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Exploring the contribution of EIA follow-up governance to EIA effectiveness – a case study of Malta

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A thesis submitted to the Faculty for the Built Environment, University of Malta,
in fulfilment of the requirements for the attainment of the degree of Doctor of Philosophy.

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To those who have always believed in me.

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ABSTRACT

EIA follow-up governance incorporates all the processes, mechanisms and arrangements required to enable the implementation of EIA follow-up. Governance, together with monitoring, evaluation, management and participation (i.e., engagement and communication), are the follow-up elements essential for understanding the outcomes of development projects which are subject to EIA. Noting how regrettably, EIA follow-up is overlooked in terms of implementation, this research aims to (i) identify best practice principles and criteria for effective EIA follow-up governance, and (ii) understand what would constitute effective EIA follow-up governance at the macro (jurisdiction) level, while utilising EIA in Malta as a case study.

A thorough literature review of EIA follow-up, particularly governance, and EIA effectiveness led to the derivation of a set of 10 best practice principles for effective EIA follow-up governance. The principles are related to: (1) legislative provisions, (2) identification of responsibilities, (3) compliance and enforcement, (4) EIA follow-up outcomes, (5) performance criteria, (6) understanding the purpose and importance of EIA follow-up, (7) adequate resource allocation, (8) efficient and effective governance arrangements, (9) transparency and accessibility, and (10) legitimacy. Together with a set of detailed accompanying criteria, these 10 principles provide a framework that can be applied to evaluate any EIA follow-up system at the macro level.

The principles were tested against data collected through a multi-method qualitative research approach, i.e., through documentary analysis, utilising information from Maltese development consent decisions (5 detailed project-level case studies), elite interviews with decision-makers (3), a focus group discussion with stakeholders (1 discussion) and a policy Delphi (2 rounds with 12 and 10 stakeholders respectively) involving the same stakeholders. With a pragmatist philosophical view underpinning the research through its practice-oriented perspective, a case study approach was utilised to guide the evaluation of the performance of EIA follow-up governance in Malta. The results were presented in evaluation tables, providing a visual representation (through a traffic-light system) of the performance of EIA follow-up governance.

The framework provided a focused assessment of EIA follow-up governance in Malta. The application of the principles proved to be relatively easy and offered clear feedback. It is evident, however, that the lack of information available on EIA follow-up, particularly on governance, may hinder a robust judgement of its performance. The best practice principles and related criteria highlighted its current state of play, but also identified deficiencies that would warrant improvements towards their effectiveness. The principles and criteria are designed to enable any interested party to evaluate any jurisdiction worldwide implementing EIA follow-up, to provide guidance and enable best practice, rather than acting as a compliance check-box tool.

Keywords: EIA, EIA follow-up, EIA follow-up governance, EIA effectiveness, case study research strategy, pragmatism, Malta.

TABLE OF CONTENTS

DEDICATION	ii
DECLARATION OF AUTHENTICITY	iii
ACKNOWLEDGEMENTS	v
ABSTRACT	vi
TABLE OF CONTENTS	vii
LIST OF TABLES	x
LIST OF FIGURES	xi
LIST OF BOXES	xii
LIST OF APPENDICES	xiii
GLOSSARY	xiv
<i>Chapter 1 - Introduction.....</i>	<i>16</i>
1.1 Introduction	16
1.2 The research gap	17
1.3 The research questions	18
1.4 Definitions and terminology	19
1.5 The structure of the thesis	20
<i>Chapter 2 – Literature Review.....</i>	<i>23</i>
2.1 Introduction	23
2.2 EIA follow-up.....	23
2.2.1 EIA follow-up governance.....	27
2.2.2 Monitoring, evaluation, management & participation – the other follow-up elements.....	31
2.2.3 The different levels of EIA follow-up	39
2.3 EIA Effectiveness.....	40
2.3.1 Exploring the different dimensions of EIA effectiveness	41
2.3.2 EIA effectiveness at different hierarchical levels	47
2.4 Conclusions.....	53
<i>Chapter 3 – EIA follow-up governance and EIA effectiveness.....</i>	<i>56</i>
3.1 Introduction	56
3.2 Formulating the best practice principles for effective EIA follow-up governance	56
3.3 Implementing the best practice principles and criteria	61
3.4 Conclusions.....	72
<i>Chapter 4 – Research Methods.....</i>	<i>74</i>
4.1 Introduction	74
4.2 Data collection and data analysis	74
4.2.1 Document analysis	76
4.2.2 Elite interviewing	83
4.2.3 Focus group discussion.....	85
4.2.4 Issues encountered with the interviews and focus groups.....	87
4.2.5 The Delphi technique	90
4.2.6 Ethics considerations.....	96
4.2.7 Data analysis	97

4.3 The research strategy – the case study approach.....	98
4.4 The pragmatist theoretical perspective.....	100
4.5 Conclusions.....	102
Chapter 5 – Understanding EIA follow-up governance – presenting the results.....	105
5.1 Introduction	105
5.2 Presenting Malta as a case study	106
5.2.1 Procedural effectiveness of EIA follow-up governance	106
5.2.2 Substantive effectiveness of EIA follow-up governance.....	126
5.2.3 Transactive effectiveness of EIA follow-up governance.....	144
5.2.4 Legitimacy of EIA follow-up governance	148
5.2.5 Summary.....	152
5.3 Stakeholders’ perceptions of EIA follow-up governance	152
5.3.1 Procedural effectiveness of EIA follow-up governance	152
5.3.2 Substantive effectiveness of EIA follow-up governance.....	160
5.3.3 Transactive effectiveness of EIA follow-up governance.....	165
5.3.4 Legitimacy of EIA follow-up governance	168
5.4 Conclusions.....	173
Chapter 6 – Discussing EIA follow-up governance and EIA effectiveness	175
6.1 Introduction	175
6.2 Establishing EIA follow-up governance arrangements (Procedural effectiveness)	175
6.3 Understanding the contribution of EIA follow-up governance (Substantive effectiveness)	178
6.4 Ensuring effective and efficient EIA follow-up governance (Transactive effectiveness).....	181
6.5 Guaranteeing legitimate EIA follow-up governance (Legitimacy)	182
6.6 Conclusions.....	183
Chapter 7 – Conclusions	186
7.1 Introduction	186
7.2 Addressing the research questions through the research outcomes.....	186
7.3 The contribution to knowledge.....	190
7.4 Suggestions and recommendations for future EIA practice in Malta	191
7.5 Application to EIA practice at an international level	193
7.6 Future research opportunities	194
REFERENCES.....	197
APPENDICES	226
Appendix A: Letters sent to the PA and the ERA requesting access to information	227
Appendix B: Case file fact sheet template.....	230
Appendix C: Interview guide	232
Appendix D: Sample of correspondence sent to interviewees	234
Appendix E: Focus group guide.....	236
Appendix F: Sample of correspondence sent to focus group invitees	238
Appendix G: Research Consent Forms	240
Appendix H: Invite to policy Delphi sent to potential participants	245
Appendix I: Delphi 1 st round correspondence sent to participants.....	247
Appendix J: Delphi 2 nd round correspondence sent to participants.....	249
Appendix K: Summary tables of cases analysed through documentary analysis	251

Appendix L: A brief outline of the development of Maltese spatial planning	295
Appendix M: The development of EIA in Malta.....	303

LIST OF TABLES

Table 2.1: Six-dimension categorisation of EIA effectiveness.....	43
Table 2.2: Four-dimension categorisation of EIA effectiveness	44
Table 3.1: Derivation of EIA follow-up governance best practice principles	57
Table 4.1: Details regarding documentation collected for analysis.....	77
Table 4.2: The documentary analysis process	80
Table 4.3: Overview of the elite interview questions	85
Table 4.4 : Overview of the focus group questions	87
Table 4.5: Details of the political figures that were originally identified for the interviews to be carried out in November 2019	88
Table 4.6: Details of the revised list of political figures to be interviewed in February 2020.....	89
Table 4.7: Overview of the key steps of policy Delphi for this research.....	93
Table 4.8: Questions presented in the Delphi first round	94
Table 4.9: Questions presented in the Delphi second round	96
Table 4.10: Characteristics of case-study research	99
Table 4.11: Ontological and epistemological foundations of pragmatism	101
Table 5.1: Procedural effectiveness of EIA follow-up governance arrangements	107
Table 5.2: A summary of the chronological development of EIA in Malta.....	112
Table 5.3: Mitigation and monitoring provisions in the 2001 EIA regulations.....	113
Table 5.4: Mitigation and monitoring provisions in the 2007 EIA regulations.....	114
Table 5.5: Monitoring provisions in the 2017 EIA regulations.....	116
Table 5.6: Monitoring provisions in the 2020 revised EIA regulations.....	118
Table 5.7: Substantive effectiveness of EIA follow-up governance arrangements	127
Table 5.8: Development permission conditions – from the environmental statement to development consent: case example (Case #1)	131
Table 5.9: Monitoring requirements in selected case studies.....	138
Table 5.10: Transactive effectiveness of EIA follow-up governance arrangements	145
Table 5.11: Legitimacy and EIA follow-up governance	149
Table 5.12: Stakeholders’ perception of procedural effectiveness of EIA follow-up governance arrangements	153
Table 5.13: Stakeholders’ perception of substantive effectiveness of EIA follow-up governance arrangements	161
Table 5.14: Stakeholders’ perception of transactive effectiveness of EIA follow-up governance arrangements	166
Table 5.15: Stakeholders’ perception of legitimacy of EIA follow-up governance arrangements.....	169
Table 7.1: The evaluation framework for effective EIA follow-up governance, including Malta’s macro scale performance evaluation.....	188

LIST OF FIGURES

Figure 2.1: EIA follow-up at different levels and their inter-relationships.....	40
Figure 3.1: The framework for the evaluation for effective EIA follow-up governance	60
Figure 4.1: The research design adopted for the study	74
Figure 4.2: Overview of the data collection process	75
Figure 4.3: Completeness of information gathered from the 39 case files sampled.....	81
Figure 4.4: Completeness of information for data analysis (i.e., all information available from all sources)	81
Figure 4.5: Availability of a monitoring case file or any follow-up in the PA file in the complete sampled cases	82
Figure 5.1: Visual representation of the presentation of results.....	105
Figure 5.2: From the environmental statement to the development permission.....	135

LIST OF BOXES

Box 2.1:	EIA follow-up International Best Practice Principles, 2007	25
Box 2.2:	International Best Practice Principles – Impact Assessment Follow-up	26
Box 2.3:	Evaluation criteria for the governance dimension for EIA follow-up of a project	28
Box 2.4:	International Best Practice Principles for Public Participation in Impact Assessment Follow-Up	38
Box 3.1:	Best practice principles for EIA follow-up governance	60
Box 3.2:	EIA follow-up governance best practice principle 1	61
Box 3.3:	EIA follow-up governance best practice principle 2	63
Box 3.4:	EIA follow-up governance best practice principle 3	64
Box 3.5:	EIA follow-up governance best practice principle 4	65
Box 3.6:	EIA follow-up governance best practice principle 5	66
Box 3.7:	EIA follow-up governance best practice principle 6	67
Box 3.8:	EIA follow-up governance best practice principle 7	68
Box 3.9:	EIA follow-up governance best practice principle 8	69
Box 3.10:	EIA follow-up governance best practice principle 9	70
Box 3.11:	EIA follow-up governance best practice principle 10	71
Box 5.1:	Traffic-light system adopted for the evaluation tables.....	106
Box 5.2:	Case study descriptions	106
Box 5.3:	Case #4: Post-consent processes related to EIA follow-up.....	140
Box 5.4:	Case #5: Post-consent processes related to EIA follow-up.....	140

LIST OF APPENDICES

Appendix A:	Letters sent to the PA and the ERA requesting access to information.....	227
Appendix B:	Case file fact sheet template	230
Appendix C:	Interview guide	232
Appendix D:	Sample of correspondence sent to interviewees	234
Appendix E:	Focus group guide.....	236
Appendix F:	Sample of correspondence sent to focus group invitees	238
Appendix G:	Research Consent Forms	240
Appendix H:	Invite to policy Delphi sent to potential participants	245
Appendix I:	Delphi 1 st round correspondence sent to participants.....	247
Appendix J:	Delphi 2 nd round correspondence sent to participants	249
Appendix K:	Summary tables of cases analysed through documentary analysis	251
Appendix L:	A brief outline of the development of Maltese spatial planning	295
Appendix M:	The development of EIA in Malta.....	303

GLOSSARY

BCB	Building Control Board
BREEAM	Building Research Establishment's Environmental Assessment Method
CEC	Commission of European Communities
CEEQUAL	Civil Engineering Environmental Quality Assessment
CEO	Chief Executive Officer
DCC	Development Control Commission
DPA	Development Planning Act
DPAR	Development Permission Application Report
EC	European Commission
EIA	Environmental Impact Assessment
EIS	Environmental Impact Statement
EDPA	Environment and Development Planning Act
EMP	Environmental Management Plan
EMAS	Eco-Management and Audit Scheme
EMS	Environmental Management System
eNGO	Environmental Non-Governmental Organisation
EP	European Parliament
EPA	Environment Protection Act
EPC	Environment and Planning Commission
EPD	Environment Protection Directorate
EPRT	Environment and Planning Review Tribunal
EPS	Environment Planning Statement
ERA	Environment and Resources Authority
EU	European Union
IAIA	International Association for Impact Assessment
IMPEL	European Union Network for the Implementation and Enforcement of Environmental Law
IPPC	Integrated Pollution Prevention and Control
ISO	International Organisation for Standards
GoM	Government of Malta
LEED	Leadership in Energy and Environmental Design
L.N.	Legal Notice
MEPA	Malta Environment and Planning Authority
MLP	Malta Labour Party
MP	Member of Parliament
NSO	National Statistics Office
NTS	Non-Technical Summary
ODPA	Outline Development Permission Application
PA	Planning Authority
PAPB	Planning Areas Permits Board
PL	<i>Partit Laburista</i>
PM	Prime Minister
PN	<i>Partit Nazzjonalista</i>
PDS	Project Description Statement
SDA	Special Development Area
SEA	Strategic Environmental Assessment
S.L.	Subsidiary Legislation
SPED	Strategic Plan for the Environment and Development
TIA	Traffic Impact Assessment
TOR	Terms of Reference
UK	United Kingdom
UN	United Nations
UNECE	United Nations Economic Commission for Europe
US	United States

Chapter 1 - Introduction

Chapter 1 - Introduction

1.1 Introduction

Environmental Impact Assessments (EIAs) play a crucial role in identifying and mitigating potential environmental impacts arising from development projects and are known to be applied in every country of the world (Alberts et al., 2020; Bond et al., 2020; Morgan, 2012; United Nations Conference on Environment and Development, 1992; UN Environment, 2018; Yang, 2019). EIAs have been the subject of debate and criticism since their inception in the late 1960s. Perceptions of their strengths and weaknesses vary depending on the legal, cultural, and policy contexts and the perspectives of their advocates and detractors (Morgan, 2012).

EIA steps typically follow the following sequence (Carroll et al., 2020; Morrison-Saunders, 2023; Wood, 2000; Wood & Becker, 2005):

- (i) *screening*, which is one of the earliest steps in the formal EIA process and involves the making of one-off decisions regarding the need for an EIA. It is considered an essential aid in identifying those development proposals with potential significant adverse environmental effects; hence its label as a 'critical decision-stage',
- (ii) *scoping*, that is, the process to identify key environmental issues,
- (iii) *impact prediction*, which identifies what changes are likely to the receiving environment as a result of a development project,
- (iv) *assessment*, which determines the level of significance and importance of such changes,
- (v) *mitigation*, where measures are taken to prevent, eliminate, reduce or offset impacts arising from a development project,
- (vi) *review*, where stakeholders have the opportunity to examine the assessment carried out for a development project and provide feedback,
- (vii) *approval decision* regarding consent for a development project, and
- (viii) *EIA follow-up*.

EIA follow-up includes any activity seeking to understand the outcomes of development projects subject to an EIA. It is one of the core components of EIA, and is most notably undertaken following a consent decision and during the implementation of a project (Arts & Morrison-Saunders, 2022a, 2022b; Morrison-Saunders, 2023; Morrison-Saunders & Arts, 2024; Morrison-Saunders et al., 2024). In order to enable the effective implementation of EIA follow-up, appropriate governance mechanisms, that is, processes and arrangements, need to be in place (Arts & Morrison-Saunders, 2022a, 2022b). Governance, together with monitoring, evaluation, management and participation (i.e., engagement and communication), are the follow-up elements essential to understanding the outcomes of development projects which are subject to EIA (Arts & Morrison-Saunders, 2022a, 2022b; Morrison-Saunders et al., 2021).

Impact assessment also occurs at a more strategic level through the implementation of Strategic Environmental Assessment (SEA) and is systematically applied to policies, plans, and programmes (Therivel, 2010). It focuses on the wider picture, is broader in scope, influences a range of projects or activities over a longer timeframe and is proactive, aiming to integrate environmental considerations early in decision-making (IAIA, 2002; Partidário & Arts, 2005; Sadler & Verheem, 1996, 2022; Therivel, 2010). The research, as is discussed throughout this chapter, focuses on the evaluation of EIA of development projects, however there are some elements arising from both the theory and practice of SEA that are considered of relevance to the overall thesis narrative.

1.2 The research gap

Regrettably however, EIA follow-up is overlooked in terms of implementation, with its overall neglect frequently reported worldwide (Morrison-Saunders & Arts, 2024). While extensive research has been conducted on EIA follow-up and its essential elements, their importance and relevance to EIA (including Arts & Morrison-Saunders, 2022a, 2022b; Marshall et al., 2005; Morrison-Saunders, 2023; Morrison-Saunders & Arts, 2024; Pinto et al., 2019), a lack of studies focusing on the governance aspect of EIA follow-up, neither theory or practice, has been identified (e.g., Arts & Nooteboom, 1999; Arts et al., 2001; Fitzpatrick & Williams, 2020; Hulett & Diab, 2002; Hunsberger et al., 2005; Olszynski, 2021; Sadler & McCabe, 2002).

Pinto et al. (2019) has been the first study considering governance as an important dimension of EIA follow-up, with subsequent literature utilising the same categorisation (for example, Arts & Morrison-Saunders, 2022a, 2022b; Morrison-Saunders, 2023; Morrison-Saunders & Arts, 2024). Moreover, Pinto et al. (2019) analyse EIA follow-up governance at the micro (project) level, with little or no consideration of how EIA follow-up governance can be implemented at the macro (jurisdiction) level. Understanding the governance context and dynamics can help improving overall EIA governance (Meuleman, 2015). Therefore, the study aims to address this gap and investigate how EIA follow-up governance can contribute to EIA effectiveness at the macro scale, specifically using EIA in Malta¹ as a case study and through the simultaneous use of macro and micro scale evaluation.

Following the identification of the research gap, this chapter continues with the identification of the research questions. This is followed by the definition and brief discussion of the three most important concepts used throughout this thesis, namely 'EIA follow-up', 'EIA follow-up governance' and 'EIA effectiveness'. The final part of the chapter outlines the structure and the content of the subsequent chapters of the thesis.

¹ All references made to Malta throughout the thesis, refer to the Maltese archipelago, i.e., Malta, Gozo and Comino.

1.3 The research questions

This thesis is a result of over ten years of direct involvement in the environmental impact assessment field in Malta, particularly between 2006 and 2016, with first-hand observation and experience in the implementation of EIA.² This, together with attendance at international meetings, including the European Commission's bi-annual meetings of the EIA-SEA National Expert Group and the UNECE Working Group on the implementation of the Espoo Convention and the SEA Protocol³, provided the motivation to gather a more in-depth insight into certain aspects of the implementation of EIA.

The research complements an already-existing body of knowledge in relation to EIA follow-up, EIA follow-up governance and EIA effectiveness, by providing a novel approach into looking at EIA follow-up governance at the macro level, together with providing a means of measuring its effectiveness. This research narrative is based on two relatively recent discussions:

- The first related to the 'governance' dimension in EIA follow-up, building on the works by Arts and Morrison-Saunders (2022a, 2022b), Morrison-Saunders and Arts (2021, 2024), Morrison-Saunders et al. (2021, 2023, 2024) and Pinto et al. (2019), and
- The second related to EIA effectiveness, mostly based on Pope et al. (2018), but also Chanchitpricha et al. (2019, 2021), Loomis and Dziedzic (2018) and Loomis et al. (2022).

Through the above and as discussed in Section 1.2, this thesis, therefore, (i) addresses this identified research gap in relation to EIA follow-up governance and effectiveness at the macro-scale (noting that Pinto et al., 2019, focuses on micro-scale EIA follow-up), (ii) builds on existing knowledge/theory in relation to EIA follow-up, particularly governance, and (iii) provides new ideas/theory as the contribution to general knowledge on the field of EIA, through the derivation of a framework for the evaluation of effective EIA follow-up governance through best practice principles and criteria.

It should also be noted that in view that there are many synonymous terms for EIA in use by others, for consistency, EIA is the term adopted throughout the thesis, aimed towards assessment at the project-level.

On the basis of the aforementioned, the thesis seeks to address the following two questions:

² This author was an Environment Protection Officer in the Environmental Assessment Unit at the Malta Environment and Planning Authority and the Environment and Resources Authority in Malta. No direct involvement in EIA-related work since the beginning of the research in 2016, due to a change in role within the ERA.

³ Meetings attended throughout the doctoral years included the EU's EIA-SEA National Experts Group in: Tallinn (Estonia), Sofia (Bulgaria), Brussels (Belgium), Vienna (Austria), Bucharest (Romania) and Helsinki (Finland) and the Working Party Meetings on International Environmental Issues in Brussels (Belgium) and online throughout 2020. This author also represented Malta at the 2017 Meeting of the Parties to the Espoo Convention (7th session) and Meeting of the Parties to the Protocol on SEA (3rd session), held in Minsk, Belarus (also part of the 2017 MT Presidency team); the 2019 Meetings of the Parties to the Espoo Convention and to the Protocol on SEA, Intermediary sessions and the 2020 Meeting of the Parties to the Espoo Convention (8th session) and Meeting of the Parties to the Protocol on SEA, (4th session). This author also attended two workshops: one related to transboundary EIA on the lifetime extension of nuclear power plants in Vienna (Austria) in December 2019 and another workshop in relation with the recent developments in EIA legislation in Helsinki (Finland) in March 2018 (Pölönen et al., 2019).

- *What would constitute effective governance of EIA follow-up at the macro scale? (RQ1)*
- *How effective is EIA follow-up governance in Malta? (RQ2)*

In order to address the abovementioned research questions, a pragmatist theoretical view, utilising a sequential multi-method qualitative approach (i.e., documentary analysis, elite interviews and focus group discussion, and finally a policy Delphi technique) with a case study research strategy has been adopted (this is discussed in more detail in Chapter 4 on research methods).

Prior to providing a structural overview to how the research questions are addressed, the following section discusses the three key concepts utilised throughout this research, namely 'EIA follow-up,' 'EIA follow-up governance' and 'EIA effectiveness.'

1.4 Definitions and terminology

EIA follow-up is defined as a critical component of EIA and essential if outcomes of a development project subject to EIA are to be known (Arts & Morrison-Saunders, 2022a, 2022b). It refers to any activity which seeks to understand these outcomes (Arts & Morrison-Saunders, 2022a, 2022b; Morrison-Saunders & Arts, 2024). All EIAs should include a clear commitment to follow-up, ensuring sufficient resources are allocated to it throughout the life-cycle of a project. This commitment can be established through regulatory requirements or incorporated into individual development approvals (Arts & Morrison-Saunders, 2022a, 2022b). The groundwork for effective EIA follow-up is laid during the early stages of the EIA (prior to development consent). The main follow-up activities then take place during construction, operation, and, where relevant, any subsequent decommissioning or repurposing of the development site (Morrison-Saunders & Arts, 2024).

EIA follow-up comprises five key elements (Arts & Morrison-Saunders, 2022a):

- Monitoring, including the collection of activity and environmental data relevant to determining the performance of a project or plan.
- Evaluation, of monitoring data against performance standards, objectives, predictions or expectations.
- Management, including making decisions and taking appropriate actions in response to issues arising from monitoring and evaluation activities.
- Engagement and communication (participation) with all stakeholders on all aspects of EIA follow-up.
- Governance, through processes, structures and arrangements enabling the commitment towards the implementation of EIA follow-up activities.

EIA follow-up is also conceived at different scales of application (Morrison-Saunders & Arts, 2004a, 2024), from evaluating the performance of individual developments (micro-level, as in the case of Pinto et al., 2019), to evaluating and learning about the efficacy and effectiveness of EIA at the jurisdiction level (macro level) to broader discussions on EIA and its effectiveness, looking at

the ‘bigger picture’ (meta level), that is, seeing whether EIA measures up to its full potential, leading to informed decision-making, better project design, improved environmental protection and sustainable use of resources (Morrison-Saunders, 2023; Sadler, 2004). This thesis, as highlighted earlier, explores EIA follow-up governance and its effectiveness at the macro level.

Throughout this research, governance, as explained earlier, is understood as those processes, structures and arrangements that should be in place to ensure that there is commitment to implement all elements of EIA follow-up, i.e., monitoring, evaluation, management and participation (Arts & Morrison-Saunders, 2022a, 2022b; Pinto et al., 2019). EIA follow-up governance should also ensure that these processes are in place and functioning. Effective governance arrangements require tailoring to the specific context, ensuring smooth integration with relevant processes already in place (Pinto et al., 2019). It is also the role of EIA follow-up governance to ensure that roles and responsibilities are clearly defined throughout the process (Arts & Morrison-Saunders, 2022a, 2022b; Morrison-Saunders & Arts, 2024; Morrison-Saunders et al., 2021; Pinto et al., 2019). Governance arrangements should also ensure that collaboration between stakeholders is ensured and promoted (Pinto et al., 2019). Finally, governance arrangements for EIA follow-up, and the EIA follow-up program itself, should be adjusted as necessary to emerging needs (Arts & Morrison-Saunders, 2022a, 2022b), warranting that it is “pragmatic, fit-for-purpose and cost effective” (Pinto et al., 2019, p. 14), therefore ensuring that EIA follow-up is efficient and effective.

With respect to EIA effectiveness, this should not be considered a one-dimensional concept. For the purposes of this research, EIA effectiveness is seen mainly through the framework identified by Pope et al. (2018), who categorise effectiveness into four dimensions: (i) procedural effectiveness, which focuses on how the assessment process is carried out and examines whether the steps followed adhere to professional standards and established procedures, (ii) substantive effectiveness, which looks at the impact of EIA on decision-making, with the focus being on how well the assessment contributes to more environmentally sound choices and whether the intended outcomes are achieved, (iii) transactive effectiveness, which refers to what extent and by whom are EIA outcomes considered worth the time and cost involved, and (iv) legitimacy which looks into whether the EIA was deemed legitimate by stakeholders. These aspects are all discussed in further detail in Chapter 2.

1.5 The structure of the thesis

The thesis is structured over six chapters. Chapter 1 discusses the identification of the research questions, including the motivation and foundations underpinning the research and the identification of the research gap. The chapter continues with definitions of the key concepts (i.e., EIA follow-up, EIA follow-up governance and EIA effectiveness). The final section of the chapter outlines the structure and content of the following chapters.

Chapter 2 considers EIA follow-up and EIA effectiveness, the two themes the research questions are built upon. The chapter first discusses EIA follow-up, its key components (as introduced earlier in this chapter) and its implementation, with a focus on EIA follow-up governance. It then continues by discussing EIA effectiveness, providing a critical review of the different approaches taken on this issue throughout the years, starting from Sadler (1996) to the most recent discussions from Chanchitpritcha et al. (2019, 2021), Loomis and Dziedzic (2018), Loomis et al. (2022) and, most importantly, Pope et al. (2018).

Chapter 3, follows from Chapter 2 in linking EIA follow-up governance to EIA effectiveness, discussing the formulation and derivation of the framework for evaluating the effectiveness of EIA follow-up governance, including the best practice principles and related criteria, based on the theoretical work discussed in the previous chapter.

Chapter 4 reviews the methods adopted and utilised throughout the research. The research questions identified in Chapter 1 are addressed through the adoption of a pragmatist theoretical view. The use of a multi-method qualitative approach, which includes: (i) a documentary analysis of case studies, (ii) elite interviews and a focus group discussion, carried out through a political crisis in Malta during November/December 2019 and the COVID-19 pandemic in 2020/2021, and finally (iii) a policy Delphi, with a case study research strategy, contributed to the establishment of a research framework that addresses the research questions.

Chapter 5 presents the results of the research methods discussed in Chapter 3, with the application of the evaluation framework for effective EIA follow-up governance, through best practice principles and criteria. The first part of the chapter looks at EIA follow-up governance in Malta through a review of Maltese EIA follow-up procedures and the results of the documentary analysis. The second part of the chapter presents the results derived from the elite interviews, the focus group discussion and the policy Delphi as the stakeholders' perceptions to EIA follow-up. The results are then analysed in more detail in Chapter 6, outlining the results within the framework of the research questions themselves.

Chapter 7 finally recalls the research questions and presents the conclusions arising from this research relating to EIA practice, particularly to EIA follow-up governance. The contribution to knowledge, associated with both EIA theory and practice is presented in this chapter. Suggestions and recommendations for EIA practice both in Malta and worldwide are also presented in this chapter, together with proposals for future research.

Chapter 2 – Literature Review

Chapter 2 – Literature Review

2.1 Introduction

Within the context presented in the previous chapter, this chapter provides a critical review of the two themes associated with the main research question, namely EIA follow-up, with a particular focus upon governance, and EIA effectiveness.

The chapter first discusses EIA follow-up (Section 2.2), its key components (namely, monitoring, evaluation, management, participation and governance) and its implementation, with a particular focus on EIA follow-up governance. Governance relates to those processes, arrangements and structures that need to be in place to ensure that there is commitment to carry out all the other elements of follow-up (Arts & Morrison-Saunders, 2022a, 2022b; Pinto et al., 2019).

The chapter then continues by discussing EIA effectiveness (Section 2.3), providing a critical review of the different approaches taken on this issue throughout the years, starting from Sadler (1996) to the most recent discussions from Chanchitpritcha et al. (2019, 2021), Loomis and Dziedzic (2018), Loomis et al. (2022) and Pope et al. (2018).

The discussion in Chapter 2 links to the subsequent Chapter 3, linking EIA follow-up governance to EIA effectiveness, concluding with the derivation of the evaluative framework for effective EIA follow-up governance, through the identification of the best practice principles and criteria, reflecting the theoretical work discussed in this chapter.

2.2 EIA follow-up

EIA follow-up is a critical component of best practice in EIA (Arts & Morrison-Saunders, 2022a, 2022b; IAIA & IEA, 1999; Morrison-Saunders & Arts, 2021). It refers to any activity that seeks to understand the outcomes of development projects, subject to EIA (Arts & Morrison-Saunders, 2022a, 2022b). This, in turn, would inform ongoing management of that development and aid further understanding of EIA performance, enhance efficacy and legitimacy of decision-making and project-level EIA, including future applications of EIA for other development proposals (Arts & Morrison-Saunders, 2022a, 2022b; Morrison-Saunders & Arts, 2024).

Noble and Storey (2005) consider EIA follow-up as that element that transforms any EIA process from a static to a dynamic one and consider it as the missing link between environmental assessment and effective project management and implementation (Hollands & Palframan, 2014). Similar to this practical approach, Gallardo and Sánchez (2016) highlight the fact that the main aims of EIA follow-up should be to verify whether: (i) preventative and mitigation measures established in the EIA studies and the decision stage are being effectively implemented, (ii) there are unpredicted impacts during the construction and operations phases that have to be mitigated, and (iii) there are corrective measures that need to be imposed and implemented.

Every EIA should include a clear commitment towards follow-up, whether mandated by law or specified within the consent decision for a development project. This pledge towards EIA follow-

up should be accompanied by a reassurance that there are sufficient resources allocated throughout the life-cycle of the development project to effectively monitor and address environmental impacts (Arts & Morrison-Saunders, 2022a, 2022b). The groundwork for effective EIA follow-up is laid during the early stages of the EIA (prior to development consent), with the main follow-up activities taking place during construction, operations, and, where relevant, any subsequent decommissioning or repurposing of the development site (Morrison-Saunders, 2023; Morrison-Saunders & Arts, 2024).

EIA follow-up, therefore, is regarded as an ongoing process rather than a one-off event and is seen to be an essential part of the life-cycle of a proposed development (Hulett & Diab, 2002). Jha-Thakur et al. (2009) also confirm how the foundations of EIA follow-up are laid at pre-consent stage, whilst at post-consent, the EIA findings are translated into reality and adapted into ongoing project development.

As already outlined in Chapter 1, EIA follow-up comprises five key elements (Arts & Morrison-Saunders, 2022a, 2022b; Morrison-Saunders, 2023; Morrison-Saunders & Arts, 2024; Pinto et al., 2019):

- Monitoring, which includes the collection of activity and environmental data relevant to project or plan performance determination. This may include baseline monitoring, compliance monitoring and performance monitoring.
- Evaluation, of monitoring data in light of performance standards, objectives, predictions or expectations. This includes the appraisal of the extent of conformance with these standards, predictions or expectations, as well as the environmental performance of the activity.
- Management, which includes making decisions and taking appropriate actions (adaptive management) in response to issues arising from monitoring and evaluation activities.
- Engagement and communication (participation) with stakeholders on all aspects of EIA follow-up. This should include communication of the results of follow-up to uphold principles of transparency, accessibility, accountability and legitimacy, as well as to share learning about both the process and the development project itself.
- Governance, through processes, structures and arrangements enabling the commitment towards the implementation of EIA follow-up activities.

With the aim of encouraging implementation and improvement of EIA follow-up practice, together with capacity building for practitioners and improvement of EIA outcomes, a set of EIA follow-up best practice principles were published (Marshall et al., 2005).

The best practice principles for EIA follow-up were first published in 2007 by the International Association for Impact Assessment (IAIA) (Morrison-Saunders et al., 2007⁴; Pinto et al., 2019). The original set of best practice principles (Box 2.1) comprised the core tenets serving as guidance

⁴ The EIA Follow-Up International Best Practice Principles by Morrison-Saunders et al. (2007) are no longer in the public domain as they have been superseded by Arts and Morrison-Saunders (2022a) - https://www.iaia.org/uploads/pdf/SP6_22%20Follow%20up_converted.pdf, discussed later in this section.

for EIA practitioners towards EIA follow-up implementation (Marshall et al., 2005; Morrison-Saunders et al., 2007, pp. 2-4).

1. Follow-up is essential to determine EIA outcomes.
2. Transparency and openness in EIA follow-up is important.
3. EIA should include a commitment to follow-up.
4. Follow-up should be appropriate for the EIA culture and societal context.
5. EIA follow-up should consider cumulative effects and sustainability.
6. EIA follow-up should be timely, adaptive and action-oriented.
7. The proponent of change must accept accountability for implementing EIA follow-up.
8. Regulators should ensure that EIA is followed up.
9. The community should be involved in EIA follow-up.
10. All parties should seek to co-operate openly and without prejudice in EIA follow-up.
11. EIA follow-up should promote continuous learning from experience to improve future practice.
12. EIA follow-up should have a clear division of roles, tasks and responsibilities.
13. EIA follow-up should be objective-led and goal oriented.
14. EIA follow-up should be "fit-for-purpose."
15. EIA follow-up should include the setting of clear performance criteria.
16. EIA follow-up should be sustained over the entire life of the activity.
17. Adequate resources should be provided for EIA follow-up.

Box 2.1: EIA follow-up International Best Practice Principles, 2007

(Morrison-Saunders et al., 2007, pp. 2-4)

The principles were originally developed following discussions held at IAIA conferences between 1999 and 2005 (Marshall et al., 2005; Morrison-Saunders et al., 2007, 2021; Pinto et al., 2019). These were presented in a sequential manner (Marshall et al., 2005; Morrison-Saunders et al., 2007), starting by providing guidance through the presentation of core values for EIA follow-up (1-3), and addressing the nature of EIA follow-up (4-6), to presenting operating principles related to the roles and responsibilities of all participants and parties in EIA follow-up (7-11) and addressing how EIA follow-up should be conducted (12-17).

A revised set of best practice EIA follow-up principles was subsequently published by the IAIA in 2022, developed through literature review, presented and discussed in collaborative sessions, mainly workshops with academics and practitioners at IAIA conferences between 2018 and 2022 (Arts & Morrison-Saunders, 2022a, 2022b; Morrison-Saunders et al., 2021). This more succinct form of the EIA follow-up principles included (Arts & Morrison-Saunders, 2022a, p. 2):

- (i) a simple definition of EIA follow-up – “Understanding the outcomes of projects or plans subject to impact assessment” (Arts & Morrison-Saunders, 2022a, p. 1; Morrison-Saunders et al., 2021),
- (ii) a simple explanation of EIA follow-up objectives, and
- (iii) the 15 best practice principles (Box 2.2 below refers).

1. State the objective of each impact assessment follow-up activity and the overall program.
2. Be tailored to context.
3. Commence early in the impact assessment process (e.g., during screening and scoping stages).
4. Be carried out throughout the project/plan life-cycle.
5. Be transparent.
6. Be accessible to all impact assessment stakeholders.
7. Provide clear accountability for impact assessment follow-up responsibilities.
8. Provide clear, pre-defined and well-justified performance criteria.
9. Specify enforcement provisions.
10. Promote continuous learning from experience to improve future practice.
11. Facilitate adaptive environmental management.
12. Be flexible according to emerging needs.
13. Inform and be informed by follow-up for other relevant activities at different levels of decision-making (tiering).
14. Consider cumulative effects.
15. Consider the overall effects of the project/plan.

Box 2.2: International Best Practice Principles – Impact Assessment Follow-up
(Arts & Morrison-Saunders, 2022a, p. 2)

The principles are structured to take into account the following (Arts & Morrison-Saunders, 2022a, 2022b; Morrison-Saunders & Arts, 2021; Morrison-Saunders et al., 2024; Pinto et al., 2019): Principle 1 defines the objectives of EIA follow-up, Principle 2 provides the context within which it should be implemented, Principle 3 stresses upon early commencement within the EIA process, Principle 4 focuses on the importance of its implementation throughout the project life-cycle, Principles 5 and 6 stress on transparency and accessibility, Principles 7, 8 and 9 focus on the quality of EIA follow-up activity, Principles 10, 11, 12 and 13 are aimed towards the outcomes of EIA follow-up, and Principles 14 and 15 focus on how impacts are addressed through EIA follow-up programs. It should also be noted that these best practice principles aim to guide the implementation of follow-up at both project level and strategic level (Arts & Morrison-Saunders, 2022a, 2022b).

While keeping in mind its best practice principles, EIA follow-up may be carried out by a variety of parties (Morrison-Saunders et al., 2024), including:

- (i) proponent-led follow-up, with the project proponent taking responsibility to manage, perform or fund most EIA follow-up activities and to engage and communicate with all relevant stakeholders about it,
- (ii) EIA regulator-led follow-up, where regulators ensure that project proponents fulfil the requirements set by development permission approval conditions, as well as ensure learning from experience to improve future EIA,
- (iii) community-led follow-up, being a way of involving the public who may have local-specific knowledge only available to them, and are independent of project proponents

- and regulators and facilitate independent evaluation of both proponents and regulators,
- (iv) indigenous-led follow-up, where Indigenous Peoples monitor and evaluate EIA follow-up activities, and
- (v) independent-led follow-up, where independent entities are engaged to either carry out EIA follow-up directly or may aid the verification of work of other stakeholders, particularly proponents and regulators.

Together with acknowledging the actors involved in EIA follow-up, it is also important to understand why it is carried out. Morrison-Saunders et al. (2024) provide a non-exhaustive list of objectives, which reflect the content of best practice principles, as follows:

- (i) Identification of environmental aspects and planned control of development and their environmental impacts.
- (ii) Maintaining decision-making flexibility and promoting an adaptive management approach to both EIA and project management.
- (iii) Improving scientific and technical knowledge (learning).
- (iv) Enhancing efficacy and legitimacy of decision-making for the specific project and for future EIAs.
- (v) Earning and maintaining trust of stakeholders.
- (vi) Protect and uphold the rights of all stakeholders, including those of Indigenous Peoples.
- (vii) Providing reliable and accurate information to all stakeholders about the actual impacts and overall performance of a project or plan and engaging them in adaptive management.
- (viii) Improving ongoing environmental management more generally by integrating with other information.

Being principles aimed towards best practice in EIA follow-up, it is essential to highlight the importance of governance processes, structures and arrangements that ensure implementation into the actual EIA follow-up activities. The importance of governance as the element that ‘glues together’ all elements of EIA follow-up is discussed in the following section.

2.2.1 EIA follow-up governance

In order to evaluate the role of governance for effective EIA follow-up, one needs to first understand its fundamental concepts. Governance encompasses the systems, structures, and processes by which organisations, governments, and societies make decisions, exercise authority, and allocate resources (Kooiman, 2003; Rhodes, 1996; Stoker, 1998; UNDP, 1997). Kooiman (2003) defines governance as a complex, dynamic process that involves multiple actors, organisations and institutions. He also introduces the idea of governance as a broader, more inclusive system where decision-making and power are distributed across various levels of society. Consequently, governance includes collaboration between public, private, and civil society actors who work together to address collective challenges including interactive, participatory and adaptive practices (Kooiman, 2003; Stoker, 1998).

Whilst acknowledging the multidimensional nature of governance (Council of Europe, n.d.), some of its common key elements include the following (Ansell & Gash, 2008; Fung, 2006; Gibson, 2006, Kooiman, 2003; Rhodes, 1996; Stoker, 1998): (i) accountability, where decision-makers must be made responsible for their actions, (ii) transparency, where all decisions need to be open and accessible to all stakeholders involved, (iii) participation, to ensure inclusive governance processes, (iv) rule of law, ensuring fairness and consistency, (v) equity and fairness, ensuring that diverse interests are appropriately balanced, (vi) effectiveness and efficiency, (vii) responsiveness, particularly in relation to adaptation to changing conditions such as those arising from environmental changes, (viii) sustainability, ensuring that governance integrates environmental, social and economic aspects, and (ix) collaboration and partnership between parties.

Noting the above elements, EIA can be considered a governance instrument, as it introduces rules and assigns particular roles and responsibilities to various actors, while aiming to direct their behaviours towards greater environmental awareness (Arts et al., 2012). Various governance elements mentioned earlier can also be identified in EIA, such as transparency in terms of provision of environmental information to guide decision-making and mandatory public participation processes (Arts et al., 2012; Chi et al., 2016; Richardson & Cashmore, 2011) ensuring concerns of all stakeholders are addressed (Chi et al., 2016). Meuleman (2015) also notes how important it is to consider governance in impact assessment seriously, as such systems may offer both constraints and opportunities for EIA governance.

This thinking may also be applied to EIA follow-up, where appropriate governance processes, arrangements and structures are required (Arts & Morrison-Saunders, 2022a, 2022b; Pinto et al., 2019): (i) to ensure commitment to implement the four key elements of follow-up mentioned earlier in this chapter, and (ii) ensure that processes to do so are in place and are actually functioning accordingly.

Based on the earlier version of the best practice principles for EIA follow-up (Morrison-Saunders et al., 2007), Pinto et al. (2019, p. 16) identified a set of criteria aimed towards the evaluation of the performance of the governance dimension of EIA follow-up at the micro-scale, i.e., at the individual project level:

- Are there plans in place to ensure that follow-up is maintained throughout the life of the development and tailored accordingly?
- Does the proponent accept responsibility for the follow-up process and accountability for the environmental impacts of the development?
- Does the regulator actively ensure that appropriate follow-up is taking place?
- Are roles and responsibilities for follow-up clearly and appropriately defined?
- Are there mechanisms to promote collaboration between stakeholders in follow-up?
- Is the follow-up process, pragmatic, fit-for-purpose and cost effective?

Box 2.3: Evaluation criteria for the governance dimension for EIA follow-up of a project
(Pinto et al., 2019, p. 16)

Keeping in mind the best practice principles for EIA follow-up (Arts & Morrison-Saunders, 2022a) and the project-level evaluation criteria identified by Pinto et al. (2019), governance needs to ensure that any arrangements in place for EIA follow-up reflect the specific context (EIA culture and societal context) in which they are located and be adequately integrated with other relevant processes (Morrison-Saunders et al., 2007; Pinto et al., 2019). These include the drawing up of legislative instruments related to EIA follow-up, the setting up of administrative arrangements including those pertaining to decision-making processes and enforcement and compliance activities.

With EIA follow-up occupying the majority of the life-cycle of a development project (Morrison-Saunders & Arts, 2024), it is discouraging to notice its lack of implementation. A governance element that has been often highlighted as deficient is the existence of dedicated legislative provisions (Hulett & Diab, 2002; Jalava et al., 2010; Jha-Thakur et al., 2009; Jones & Fischer, 2016; Morrison-Saunders & Arts, 2004a; Paliwal, 2006; Pinto et al., 2019). Jalava et al. (2010) comment that specific legislative requirements aimed towards EIA follow-up should be included in the respective EIA legislation and thus made mandatory rather than voluntary. The inclusion of specific requirements related to monitoring in the 2014 amendment to the EIA Directive served as a clear signal towards the ever-increasing importance of EIA follow-up (EurLex, 2014). This was also confirmed by Jones and Fischer (2016) who comment that this introduction created a legislative framework for EIA follow-up, which was considered lacking in most EU Member States.

In India, Jha-Thakur et al. (2009) and Paliwal (2006) note EIA follow-up remains a complex issue, which may present additional challenges even after years of EIA implementation, while also still considered the weakest link. Jha-Thakur et al. (2009) comment that a more focused effort in design of EIA follow-up in India may pave the way for more effective EIA, leading to more sustainable development.

On the other hand, Khan and Chaudhry (2024) note how specific requirements for EIA follow-up in EIA legislation in Pakistan ensure its strength in implementation. South Africa, for example, compiled a set of non-legally binding guidelines identifying compliance monitoring, environmental monitoring and environmental auditing as essential in EIA implementation (Hulett & Diab, 2002). The importance of legislative provisions for EIA follow-up is also considered a crucial step in establishing compliance. The lack of regulations establishing EIA follow-up in South Africa (i.e., through mandatory requirements), was seen at the time to be a retrograde step in environmental management in the South African system (Hulett & Diab, 2002).

Governance arrangements also require a degree of clarity and transparency (Morrison-Saunders et al., 2023), thus accompanying guidance documentation could aid in the implementation of EIA follow-up elements. Jones and Fischer (2016) denounce the general lack of support structures for project proponents, which together with a lack of guidance and expertise may be leading to the low implementation of EIA follow-up, symptomatic of a lack of governance arrangements. International entities such as the IAIA have provided targeted guidance via the publication of

explanatory notes (Morrison-Saunders, 2023; Morrison-Saunders et al., 2007) and best practice principles (Arts & Morrison-Saunders, 2022a). The very recent publication (April 2024) of a guidance document by the IAIA ('Guidance for Implementing the Impact Assessment Follow-up International Best Practice Principles'), with the purpose of providing guidance to aid EIA practitioners to implement the Impact Assessment Follow-up International Best Practice Principles by providing additional information regarding their application (Morrison-Saunders et al., 2024), is a step in the right direction.

However, unlike other steps in EIA, there is no strict methodology or detailed procedural guidelines as to how EIA follow-up is to be carried out, coupled with an overall lack of training and capacity building on the same (Jones & Fischer, 2016). As Waldeck et al. (2003) state, EIA guidance should be aimed towards better environmental protection, increase in certainty of EIA outcomes, enhance the consistency of the advice given to government and ensure better planning of proposals, together with ensuring better decision-making. Similarly, any guidance aimed for EIA follow-up should strive to ensure that its goals and objectives are reached.

Responsibility and accountability of all stakeholders in the implementation of EIA follow-up is key, particularly with project proponents being made responsible for the impacts that may arise from a development (following the 'polluter pays' principle), and regulators ensuring that EIA follow-up occurs (Pinto et al., 2019). For example, Bashour (2016) points out that in Lebanon, Palestine and Jordan, these responsibilities are clearly indicated for EIA follow-up in the respective legislative provisions, whereby the project proponent is responsible for the implementation of the mitigation measures outlined in an Environmental Monitoring Program (EMP); while EIA follow-up and monitoring of its implementation falls under the remit of the environmental agency responsible for EIA (i.e., the regulator). It also stresses that there were no legal provisions in the three countries associated with the lack of compliance during EIA follow-up, with limited organisational structures allocated by authorising agencies, along with budgeting and staffing allocation.

It is also important for EIA follow-up governance arrangements to ensure that relevant information pertaining to follow-up is made available to all stakeholders and parties involved (Morrison-Saunders et al., 2022a). Morrison-Saunders and Arts (2004a, 2004b) highlight how uncertainty and limited information availability may contribute to the difficulties in the implementation of follow-up elements, such as monitoring and auditing. Dipper et al. (1998) also voice their concern with respect to uncertainty, in that this may present problems with impact predictions which are deemed as uncertain during the assessment stage, which would ultimately lead to a non-rigorous audit at post-consent EIA follow-up. Lawrence (1997) also draws this parallel with the EIA process, given that the element of uncertainty is considered to be an inherent characteristic of EIA, and which would also reflect into EIA follow-up.

Similar to the case of uncertainty, problems and inadequacies in environmental statements may also lead to substantial challenges in EIA follow-up (Morrison-Saunders & Arts, 2004a, 2004b).

Landim and Sánchez (2012) and Ramos et al. (2004) also confirm that deficiencies in environmental statements contribute to difficulties in EIA follow-up implementation. Morrison-Saunders and Arts (2004a) note that these may include vague impact predictions, little or no extrapolation from baseline monitoring, or overall lack of rigour in the assessment process. A clear understanding of EIA follow-up, possibly through appropriate governance arrangements, e.g., through the appropriate dissemination of information regarding its scope and purpose, it can be ensured that EIA follow-up is taken into consideration throughout the whole EIA process.

Whilst ensuring that EIA follow-up governance arrangements are in place, one must also certify that appropriate resources (time, budget, staff) are allocated for EIA follow-up implementation, by both the project proponents and the regulatory authorities (Morrison-Saunders & Arts, 2004a, 2004b; Morrison-Saunders et al., 2024; Pinto et al., 2019). Despite sounding like an obvious predicament, EIA follow-up governance arrangements require the provision of the necessary resources (i.e., staff complement, budgetary allocation, time scheduling) to be effective. However, no resources may necessarily be made available to EIA follow-up, unless its benefits are universally recognised.

In order to understand what governance arrangements need to be in place to ensure effective EIA follow-up, the following section discusses monitoring, evaluation, management and participation (i.e., engagement and communication) in more detail.

2.2.2 Monitoring, evaluation, management & participation – the other follow-up elements

Monitoring

Monitoring is defined as a collection of activity and environmental data relevant to project or plan performance determination, and may be of the following types: baseline monitoring, compliance monitoring and effects or performance monitoring (Arts & Morrison-Saunders, 2022a, 2022b; Morrison-Saunders, 2023; Morrison-Saunders & Arts, 2024; Pinto et al., 2019). Post-consent monitoring is considered a key step to aid the verification of the impacts predicted by the EIA, the prediction methods utilised and the effectiveness of the associated mitigation measures, leading to an improved EIA process (Melo, 2004; Ramos et al., 2004).

Monitoring has always been considered an essential starting point with respect to EIA follow-up and is the element mostly associated to it (Morrison-Saunders, 2023). Earlier discussions of EIA follow-up agreed with this statement and included monitoring as a main element of EIA follow-up (Arts et al., 2001; Morrison-Saunders & Arts, 2004b), defining it as the collection of data and comparison with standards, predictions and expectations reached at the pre-decision stages of the EIA process. This was also reflected in the earlier version of the best practice principles for EIA follow-up (Morrison-Saunders et al., 2007, p. 1), which define monitoring as “the collection of activity and environmental data both before (baseline monitoring) and after activity implementation (compliance and impact monitoring).” Monitoring is considered a technical exercise including baseline monitoring of the early stages of environmental indicators during the

pre-decision stages. This, in turn, serves as the basis for EIA prediction and evaluation, together with monitoring related to compliance with, and effects or impacts of, that decision in the post-consent stages (Pinto et al., 2019).

More recent discussions of EIA follow-up, including the 2022 best practice principles for EIA follow-up (Arts & Morrison-Saunders, 2022a, 2022b; Morrison-Saunders, 2023; Morrison-Saunders et al., 2021; Pinto et al., 2019), retain the same definition for EIA follow-up monitoring.

During the early years of EIA implementation, monitoring was not a mandatory step in several jurisdictions. Bisset (1980) comments that during the initial years of EIA practice in the US, little interest was shown in project and environmental management by means of monitoring. This activity was considered lengthy, time-consuming, and expensive.

The failure of the 1985 EIA Directive and its 1997 modifications to refer to monitoring, had also raised serious criticism on the effectiveness of the system, particularly as it was considered a missed opportunity in ensuring the quality of EIAs (Barker & Wood, 2001). Wood (1999) originally criticised the absence of a monitoring provision in the EIA Directive and argued that the continued emphasis on pre-consent analysis led to the failure of Member States to maximise the potential of EIA systems. Whilst noting that a 2012 IMPEL⁵ study (IMPEL, 2012) highlighted the fact that the recommendations arising from EIAs were included in the development consent as either obligations or conditions in two-thirds of the countries involved in the said study; the five-year European Commission reports and the 2014 revision of the EIA Directive (EurLex, 2014) have all stressed the importance of mitigation and monitoring.

Jones and Fischer (2016) comment that without the mandatory inclusion of monitoring in the development consent decision (either through a specific legislative framework or through the conditions in the development consent), project proponents would not take up such measures on their own initiative. This is also confirmed by Nicolaisen and Fischer (2016) who state that whilst the focus of efforts, resources and funds is set on the pre-development consent phase, nearly little to no attention is given to post-decision monitoring of impacts with monitoring and evaluation of project outcomes occurring in an ad hoc manner and is only carried out for projects with high political relevance.

Post-consent monitoring programs may still present issues as they are generally still considered to be fairly undeveloped, particularly since issues such as financial/time constraints and negligence from the project proponents' end, together with administrative deficiencies in the management of this stage of the EIA process take over (Ramos et al., 2004). Albeit the relative

⁵ IMPEL: European Union Network for the Implementation and Enforcement of Environmental Law. It is an international non-profit association of the environmental authorities of the EU Member States, acceding and candidate countries of the EU, EEA and EFTA countries and potential candidates to join the European Community. Its objective is to create the necessary impetus in the EU to make progress on ensuring a more effective application of environmental legislation (IMPEL, n.d.).

reluctance shown towards monitoring, Bjorkland (2013) lists the following advantages towards its implementation:

- a confirmation of the accuracy of ex-ante predictions about environmental impacts carried out in the EIA,
- advanced availability of databases to all regulators and interested stakeholders for future development consent-related decisions,
- the creation of a continuous learning loop for the improvement of EIA and decision-making,
- the provision of technical assistance in adaptive management in project implementation, and
- the reduction in frequency of reliance on mitigation measures in order to avoid the carrying out of EIAs.

EIA follow-up governance would need to ensure that monitoring is not only implemented through appropriate processes and arrangements, but it would also need to ensure accessibility to stakeholders and transparency in terms of its outcomes.

The following element of EIA follow-up, evaluation, can aid in understanding whether monitoring outcomes may act as an early warning system for environmental impacts (Pinto et al., 2019).

Evaluation

Monitoring and evaluation are two closely linked follow-up activities that are often carried out concurrently by the same party (Pinto et al., 2019). Evaluation of monitoring data in light of performance standards, objectives, predictions or expectations is considered an essential element of EIA follow-up, being the heart and core of EIA (Arts & Morrison-Saunders, 2022a; Glasson et al., 2005; Morrison-Saunders et al., 2024; Wood, 1999). It is an exercise whereby information arising from monitoring is assessed and distilled for the purposes of learning and management (Pinto et al., 2019). Here it should be appropriate to make a distinction between auditing and evaluation in an environmental context: (i) EIA auditing, which focuses on the performance of various aspects of EIA, particularly the one carried out as part of EIA follow-up, and (ii) environmental management auditing, which refers to an internal corporate audit (Dipper et al., 1998). In simple terms, Wood (1999) comments that “without auditing in EIA, the quality and accuracy of information supplied to the decision-making process will remain largely unproven” (p. 687).

Wood et al. (2000) note that the term ‘post-auditing’ is associated with the examination of the accuracy of environmental impact predictions in EIAs by comparing them retrospectively with impacts that may occur at the operations stage. Wood (2003) argues that monitoring and auditing are widely acknowledged as appropriate feedback mechanisms to establish EIA effectiveness. Auditing involves the periodical objective investigation of monitoring observations by comparing them with pre-defined criteria, and can be used to assess the quality of predictions and the effectiveness of mitigation (Arts et al., 2001; Glasson et al., 2005; Morrison-Saunders & Arts, 2004; Munro et al., 1986). Jay et al. (2007) comment that evaluation would ultimately need to determine

the difference that the EIA process would actually be making in real terms and the examination of various aspects of the EIA systems (Wood et al., 2000). It also establishes, according to Jones and Fischer (2016), whether EIA 'greening' efforts are based on correct predictions in EIAs, and serves as a critical point in testing the predictive force of EIA (Branis & Christopoulos, 2004).

Morrison-Saunders and Arts (2004a) also relate evaluation to subjective policy-oriented judgements in addition to purely scientific and technical analysis, which consequently requires value-judgements to be made. One of the main aims of EIA follow-up evaluation or audit is to create a feedback loop, which in most literature is considered to be near non-existent, into pre-consent EIA, to identify what works and what does not. Dipper et al. (1998) and Wood (1999) indicate that this loop may lead to the reinvention of the wheel for each EIA separately rather than learning from past experiences and leading to its refinement. Wood et al. (2000) confirm this and add that auditing should lead to improved resource targeting, prediction accuracy, mitigation, and environmental protection for future project proposals. Evaluation can aid in promoting continuous learning from experience to improve future EIA practice (Arts & Morrison-Saunders, 2022a, 2022b; Pinto et al., 2019).

Wood (1999, 2000) categorises post-development auditing techniques as follows:

- implementation audits, which shift the focus on the role of follow-up in establishing project compliance with development permission conditions, including mitigation measures,
- project impact and predictive technique audits, which stress on the scientific approach to follow-up, and
- procedure audits, focusing on the performance and effectiveness of the EIA process.

Jones and Fischer (2016) note that evaluation and auditing are rarely carried out, in contrast with monitoring which is considered to be the most common form of EIA follow-up. Branis and Christopoulos (2004) comment on the fact that institutional problems may hinder both monitoring and post-auditing, together with problems associated with the availability of monitoring data. Appropriately designed post-project monitoring programmes and related audits are considered to be a rare feature in EIA follow-up.

Dipper et al. (1998) argue that the general neglect of post-consent monitoring and auditing stages has imposed a severe constraint onto the development of EIA systems worldwide. Whilst noting the advantages of carrying out auditing at the EIA follow-up stage, Bisset (1980) and Dipper et al. (1998) also highlight a number of associated issues to an otherwise conceptually viewed simple process:

- problems with impact monitoring data, particularly when auditing is not a mandatory requirement,
- problems with impact predictions, especially when vague or uncertain jargon is utilised to establish impact significance, for example, the identification of 'minor to major' impact significance. This is also the case for cumulative impacts or unpredicted impacts, which present problems in terms of auditing given their complex nature,

- problems with methodology, which arise given that no guidance exists vis-à-vis the methodology to be utilised at EIA follow-up stage, and
- institutional problems, related to the number of different interested stakeholders involved in the EIA process. For example, project proponents may see the costs associated with auditing as prohibitive and as an unnecessary bureaucratic hurdle, whilst the regulators or authorities involved in the decision-making phase or in the review phase of the process may see auditing as a critique to the work carried out by them.

Munro et al. (1986) discuss that auditing should become a routine exercise embedded as an integral part of EIA, comparable to any other routine process found in a business environment. The overall environmental performance of a project should also be given due importance through the necessary audit exercises (Arts & Morrison-Saunders, 2022a). In addition, appropriate and well-defined methods are necessary to uphold expectations for rigour and credibility during EIA follow-up evaluation (Pinto et al., 2019). EIA follow-up evaluation provides the basis for management response that might be required or to confirm that existing mitigation measures are adequate (Morrison-Saunders, 2023). This can be ensured through appropriate governance arrangements aimed at the implementation of EIA follow-up evaluation.

Management

Management in EIA follow-up involves applying the knowledge and understanding developed through monitoring and evaluation, to optimise the overall performance of EIA (Pinto et al., 2019). EIA follow-up management is defined as the process of making the necessary decisions and taking appropriate action in response to issues arising from monitoring and evaluation processes (Arts et al., 2001; Arts & Morrison-Saunders, 2022a, 2022b; Morrison-Saunders & Arts, 2004b, p. 4). Such management decisions may be made both by the project proponents themselves (for example, in the case of any unpredicted impact) and by the EIA regulators (in the case of reviewing consent decisions, if possible, and any management requirements).

The management aspect in EIA follow-up is considered to be action-oriented, aimed at minimising the negative impacts of development as much as possible and to maximise the positive elements (Arts & Morrison-Saunders, 2022a, 2022b; Morrison-Saunders et al., 2007; Pinto et al., 2019).

Sánchez and Gallardo (2005) comment on the fact that EIA effectiveness is highly dependent on the implementation of cost-effective mitigation and management measures to prevent environmental degradation as much as possible. Jay et al. (2007), Marshall (2002, 2005) and Sánchez and Hacking (2002) stress the fact that EIA follow-up can be considered as the strategic link between EIA and the appropriate implementation of environmental management tools, including EMS (environmental management systems) and EMP (environmental management plans). EMS is a voluntary system of compliance that operationalises the implementation of environmental protection and management measures (Morrison-Saunders & Arts, 2004a).

While EMPs may not necessarily require EMS certification, Bennett et al. (2016) consider it as one means of managing ongoing impacts during and after the completion of a development. Nowicki et al. (2021) discuss that the introduction of an EMS can ensure that corrective measures and remedial actions can become an integral part of an organisational structure. They can also become a platform necessary for the development of pro-active environmental strategies, acting as a management aspect at the EIA follow-up stage. The most utilised systems associated with EMS are the EU Eco-Management and Audit Scheme – EMAS⁶ (European Commission, n.d.) and ISO 14001⁷ (ISO, 2015).

The boundary between EIA and EMS is considered a relatively fuzzy one as can be confirmed by Hollands and Palframan (2014). Seeking the differences between EIA and EMS, they note that:

- the weaknesses of one system tend to be offset by the strengths of the other,
- both EIA and EMS are designed to provide answers to the same questions that is, what needs to be managed and how it should be managed, at different stages of the development process, and
- while EIA seeks to influence project design before the development consent process, EMS is considered a useful framework during the construction and operations phases at post-consent.

Ridgway (2005) notes that whilst the EIA is essential throughout the concept development phase and the early planning phase, its importance decreases significantly following project approval, with the auditing and management aspect, particularly through the implementation of an EMS,

⁶ EMAS was developed by the European Commission for companies and other organisations with the aim of evaluating, reporting and improving their environmental performance, together with guaranteeing their credibility and transparency (European Commission, n.d.). EMAS is regulated through EC Regulation No. 1221 of 2009 (EurLex, 2019), with its objective being the promotion of continuous improvements in the environmental performance of organisations by the establishment and implementation of environmental management systems through periodic evaluation, provision of information, discussion with the public and active involvement of employees.

⁷ ISO 14001:2015 is a standard issued by the International Organization for Standardization (ISO) aimed to provide guidance to organisations with respect to how environmental management systems can be utilised to enhance their environmental performance (ISO, 2015), and the certification arising from such would be used to externally certify their credibility (Bennett et al., 2016). Other systems that may be utilised to provide sustainability certification, or acting as a management system during the operational phase of a development include:

- BREEAM (Building Research Establishment's Environmental Assessment Method) – a sustainability assessment method for large-scale projects or master plans; infrastructural developments and buildings. This method aims to certify a development's environmental, social and economic sustainability performance using specific standards, leading to more sustainable environments (Building Research Establishment, n.d.b.).
- CEEQUAL (Civil Engineering Environmental Quality Assessment) – a sustainability assessment, ratings and awards scheme aimed for civil engineering, infrastructure, landscaping and public projects, in order to achieve improved project specification, design and construction. This, in turn, encourages higher sustainability standards and improved environmental and social performance (Building Research Establishment, n.d.a.; Carroll et al., 2020).
- LEED (Leadership in Energy and Environmental Design) – is the most widely used green building rating system in the world and provides a framework for healthy, highly efficient, and cost-saving green buildings. The certification itself is globally recognised, and is considered to be a symbol of sustainability achievement and leadership (U.S. Green Building Council, n.d.).

gaining more relevance and importance, ending up as being a key tool for environmental management at the implementation stage of a proposal.

The implementation of EIA follow-up management, also through EMS, poses a number of issues according to Hollands and Palframan (2014). Barriers to integration between EIA and EMS include costs, in terms of both time constraints and financial burden and lack of transfer of information from the EIA at pre-consent stage to the EMS stage. This is particularly due to a lack of continuity between personnel, over-specialisation or segregation of roles, in that the practitioners of EIA and EMS would not be aware of each other's work. Ridgway (2005) concludes that EMS can assist the delivery of EIA outcomes and aid the developer in demonstrating that it has met all the conditions imposed at the development consent stage and which can be used as a monitoring tool in adapting management actions accordingly. Gallardo et al. (2016) point out that the strengthening of linkages between EIA and EMSs during EIA follow-up would in turn lead to potential overall improvement of the system. They note that EIA follow-up had led to direct improvements to corporate and project EMSs and contributed to the control of geo-environmental impacts and led to the improvement of the effectiveness of mitigation.

Adaptive management is not considered as a response to the precautionary principle; but as Olszynski (2021) notes, it is an admission that the effectiveness of the mitigation measures proposed and potentially being taken into account in impact prediction is uncertain. This approach may be considered to be key to successful and effective EIA follow-up, implemented through appropriate monitoring and auditing tools emerging from EIA (Bjorkland, 2013). Data through this process is gathered for four key purposes:

- the evaluation of progress towards the achievement of EIA goals,
- the determination of resources status for the identification of any required management actions,
- the increased understanding of resource dynamics through the comparison of predictions against survey data, and
- the development and refinement of models of resource dynamics to modify ongoing activities as necessary and create a database of information that can be utilised for any future project proposals.

Morrison-Saunders (1996) originally investigated this relationship, indicating the rise of an adaptive ongoing management system that would be able to respond to observed problems, uncertainties or shortcomings in either the monitoring or mitigation activities of a development life-cycle. This adaptive approach to management is essential, noting that if the monitoring and evaluation processes indicate that targets or criteria identified in the EIA are not being achieved, appropriate improvements to impact mitigation activities are taken into consideration (Morrison-Saunders, 2023; Pinto et al., 2019). The use of EMPs and EMSs as discussed earlier, rather than simple reliance on mitigation measures, is also an indication of adaptive management arising from EIA follow-up. Having appropriate follow-up governance arrangements enabling management responses could ensure effective and efficient implementation of EIA follow-up.

Engagement and Communication (Participation)

Public participation in EIA follow-up refers to those processes and practices for involving stakeholders in follow-up for projects subject to an EIA, while ensuring credibility and transparency (Morrison-Saunders, 2023; Morrison-Saunders & Arts, 2023, 2024; Morrison-Saunders et al., 2023).

Engagement and communication for EIA follow-up entails ensuring that stakeholders have the appropriate means to actively participate in determining and learning about the outcomes of EIA. This would include their involvement in informing ongoing management of that development and is essential for the legitimacy of EIA decision-making throughout the development life-cycle (Morrison-Saunders & Arts, 2023). Active engagement and communication should be carried out with the relevant stakeholders on all aspects of EIA follow-up, i.e., starting from the design of follow-up programs during the early stages of EIA through to implementation once project construction is carried out and operations commence (Morrison-Saunders & Arts, 2021). Involvement in EIA follow-up would stress the importance of transparency, accessibility and openness (Arts & Morrison-Saunders, 2022a, 2022b; Morrison-Saunders & Arts, 2004a; Morrison-Saunders et al., 2007, Pinto et al., 2019).

Active participation and engagement of the community in EIA follow-up is also dependent on the availability of EIA-related information to the non-expert, again stressing transparency, openness, and ultimately legitimacy. The involvement of stakeholders in EIA follow-up can influence the perception of the legitimacy of EIA follow-up programs (Pinto et al., 2019).

Linked to this engagement and communication, the IAIA has published 'International Best Practice Principles for Public Participation in Impact Assessment Follow-Up' (Morrison-Saunders & Arts, 2023; Morrison-Saunders et al., 2023). The principles are framed within the spectrum of public participation, with the minimum requirements pertaining to information provision, and the maximum being related to community empowerment, i.e., where the community can make decisions regarding projects, their management and ongoing monitoring (Morrison-Saunders & Arts, 2023, 2024). The twelve principles include (Morrison-Saunders & Arts, 2023, p. 2):

1. Mandatory public reporting of IA follow-up activity.
2. Ease of access to published material.
3. Full transparency and ease of comprehension.
4. Clarity about the IA follow-up process.
5. Opportunity for public input to IA follow-up decision-making.
6. Continuous access to IA follow-up activities and outputs.
7. Inclusion of independent verification.
8. Two-way flows of communication between stakeholders.
9. Establishment of partnerships between proponents, regulators and the community.
10. Inclusion of Indigenous values, knowledge systems and worldviews.
11. Participatory monitoring.
12. Involvement of community in adaptive management.

Box 2.4: International Best Practice Principles for Public Participation in Impact Assessment follow-up

(Morrison-Saunders & Arts, 2023, p. 2)

For most of these best practice principles and for EIA follow-up in general, the lack of appropriate governance arrangements (for example, legislative provisions supporting EIA follow-up and adequate administrative arrangements) focusing on EIA follow-up, guaranteeing engagement and communication, may have consequences on both the opportunities for involvement and participation, but also those related to learning from experience through active feedback into EIA. In order to determine EIA outcomes, follow-up is essential, therefore a clear commitment to its carrying out is needed (Morrison-Saunders et al., 2007; Pinto et al., 2019).

2.2.3 The different levels of EIA follow-up

The link between EIA follow-up, particularly governance, and EIA effectiveness can be seen through three different scales of studies: micro-follow-up, macro-follow-up and meta-follow-up (Marshall et al., 2005; Morrison-Saunders, 2023; Morrison-Saunders & Arts, 2004b). Morrison-Saunders and Arts (2004b, p. 312) conceptualise this through Figure 2.1 below.

The micro or project-level follow-up refers to impact prediction, monitoring, compliance auditing and implementation of mitigation measures proposed by an EIA on a project-by-project basis (Morrison-Saunders, 2023). The primary aim at this level would be to assess the acceptability of the management of both the project and the environment impacted by such.

The macro, or the jurisdictional level follow-up (i.e., the most relevant to this research, in view of the fact that EIA follow-up governance is being assessed at the jurisdiction level) would seek to determine effectiveness as measured by its influence on decision-making, the efficiency of its procedures and the utility and usefulness of EIA (Morrison-Saunders, 2023; Morrison-Saunders & Arts, 2004b).

At the meta or concept scale follow-up, EIA would be viewed more broadly, while looking at the 'bigger picture', with its main aim to determine whether EIA does actually work and provide the expected results (Marshall et al., 2005; Morrison-Saunders, 2023; Morrison-Saunders & Arts, 2004b). This is also seen in terms of whether EIA leads to informed decision-making, better project design, improved environmental protection and sustainable use of resources (Morrison-Saunders, 2023; Sadler, 2004).

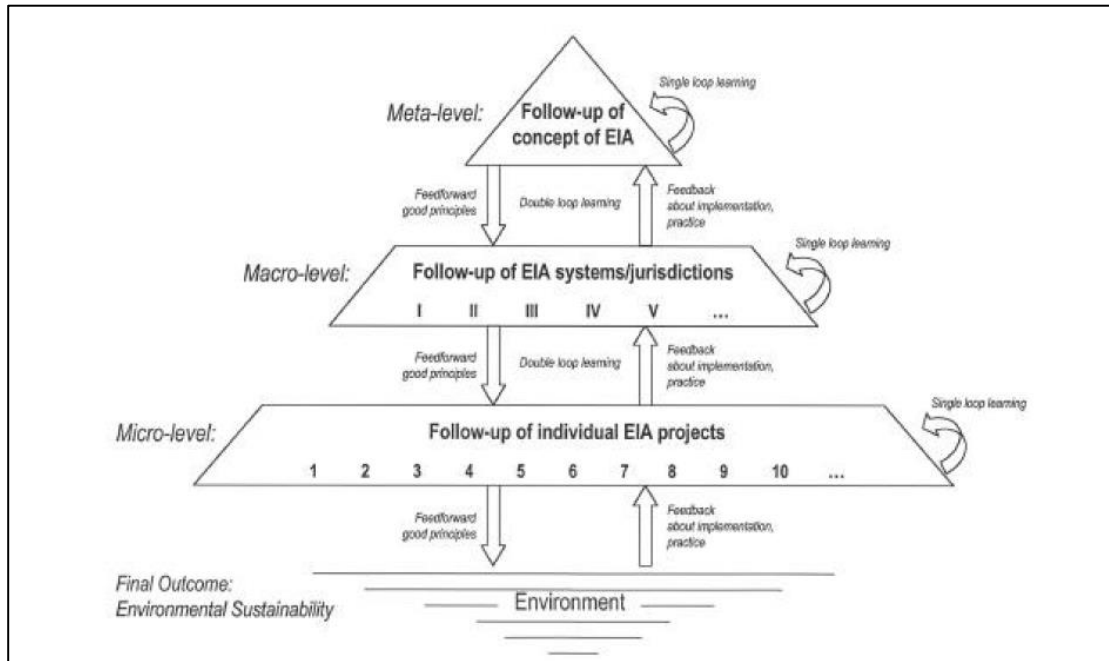


Figure 2.1: EIA follow-up at different levels and their inter-relationships
(Source: Morrison-Saunders & Arts, 2004b, p. 312)

In order to further understand how governance can ensure EIA follow-up effectiveness at the macro scale, the next section discusses the concept of EIA effectiveness in more detail, with the subsequent section linking the two concepts in the formulation of the framework for the evaluation of effective EIA follow-up governance.

2.3 EIA Effectiveness

In order to discuss EIA effectiveness, one must first seek to understand the meaning behind this notion. It should be noted that there is no single definition assigned to effectiveness and as correctly highlighted by Cameron (1986), “agreement about effectiveness is mainly an agreement to disagree” (p. 539).

In his pioneering work, ‘International Study of the Effectiveness of Environmental Assessment’, Sadler (1996) links EIA effectiveness to “the overall evaluation of performance by reference to the policy and institutional functions it is meant to serve” (p. 37). Elling (2009, p. 129) defines effectiveness as the “... potential outcome of a goal-oriented process”, similar to what Cashmore et al. (2010, p. 372) state in their own definition: “... effectiveness has typically been defined as a measure of goal attainment”. Pölönen et al. (2011) concur with the conceptual linkages between EIA effectiveness and goal attainment. According to them, EIA is: “... a core question of research on the effectiveness of environmental policy tools has been whether the instrument works, is used as intended and meets the purposes for which it is designed” and is “often understood as referring to achievement of policy goals.” (p. 121).

The concept of goal attainment is also relevant at the strategic level to SEA, where its effectiveness is also linked to the achievement of its stated goals, i.e., ensuring high level protection of the environment while promoting sustainable development (Sadler & Verheem, 2022; Therivel & Gonzalez, 2024). SEA effectiveness has also been discussed extensively in research publications

(e.g., Acharibasam & Noble, 2014; Bina et al., 2011; Bond et al., 2018; Cashmore et al., 2008; Chanchitpricha & Bond, 2013; Geißler, et al., 2019; Hanna & Noble, 2015; Partidario & Monteiro, 2018; Pope et al., 2018; Sadler & Verheem, 2022; Therivel & Gonzalez, 2019, 2024; Zhang et al., 2013), with studies highlighting how the quality of SEA practice and reports is often not deemed up to standard, falling short of achieving its stated goals questioning its influence and relevance on decision-making and spatial planning processes (Sadler & Verheem, 2022).

Retief et al. (2020) note that over the past 50 years, the perspectives of the role of EIA in terms of its aims and influences have evolved significantly. This is mainly due to different stakeholder perspectives, shifting in policy mandates (for example, due to changes in government administration/political outlooks and pertinent international issues, such as climate change) and the overall view that EIA is a tool that supports decision-making, rather than determining specific outcomes.

Two common factors can be traced in the discussions of EIA effectiveness literature, mainly being: (i) the establishment of goals for EIA, and (ii) the achievement of the said goals and outcomes.

EIA effectiveness has been extensively defined on a number of aspects, some of which were based on the impact assessment process in general (Chanchitpricha & Bond, 2013; Morrison-Saunders, 2023):

- the resources required (for example, staff complement, overall time required and the costings associated with impact assessment),
- the purposes of impact assessment including the actors and stakeholders involved in the process, together with the values and interests of decision-makers,
- the overall contribution to policy development,
- the lessons learnt from EIA and the changing perspectives learned from such, and
- the expectations of all parties involved.

In further defining EIA effectiveness however, various studies (e.g., Alberts et al., 2021; Arts et al., 2012; Baker & McLelland, 2003; Bond et al., 2013a, 2013b; Chanchitpricha & Bond, 2013, 2020; Caro-Gonzalez et al., 2023; Chanchitpricha et al., 2019, 2021; Fundingsland Tetlow & Hanusch, 2012; Loomis & Dziedzic, 2018; Loomis et al., 2022; Pope et al., 2018; Rozema & Bond, 2015; Sadler, 1996; Theophilou et al., 2010; Therivel & González, 2019) seek to categorise it into different dimensions.

Noting the above, the next section (2.3.1) discusses the different dimensions of EIA effectiveness.

2.3.1 Exploring the different dimensions of EIA effectiveness

Sadler (1996, p. 39) originally categorises effectiveness into three categories, distinguishing them in terms of purpose:

- *Procedural effectiveness* – “Does the EA process conform to established provisions and principles?”
- *Substantive effectiveness* – “Does the EA process achieve the objectives set, e.g., support well informed decision making and result in environmental protection?”

- *Transactive effectiveness* – “Does the EA process deliver these outcomes at least cost in the minimum time possible, i.e., is it effective and efficient?”

These three effectiveness types are discussed more extensively later in this section.

Baker and McLelland (2003) add another dimension to their categorisation of EIA effectiveness, by including *normative effectiveness*. This originally refers to whether the impact assessment process (be it EIA or SEA) achieved its ideal, normative goals (Baker & McLelland, 2003; Chanchitpricha & Bond, 2013; Pope et al., 2018; Therivel & González, 2019). Normative effectiveness has often been linked to incremental changes in institutions, organisations, philosophy, science and culture, or evidence of the contribution towards achieving sustainable development. It is also associated with the sense of principles that society (or a community) agrees on, as well as the sense of accepted behaviours within society (or a community) (Bina, 2007; Cashmore et al., 2004; Gallardo & Bond, 2011).

In seeking a definition of normative effectiveness, Bond et al. (2015) ask whether EIA meets the expectations of stakeholders irrespective of the sustainability discourse they align with. Bond et al. (2013a) argue that normative effectiveness reflected the extent to which normative goals, through a mix of social and individual norms, were attained. Bond et al. (2012, 2013a, 2013b, 2015) further build on the categorisations by Sadler (1996) and Baker and McLelland (2003) and with the concept of sustainable development in mind, identify two other categories of EIA effectiveness, namely knowledge and learning and pluralism.

Knowledge and learning refers to the understanding that effective EIA can facilitate learning in various forms (Bond et al., 2013a, 2013b; Jha-Thakur et al., 2009; Nilsson, 2005; Pope et al., 2018). Bond et al. (2015) conceptualise knowledge and learning in terms of EIA effectiveness through the following question: ‘How, and to what extent, does the EIA process facilitate instrumental and conceptual learning?’ (i.e., the former referring to the acquisition of new knowledge within an existing frame and the latter referring to a modification in the frame). Acquisition of knowledge and, consequently, learning, can both occur within an EIA for an individual development project (i.e., at the micro level), while EIA practice offers more learning and improvement opportunities over time, possibly both at the micro and the macro/jurisdiction levels (Bond et al., 2015; Pope et al., 2018).

Pluralism refers to the different value systems and perspectives held by diverse stakeholders and how these are managed within EIA, together with how and to what extent are affected and concerned parties accommodated into and satisfied by the EIA process (Bond et al., 2012, 2013, 2015; Pope et al., 2018). Pluralism is deemed to be vital in any discussion relating to EIA effectiveness (Bond et al., 2011; Cashmore et al., 2004, 2010; Rozema & Bond, 2015) but is also considered to be an integral part of EIA per se, particularly in ensuring that all parties and stakeholders are appropriately involved (Therivel & González, 2019). The categorisation by Bond et al. (2015) includes pluralism as a distinct dimension, and one which influences the other dimensions. Pluralism is conceptualised through the following question: ‘How, and to what extent,

are affected and concerned parties accommodated into and satisfied by the assessment process?’ (Bond et al., 2015; Pope et al., 2018).

In summary, Table 2.1 below outlines the six-dimension categorisation of EIA effectiveness.

Table 2.1: Six-dimension categorisation of EIA effectiveness

(adapted from Baker & McLelland, 2003; Bond et al., 2013a, 2015; Chanchitpricha & Bond, 2013; Sadler, 1996)

Effectiveness dimension	Detailed description
Procedural effectiveness	Assessment that complies with acceptable standards and principles.
Substantive effectiveness	Achievement of the expected substantive objectives (i.e., sustainable development).
Transactive effectiveness	Where the outcomes are obtained with least cost in the minimum timeframe.
Normative effectiveness	Achievement of normative goals which could be: incremental changes in institutions, organisations, philosophy, science and culture, or evidence of the contribution towards achieving sustainable development.
Knowledge and learning	Understanding that effective EIA can facilitate learning in various forms.
Pluralism	How and to what extent are affected and concerned parties accommodated into and satisfied by the process.

Pope et al. (2018) later refine the six-dimension framework proposed by Bond et al. (2015) by identifying a conceptual overlap between knowledge and learning and substantive effectiveness, and also between normative effectiveness and pluralism.

With respect to knowledge and learning and substantive effectiveness, Pope et al. (2018) identified this conceptual overlap in view of the fact that knowledge and learning are the mechanisms through which substantive outcomes are delivered either directly by informing decision-making, or indirectly/incrementally by leading to changes in governance and societal context over time. As for normative effectiveness and pluralism, Pope et al. (2018) noted that as whether or not stakeholders feel that they have been accommodated throughout the EIA to a large extent depends upon whether they agree with the overall goal of the process itself.

In this regard, the revised EIA effectiveness framework identified by Pope et al. (2018) proposed that: (i) learning (which also implies knowledge gain) is included as a consideration of substantive effectiveness in system-wide reviews (i.e., at the macro/jurisdiction level), and (ii) both considerations of the effectiveness of stakeholder engagement (pluralism) and views about the ability of the process to deliver what observers wish to see (normative effectiveness) can be incorporated under the legitimacy effectiveness dimension. *Legitimacy*, as identified by Pope et al. (2018) is understood as the acceptance of the results of the impact assessment by the actors involved in the process (Caro-Gonzalez et al., 2023). Legitimacy as an effectiveness dimension is conceptualised by Pope et al. (2018) through the following question: “Was the assessment process perceived to be legitimate by a wide range of stakeholders?” (p. 43). It is also worth highlighting that the categorisation of effectiveness by Pope et al. (2018), based on strategic-level assessment, informed the formulation of SEA effectiveness dimensions used by Thérivel and González (2019; 2024). With the evident conceptual similarities between the two, one may conclude that SEA

effectiveness dimensions are also relevant to EIA effectiveness as both tools share core objectives related to environmental decision-making, sustainability and impact mitigation.

In addition to the above, Loomis et al. (2022) have also proposed the transformative effectiveness dimension, based on a principle of continuous improvement in EIA, which does not restrict itself only to impact assessment tools but also to public policies and stakeholders. This effectiveness dimension also refers to the extent to which EIA fulfils its transformative purpose, in which the stakeholders' frames of reference are changing, to increasingly consolidate a strong sustainable development paradigm (Caro-Gonzalez et al., 2023). Conceptually, transformative effectiveness can be seen as close to the substantive dimension, due to changing stakeholders and development types through EIA, which in itself may be considered as a substantive outcome.

Table 2.2: Four-dimension categorisation of EIA effectiveness
(adapted from Pope et al., 2018)

Effectiveness dimensions	Detailed description
Procedural effectiveness	Have appropriate processes been followed that reflect institutional and professional standards and procedures?
Substantive effectiveness	To what extent does the assessment lead to change in process, actions, learning or outcomes?
Transactive effectiveness	To what extent and by whom is the outcome of conducting the assessment considered to be worth the time and cost involved?
Legitimacy	Was the assessment process perceived to be legitimate by a whole range of stakeholders?

Table 2.2 provides a summary of the four-dimension EIA effectiveness categorisation identified by Pope et al. (2018). Noting its streamlined structure and given that other studies have applied this framework to examine EIA effectiveness at the macro/jurisdiction level, which is pertinent to this research as discussed in Chapter 1 (e.g., Chanchitpricha & Bond, 2020; Chanchitpricha et al., 2019, 2021; Geißler et al., 2019; Zhao et al., 2023), it was seen as appropriate to apply this effectiveness framework to this research related to EIA follow-up governance.

The following sections discuss these four effectiveness types in more detail, concluding with a discussion linking EIA follow-up, particularly governance and EIA effectiveness and the derivation of the framework for evaluation of EIA follow-up governance effectiveness.

Procedural effectiveness

Sadler (1996) related procedural effectiveness to how EIA is undertaken, that is, the steps that are followed (Caro-Gonzalez et al., 2023), and whether these reflect professional standards and procedures (Pope et al., 2018). Arts et al. (2012) note that in professional literature, EIA effectiveness pertaining to procedural elements is one of the most dominant aspects in the process (e.g., Cashmore et al., 2004; Geißler et al., 2019; Loomis & Dziedzic, 2018; van Doren et al., 2013; Wood, 1999, 2003).

Compliance with the acceptable principles and standards governing EIA is considered one of the hallmarks of 'effective' EIA (Chanchitpricha & Bond, 2013; Sadler, 1996). The extent to which formal EIA procedures have been followed is also considered to be an indicator of effectiveness

(Cashmore et al., 2004; van Doren et al., 2013). Given that EIA was thought as a 'process', early discussions of effectiveness [in the 1990s] focused overwhelmingly on the 'procedural' aspect, while little regard was being given with respect to its effectiveness (Cashmore et al., 2004). Lyhne et al. (2017) and Pope et al. (2018) further confirm this, noting that historically many EIA evaluation studies have focused on procedural effectiveness, e.g., commencing with Sadler (1996), that is the extent to which EIAs are conducted in line with legal frameworks and international best-practice guidelines.

Procedural effectiveness is also described by Lyhne et al. (2017) as reflecting a system where all mandatory steps are undertaken and, if possible, at low or reasonable cost (linking to transactive effectiveness, discussed later). This often depends on the responsible agency's will to effectively adopt and/or efficiently implement mitigation measures submitted in EIAs. Khan et al. (2020), for example, attribute the procedural effectiveness of EIA in Pakistan solely to the local Environment Protection Agency, rather than any other factors that could be equally influential on the process.

Noting how this effectiveness dimension is reliant on appropriate implementation of the legally binding processes, it is important that these are supported by appropriate institutional arrangements and frameworks, as a form of good governance. It would not be possible to guarantee procedural effectiveness if these governance arrangements are not in place and duly implemented.

Substantive effectiveness

Sadler (1996) defines substantive effectiveness as the achievement of expected and agreed objectives of EIA tools. This also refers to the extent to which the intended outcomes of the EIA process are achieved (van Doren et al., 2013). Both Arts et al. (2012) and Lyhne et al. (2017) explain that substantive effectiveness received less attention than procedural effectiveness, however, it is still more extensively researched than the other effectiveness dimensions (Caro-Gonzalez et al., 2023; Cashmore et al., 2004; Serrano & Fonseca, 2024). Substantive effectiveness concerns what EIA aims to achieve with respect to contributing to more environmentally friendly decisions and to how the intended outcomes of the EIA process are achieved (Lyhne et al., 2016; Nakwaya-Jacobus et al., 2021, 2023; Pope et al., 2018; van Doren et al., 2013). Cashmore et al. (2004) identify three key defining characteristics of substantive effectiveness:

- whether EIA and decision-making are rational or politically exercised,
- whether the purpose of EIA is to inform or influence decisions, and
- establishing the relationship between EIA and sustainable development.

Chanchitpricha and Bond (2013) argue that substantive effectiveness can be based on the extent to which identified aims can be achieved when applying management tools such as EIA or policy in practice. The authors also list factors that influence substantive effectiveness, including the regulatory framework on implementing impact assessment in the decision-making process, stakeholder and public participation, and the quality of the EIA report. Therefore, procedural

effectiveness has consequences for substantive outcomes of EIA (i.e., if processes are deficient or not appropriately followed, consequentially, EIA outcomes would not be good).

Lyhne et al. (2016) note that the substantive contribution made by EIA to decision-making may be measured through three variables:

- the awareness of actors involved in decision-making of the potential consequences of decisions,
- the promotion of environmental values, and
- the effects upon design and consent decisions.

Weston (2010) notes that substantive theories consider the EIA as part of a wider social learning and communicative process in the project of sustainable development, focusing on the communicative aspects of the process rather than simply conforming with a strictly procedural scientific process.

Substantive effectiveness requires appropriate governance arrangements to ensure that EIA objectives are achieved. In addition to the procedural aspects discussed earlier, it is important that stakeholders including decision-makers, understand the scope and purpose of EIA. This, coupled with appropriate means of public participation and adequate allocation of resources, may ensure that substantive effectiveness, through good governance, is achieved.

Transactive effectiveness

Sadler (1996) originally defines transactive effectiveness as the achievement of goals, when investing minimum cost and time. Chanchitpricha and Bond (2013), Pope et al. (2018), Theophilou et al. (2010) and Therivel and González (2019) concur with this definition and state that transactive effectiveness is based on the following four factors: (i) time, (ii) financial resources, (iii) skills, and (iv) specification of roles. Transactive effectiveness, together with substantive effectiveness, have been described as the least researched types of effectiveness (Caro-Gonzalez et al., 2023; Theophilou et al., 2010).

Transactive effectiveness looks at EIA in a proficient way, focusing on the achievement of objectives and the resources invested in terms of human resources, cost and time (Baker & McLelland, 2003; Caro-Gonzalez et al., 2023; Chanchitpricha & Bond, 2013; Sadler, 1996). It is important to recognise that the assessment of transactive effectiveness depends on the judgements of regulators and supporters of EIA, given that cost and time constraints may be embedded in the regulations (Caro-Gonzalez et al., 2023; Getty & Morrison-Saunders, 2020).

It has been also argued that the failure to highlight transactive effectiveness in an era of economic rationalism, cost-cutting measures and geopolitical instability puts at risk the future of EIA itself (Bond et al., 2014; Morrison-Saunders et al., 2014; Pope et al., 2018). In providing a framework for transactive effectiveness, Bond et al. (2015) make reference to what extent, and by whom, is the outcome of conducting assessment considered to be worth the time and cost involved.

Governance arrangements aimed towards the appropriate allocation of resources (i.e., staff, time, budget) are therefore necessary to ensure transactive effectiveness. These should ensure that the goals of EIA are achieved with minimum investment possible.

Legitimacy

Pope et al. (2018) originally identify legitimacy as the fourth EIA effectiveness dimension in their categorisation, framing it through the following question: “Was the assessment process perceived to be legitimate by a wide range of stakeholders?” (p. 43). It should be noted that discussion regarding legitimacy as an effectiveness dimension in EIA literature is still limited to date, however Morrison-Saunders (2023) argues that in addition to the three forms of effectiveness discussed earlier, EIA must be held to be legitimate in the eyes of all stakeholders involved. Legitimacy can therefore be considered a key element when looking into EIA effectiveness. Chanchitpricha and Bond (2020) define legitimacy in EIA as the extent to which the process delivers outcomes which stakeholders consider to be fair, and which delivers acceptable outcomes. Bond et al. (2022) also note that legitimacy can be also perceived as a result of the other three dimensions (i.e., procedural, substantive and transactive), as failure in any one of these dimensions would ultimately affect and influence the legitimacy of an EIA.

Consequently, this leads to a situation where the three forms of effectiveness must be appropriately complementary and integrated (Baker & McLelland, 2003; Bond et al., 2022; Morrison-Saunders, 2023). Chanchitpricha et al. (2019, 2021) also noted how procedural, substantive and transactive elements in their evaluation of SEA case studies, combined to help account for legitimacy in practice.

Besides ensuring procedural, substantive and transactive effectiveness, governance arrangements need to be in place to ensure that EIA is deemed legitimate by all actors and stakeholders involved. In terms of legitimacy, governance arrangements need to be in place and implemented to ensure that stakeholders perceive EIA as accessible, transparent, and ultimately, legitimate.

The following section now looks into how these four dimensions of EIA effectiveness are assessed at different hierarchical levels. The link to the main research question, in relation to the macro/jurisdiction scale, is also discussed.

2.3.2 EIA effectiveness at different hierarchical levels

One can also look at the four dimensions of EIA effectiveness through different scales: micro/project-level, macro/jurisdiction-level and meta/conceptual level (Loomis et al., 2022). Using a similar categorisation to that utilised by Morrison-Saunders & Arts (2004b) to discuss EIA follow-up at different scales, the following section presents various studies at different hierarchical levels, shedding more light on the four dimensions of EIA effectiveness, particularly through the context of the main research question, i.e., EIA follow-up governance and EIA effectiveness at the macro scale.

Micro/project level

EIA effectiveness, through its four dimensions, can be analysed at the micro (project level) through individual activities or projects. Whilst noting that the amount of published macro/jurisdiction level studies (as discussed in the subsequent section) exceeds the micro/project level studies, some of the studies at this level are crucial in understanding EIA effectiveness in its different dimensions. It should also be noted that most studies tend to focus on more than one effectiveness dimension, as seen below.

In terms of *procedural effectiveness*, Hirji and Ortolano (1991) develop a concept of EIA effectiveness based on procedural compliance, completeness of EIA documents, methods to assess impacts, influence on project decisions and weight given to environmental factors, based on Kenyan case studies for water resources development. Focusing on procedural aspects, Bataineh (2007) analyses effectiveness by evaluating the set of measures implemented to minimise ecological impacts resulting from the construction activities of a pipeline project in Azerbaijan. Similarly, Caro-Gonzalez et al. (2021) analysed the methods used in EIA case studies in Colombia to demonstrate their procedural effectiveness.

Substantive effectiveness is analysed by Gwimbi and Nhamo (2016) through the implementation of EIA follow-up in Zimbabwe. This study investigated implemented mitigation measures and their effectiveness in mining and related operations along the Great Dyke of Zimbabwe. Micro-level studies, however, often link substantive effectiveness to other effectiveness types. Referencing experiences with screening of livestock farms for EIA in Denmark, Christensen (2006) indicates that EIA screening processes may lead to holistic assessment of a development proposal, which may in turn lead to modifications of a proposed development project. With a procedural and substantive effectiveness perspective, Christensen (2006) also concludes that a sound EIA screening process can affect the overall outcome of the EIA process substantively.

In their analysis of 63 EIS cases from Brazil, Landim and Sánchez (2012) link the procedural, substantive and transactive dimensions to evaluate effectiveness. Their primary focus is on procedural effectiveness and comment that “the quality of environmental impact assessment (EIA) documents is often pointed to as one determinant of their effectiveness” (p. 217). However, with an eye on the procedural, substantive and transactive effectiveness dimensions, they highlight the following issues: (i) increase in length of EIA documents, featuring more illustrations and graphic presentations, (ii) lengthier descriptions of the development proposals, (iii) assessment of alternatives still lacking the necessary information, including comparative studies, (iv) broader baseline studies, (v) clearer impact identification models, which however lack the utilisation of models or the use of complex scale-weighted systems, and (vi) the evolution of mitigation and management systems. These may lead to lengthier processes (impacts on procedural effectiveness), increase in the amount of information procedure which may not necessarily translate into clear EIA outcomes (impacts on substantive effectiveness) and

additional resources required, particularly in terms of time, staff and budget (impacts on transactive effectiveness).

In terms of *transactive effectiveness*, Sánchez and Gallardo (2005) discuss EIA effectiveness through a case study of a highway in Sao Paulo in Brazil, where it is analysed through the implementation of cost-effective mitigation and other management measures to prevent significant environmental degradation.

Legitimacy is also discussed in relation to other EIA effectiveness dimensions at the micro-level. Rozema and Bond (2015) evaluate EIA effectiveness through the analysis of two controversial case studies, i.e., the development of HS2 rail project in the UK and of a motorway in the Netherlands. Effectiveness was analysed through discourse mobilisation, discussing whether EIA accommodates civil society discourses that have been mobilised in the context of project development, linking to how legitimacy is framed by Pope et al. (2018). Similarly, through their analysis of an out-of-town shopping centre in Sweden, Isaksson and Storbjork (2012) discuss EIA effectiveness or its lack thereof, noting elements of substantive and legitimacy aspects. They note that attempts to increase EIA effectiveness would also require the transformation of the fundamental norms and power relations that steer planning practice.

The next section discusses the EIA effectiveness dimensions through macro/jurisdiction level case studies.

Macro/jurisdiction level

The macro/jurisdiction level assessment of EIA effectiveness is the most relevant to this research, and may contribute to the identification of trends in different countries, territories and jurisdictions. Ever since the inception of EIA in the 1960s, a vast amount of EIA effectiveness studies, particularly at the macro level, have been published. It is not the scope of this thesis to review each and every one of these studies, however what follows is an illustrative (non-exhaustive) overview of some of these studies, in relation to the four EIA effectiveness dimensions.

Most of these studies, as highlighted by Caro-Gonzalez et al. (2023) and discussed earlier in this section, focus on the procedural effectiveness dimension, followed by substantive effectiveness and multidimensional studies (which include discussion of more than one effectiveness dimension).

In terms of *procedural effectiveness* at the macro/jurisdiction scale, Heuvelhof and Nauta (1997) analyse the impact of EIA on decision-making and consider it the main criterion in the establishment of procedural effectiveness of EIA in the Netherlands. They conclude that EIA has a considerably high impact on the decision-making process, with 69 per cent of EIAs considered to have a net beneficial impact on the process, while noting that the EIA process must always be linked to a formal decision, particularly from a legalistic point of view.

Barker and Wood (1999) carry out an evaluation of the procedural effectiveness of EIA systems in eight European countries, namely the UK, Germany, Spain, Belgium, Denmark, Greece, Ireland, and Portugal. EIA performance is analysed through the quality of EIA reports. This analysis is similar to Wood's (2003) comparative review of the procedural performance of EIA in the US, EU, UK, the Netherlands, Canada, Australia, New Zealand and South Africa.

Many of the macro-level studies focusing on procedural effectiveness tend to focus on the implementation of the different procedural steps of EIA, looking at the extent to which EIAs are conducted in line with legislative provisions and international best-practice guidelines. For example, in their analysis of the development assessment system in the UK, Tinker et al. (2005) state that the transmission of mitigation measures as recommended in the EIA process to the decision-making phase influences overall EIA effectiveness, from a procedural point of view. They also note the relative rarity for eventual planning conditions to cover all the aspects of project design and their implementation in order to mitigate environmental impacts (Tinker et al., 2005). Morrison-Saunders and Bailey (2009) discuss procedural EIA effectiveness through the case study of Western Australia, while reviewing the role of EIA regulators and EIA consultants. In his study of the Egyptian EIA system, Badr (2009) also looks into procedural effectiveness by evaluating the importance of scoping as an essential systematic and procedural measure.

Pinho et al. (2010) indirectly look into procedural EIA effectiveness by specifically evaluating the EIA screening stage in different EU Member States. They conclude that there is considerable room for improvement with respect to the current arrangements, both through the implementation of the EIA Directive and in the national EIA mechanisms. Harmonisation at the jurisdiction level between EU Member States could avoid problems hindering the carrying out of effective EIAs. Issues which were identified as needing addressing included (Pinho et al., 2010): diverging levels of environmental protection, ambiguous screening procedures, problems with interpretation of screening criteria, difficulties with establishing cumulative impacts, deliberate attempts by project proponents to remain below threshold values therefore to avoid EIA, and the role of national and regional government entities. This approach towards identifying issues regarding procedural aspects at the macro level was also adopted by Khan et al. (2020), who evaluate procedural EIA effectiveness through the performance of the Environmental Protection Agency (EPA) of Punjab, Pakistan in EIA implementation. Yang et al. (2023) also evaluate the procedural effectiveness of EIA in China, with a systematic review and analysis from the perspective of effectiveness evaluation.

Arts et al. (2012) assess effectiveness of the EIA systems in the Netherlands and the United Kingdom, through a procedural lens, highlighting deficiencies in the EIA follow-up mechanisms and integration of decision-making within the EIA process. They note that the quality of the environmental reports is considered one of the contextual factors contributing to EIA effectiveness.

On a much larger scale (however, still at the macro/jurisdiction scale), the European Commission also sought to assess the procedural effectiveness of the EIA Directive, following its publication in 1985. It commissioned four reports on the application and effectiveness of the EIA Directive: 1993 (CEC, 1993); 1997 (CEC, 1997) covering the period between 1990 and 1996; 2003, covering the period between 1997 and 2001 (CEC, 2003) and 2009, covering the 20 years of implementation of the EIA Directive (CEC, 2009). The reports followed the evolution and the implementation of the Directive, highlighting what functions and what does not and providing recommendations for improvements. Those recommendations eventually led to some of the amendments of the Directive in 2014.

Barker and Wood (2001) confirm that the issues highlighted in the EU Commission's five-year reports served their auditing purposes, and have led to recommendations regarding the identified shortcomings, namely procedural, with respect to screening, assessment of alternatives, scoping, integration with other processes, such as the IPPC process, and transboundary impacts. Similar recommendations in the 2009 report led to the latest amendments to the 2011 EIA Directive (through Directive 2014/52/EU), which indicated the areas that required improvements, including concerns regarding the 'screening' procedure, concerns regarding the quality of EIA, the lack of harmonised processes for public participation, difficulties regarding international transboundary EIA processes, and better coordination between EIA and other EU directives and policies.

Pölonen et al. (2011) link aspects of procedural and substantive effectiveness in their evaluation of EIA screening processes in Finland. They also link the quality of EIA to the decision-making process and the overall effectiveness of the system. The inadequacy of mechanisms at the decision-making phase is also considered a key constraint on both procedural and substantive EIA effectiveness.

Substantive effectiveness at the macro level is often linked to how EIA outcomes influence the decision-making processes. Heinma and Poder (2010) discuss EIA effectiveness in Estonia and conclude that EIAs lack influence on the determination of applications for development consent, unless they provide new information. They also state that half of the EIAs carried out in Estonia did not improve any of the final decisions, therefore are lacking in terms of substantive effectiveness.

In their analysis of the Finnish EIA system, Hokkanen and Jantunen (2012) analyse EIA from a substantive effectiveness perspective and note that EIA is well managed and that an improvement in the quality of the EIA report and their outcomes could be identified since its implementation. They also indicate that in general terms the goals of Finnish EIA legislation, namely (i) preventive environment protection, (ii) comprehensive assessment of environmental impacts, and (iii) early and wide public participation have been achieved. They relate its successes to an early scoping process, which includes public participation requirements and obligations that go beyond the requirements of the EU EIA Directive.

Similarly, Zhao et al. (2023) evaluate the substantive effectiveness of EIA in China through a systematic review and analysis from the perspective of effectiveness evaluation.

In terms of macro-level studies focusing specifically on *transactive effectiveness*, Caro-Gonzalez et al. (2023) only identify 4 publications addressing the cost-efficiency of EIA (not necessarily mentioning transactive effectiveness explicitly), including issues pertaining to financial and human resources. For example, Macintosh (2010) evaluates EIA in Australia through the project proponents' views on cost-effectiveness, reflecting the elements of transactive effectiveness.

Reflecting on *legitimacy* as an EIA effectiveness dimension, Jones and Morrison-Saunders (2016) link transparency to effectiveness in their assessment of EIA in Western Australia, and note that its inclusion in decision-making and significance determination can provide well-defined aims and objectives through a clear, open process, leading to a successful, effective and legitimate EIA.

Albeit not specifically, Kruopiene et al. (2009) also highlight legitimacy issues in their assessment of EIA in Lithuania, particularly in terms of transparency. They identify significant shortcomings, including the subjectivity in forecasting environmental effects, insufficient consideration of alternatives, the politicisation of the process and the incompetency of the authorities involved.

Lyhne et al. (2016, 2017) link both substantive effectiveness and legitimacy in their evaluation of the Danish EIA system. The participants of this study felt that the quality of EIA reports actively contributes to the overall EIA effectiveness. The way in which EIAs are conducted is perceived as essential for effectiveness and transparency, important in terms of legitimacy aspects. This was further confirmed by Lyhne et al. (2016) who state that the quality of the EIA report is viewed by some participants in EIAs as critical to effectiveness, given that it defines the adequacy and legitimacy of the information provided. They also comment that EIA is meant to influence the entire development process stage, particularly the decision-making stage and the implementation stage. The emphasis on the carrying out of all the EIA-related procedures and that all necessary information is provided to the decision-makers, seems to take over any substantive outcomes of the EIA (Lyhne et al., 2021).

As hinted earlier, macro-level studies have also analysed EIA effectiveness through a multidimensional approach. For example, the four effectiveness dimensions (procedural, substantive, transactive and legitimacy) as identified by Pope et al. (2018) are used by Chanchitpricha and Bond (2020) as the benchmark against which to evaluate past EIA practice in Thailand in terms of strengths, limitations and challenges (Chanchitpricha et al., 2021). Similarly, Loomis and Dziedzic (2024) assess the substantive influence of EIA to decision-making through a comparative study of EIA in Paraná, Brazil and California, United States, while using the four EIA effectiveness dimensions. Nakwaya-Jacobus et al. (2021, 2023) investigate the substantive, normative, and transactive effectiveness dimensions of EIA in Namibia, through the perceptions of key actors.

Meta/concept level

Sadler's (1996) analysis of EIA effectiveness is one of the first studies carried out at a meta/concept level. It was commissioned as an initiative between the Canadian Environmental Agency and the International Association for Impact Assessment (IAIA). It focuses on four themes, namely:

- the foundations of environmental assessment,
- the new dimensions in environmental assessment,
- the relationship between environmental assessment and decision-making, and
- capacity building.

It also discusses the critical challenges of EIA systems in the late 1990s, some of which may still be considered relevant today, including: (i) the use of environmental assessment as a tool for sustainability assurance, (ii) the provision of guidance at a larger scale to decision-making, (iii) ensuring the practical application of environmental assessment, and (iv) providing a quality control mechanism of environmental assessment. EIA can, therefore, be considered as effective at the meta-scale (i.e., conceptual/theoretical) as a key means for delivering sustainable development, while looking at the 'bigger picture'.

Sadler (1996) establishes that effective environmental assessment should be based on the following:

- appropriate timing in initiating assessment,
- appropriate terms of reference or guidelines,
- quality of information, and
- receptivity of decision-makers on environmental assessment results.

Sadler (1996) asserts that the overall purpose of an EIA should ultimately be solving problems or issues that may arise during the process rather than being an exercise to find all the faults in the system being implemented. Meta-scale EIA focuses on EIA as a concept with questions pertaining to its purpose (Loomis et al., 2022). The meta scale is concerned with broader concepts beyond single systems, such as the promotion of sustainable development; however, it utilises macro and micro-scale EIA to illustrate and explain such concepts.

In summary, the previous sections have attempted to provide a comprehensive discussion of the 'interminable' issue of effectiveness (Cashmore et al., 2004, p. 295). First, by providing a definition of EIA effectiveness, which as Morrison-Saunders (2023) notes, is characterised by a body of literature which is considered dense and convoluted, and by discussing the different dimensions of effectiveness identified in literature. Secondly, by seeing how effectiveness is analysed through different hierarchical levels, i.e., micro, macro and meta.

2.4 Conclusions

In line with the research questions, this chapter has examined existing literature on EIA follow-up, particularly EIA follow-up governance, and EIA effectiveness. Whilst acknowledging and

reviewing the importance of all the elements of EIA follow-up (i.e., monitoring, evaluation, management, engagement and communication), the literature has highlighted the fact that appropriate EIA follow-up governance arrangements need to be in place to ensure that (Arts & Morrison-Saunders, 2022a; Pinto et al., 2019): (i) there is commitment towards its implementation, and (ii) the processes to do so are in place and are actually functioning.

However, arrangements for EIA follow-up governance and subsequent implementation by the stakeholders involved need to be effective. To this end, literature related to EIA effectiveness dimensions was also discussed, particularly through the lens of the effectiveness dimensions identified by Pope et al. (2018) and subsequent studies. It was also noted that both EIA follow-up and EIA effectiveness can be considered at three spatial scales: (i) micro/project level, (ii) macro/jurisdiction level, which is the most relevant to this research, and (iii) meta/concept level.

Taking into consideration the critical review of EIA follow-up, particularly EIA follow-up governance, and EIA effectiveness, the following chapter aligns these two aspects through the formulation of best practice principles and criteria as the framework for evaluation for effective EIA follow-up governance.

Chapter 3 – EIA follow-up governance and EIA effectiveness

Chapter 3 – EIA follow-up governance and EIA effectiveness

3.1 Introduction

This chapter takes into consideration the critical review of EIA follow-up governance and EIA effectiveness, and together with the research questions, aligns the two aspects through:

- The formulation of best practice principles and criteria for EIA follow-up governance, and
- The derivation of the theoretical framework for the evaluation of effective EIA follow-up governance at the macro level, aided by micro level case studies.

The first part of this chapter (Section 3.2) discusses how the best practice principles pertaining to governance arrangements are derived through a distillation of works, namely:

- (i) the best practice principles for EIA follow-up which define both EIA follow-up and EIA follow-up governance (Arts & Morrison-Saunders, 2022a, 2022b, Morrison-Saunders et al., 2024),
- (ii) the criteria derived from the EIA follow-up best practice principles by Pinto et al. (2019), and
- (iii) the EIA effectiveness dimensions as categorised by Pope et al. (2018).

A similar method has been employed by other researchers in establishing criteria for evaluating impact assessment performance at various stages and at various scales (e.g., Chanchitpritcha & Bond, 2013; Dalal-Clayton & Sadler, 2017; Morrison-Saunders et al., 2023; Pinto et al., 2019; Pope et al., 2018; Wood, 2003). This is also discussed further in Chapter 4.

The chapter continues (Section 3.3) by presenting the 10 individual best practice principles and providing detailed guidance for each principle (in terms of clear interpretation of terms utilised) and each criterion to ensure that appropriate in-practice evaluation can be carried out.

3.2 Formulating the best practice principles for effective EIA follow-up governance

Table 3.1 below provides a summary account for the derivation of each best practice principle, based on the key works identified in Section 3.1 above and also other relevant literature. Column 1 of the table presents the EIA effectiveness categorisation group (reflecting the Pope et al. (2018) EIA effectiveness dimensions) upon which the principle is based on. Column 2 indicates the key texts utilised to formulate the best practice principles presented in Column 3. The core concepts identified in the text highlighted in bold in Column 2 serve as the key points of connection and serve as the basis for the formulation of the best practice principles in Column 3.

This process is also utilised by Pinto et al. (2019), where each criterion identified for best practice EIA follow-up was discussed through a distillation of relevant literature. This alignment provides the basis for the formulation of the accompanying criteria utilised to assess each of the principles in the evaluation framework. These are also discussed later in this chapter.

Table 3.1: Derivation of EIA follow-up governance best practice principles

Group	Key texts utilised for derivation of the best practice principles	EIA follow-up governance best practice principles (Source: Author)
Procedural	Arts & Morrison-Saunders, 2022a (p. 1): "...A commitment to follow-up should be present for every IA whether this is through inclusion in legislative provisions for IA or within individual approval decisions." Principles 4 and 9, in the Impact Assessment Follow-up Best Practice Principles, Arts and Morrison-Saunders, 2022a (p. 2): <i>Be carried out throughout the project or plan life-cycle</i> and <i>Specify enforcement provisions</i> are also relevant from a procedural point of view. Pinto et al., (2019, p. 16): "Are there plans in place to ensure that follow-up is maintained throughout the life of the development and tailored accordingly?" Additionally, other research works have highlighted the lack of legislative provisions as a key influence in the lack of implementation of EIA follow-up: Hulett & Diab, 2002; Jalava et al., 2010; Jha-Thakur et al., 2009; Jones & Fischer, 2016; Paliwal, 2006.	1. Have legislative provisions which specify EIA follow-up requirements.
	Principle 7 in the Impact Assessment Follow-up Best Practice Principles, Arts and Morrison-Saunders, 2022a (p. 2): "Provide clear accountability for impact assessment follow-up responsibilities", with Morrison-Saunders et al., 2024 (p. 15) stating that the purpose of this principle is to: "The purpose is to clarify the roles and responsibilities of the main parties - proponent, regulator, and stakeholders as well as independent experts (i.e., the key element of governance in IA follow-up). Pinto et al. (2019, p. 16): "Are roles and responsibilities for follow-up clearly and appropriately defined?" Also mentioned by Bashour (2016) where follow-up responsibilities are indicated in the respective legislative provisions.	2. Establish clear identification of responsibilities in follow-up in EIA procedures/regulations.
	Principle 9 in the Impact Assessment Follow-up Best Practice Principles, Arts and Morrison-Saunders, 2022a (p. 2): "Specify enforcement provisions. - In addition to promoting 'good behaviour', it is also important to identify the consequences for non-compliance within IA follow-up provisions."	3. Specify compliance and enforcement provisions related to EIA follow-up.

	Morrison-Saunders et al., 2024 (pp. 19, 20) indicate: “Enforcement provisions refers to mechanisms employed by regulators and other stakeholders to achieve compliance and correct or halt non-compliance situations regarding expected environmental performance.” This is also linked to governance provisions linking to those processes and arrangements that enable the implementation of EIA follow-up. Pinto et al. (2019) link this to the evaluation of monitoring performance.	
<i>Substantive</i>	Derived from three Impact Assessment Follow-Up Best Practice Principles: “Principle 5: Be transparent (All IA follow-up arrangements and implementation actions and their outcomes should be publicly disclosed)”, Principle 10: “Promote continuous learning from experience to improve future practice), and Principle 11: Facilitate adaptive management (Arts & Morrison-Saunders, 2022a, p. 2). On adaptive management, Morrison-Saunders et al. (2024, p. 23) note that EIA follow-up monitoring and management needs to be flexible to achieve the agreed environmental outcomes. With respect to continuous learning, Morrison-Saunders et al. (2024, p. 21) note that this should be an EIA follow-up objective to prevent EIA from being just a procedural exercise and to promote ongoing improvement of future practice.	4. Ensure reporting of EIA follow-up outcomes , to facilitate adaptive management and promote continuous learning from experience to improve future practice.
	Principle 8 in the Impact Assessment Follow-up Best Practice Principles, Arts and Morrison-Saunders, 2022a (p. 2): “Provide clear, pre-defined and well-justified performance criteria”, with Morrison-Saunders et al. (2024), where “performance criteria establish an agreed or acceptable level of impact or outcome that must be achieved” (p.17). Pinto et al. (2019, p. 13) add the following as one of their evaluation criteria: “Are clear, pre-defined and well-justified performance criteria provided for guiding evaluation outcomes?”	5. Establish clear, pre-defined and well-justified performance criteria for EIA follow-up.
	Based on the definition provided in Arts and Morrison-Saunders (2022a, p.1), whereby follow-up is defined as being a “fundamental component of IA and essential if outcomes of a plan or project subject to IA are to be known”. Morrison-Saunders et al. (2024) also list of	6. Have a clear understanding of the purpose and importance of EIA follow-up.

	purposes as to why EIA follow-up should be carried out. A clear understanding of EIA follow-up, e.g., through the dissemination of information regarding its scope and purpose, can ensure that EIA follow-up given due importance (Morrison-Saunders & Arts, 2004a, 2004b).	
<i>Transactive</i>	In their discussion of who should be responsible for EIA follow-up, Morrison-Saunders et al. (2024, p. v) note that “irrespective of which of the above-mentioned parties is leading, that party should establish a dedicated IA follow-up team, with sufficient funding and resources...”. Pinto et al. (2019) make reference to resources in their criteria as: “Is the follow-up process pragmatic, fit-for-purpose and cost effective?” (p. 16).	7. Allocate adequate resources to ensure EIA follow-up.
	Principle 2 (“Be tailored to context”) and Principle 12 (“Be flexible according to emerging needs”) in Arts and Morrison-Saunders (2022a, p.2). Pinto et al. (2019) make reference to resources in their criteria as: “Is the follow-up process pragmatic, fit-for-purpose and cost effective?” (p. 16).	8. Ensure that governance arrangements are appropriately efficient and effective .
<i>Legitimacy</i>	Principle 5 (“Be transparent”), indicating that all EIA follow-up arrangements and implementation should be publicly disclosed and ensuring that all stakeholders have a right to provide feedback. Principle 6 (“Be accessible to all impact assessment stakeholders”), indicating that all information related to EIA follow-up should be easy to access and to understand (Arts & Morrison-Saunders, 2022a; Morrison-Saunders et al., 2024).	9. Ensure transparency and accessibility of EIA follow-up to all stakeholders/parties involved.
	Morrison-Saunders et al. (2024, p. v) list “enhancing efficacy and legitimacy of decision making for the specific project or plan and for future IAs.” Pinto et al. (2019) also consider legitimacy to be important in EIA follow-up implementation, with one of their criteria being: “Is the EIA follow-up program perceived to be legitimate by stakeholders?” (p. 15).	10. Ensure legitimacy of EIA follow-up governance arrangements.

The best practice principles can be therefore summarised as per Box 3.1 and Figure 3.1 below, and build upon the existing EIA follow-up best practice principles, with a new focus on governance elements (as discussed in Section 2.2):

Best practice principles for EIA follow-up governance

1. Have *legislative provisions* which specify EIA follow-up requirements.
2. Establish clear identification of *responsibilities* in follow-up in EIA procedures/regulations.
3. Specify *compliance and enforcement* provisions related to EIA follow-up.
4. Ensure *reporting* of EIA follow-up outcomes, to facilitate *adaptive management* and promote continuous *learning from experience* to improve future practice.
5. Establish clear, pre-defined and well-justified *performance criteria* for EIA follow-up.
6. Have a clear *understanding* of the purpose and importance of EIA follow-up.
7. Allocate adequate *resources* to ensure EIA follow-up.
8. Ensure that *governance arrangements* are appropriately efficient and effective.
9. Ensure *transparency* and *accessibility* of EIA follow-up to all stakeholders/parties involved.
10. Ensure *legitimacy* of EIA follow-up governance arrangements.

Box 3.1: Best practice principles for EIA follow-up governance

(Source: Author)

The best practice principles have been mapped within the context of the four effectiveness dimensions in Figure 3.1 below. Principles 1 – 3 fall under the procedural effectiveness dimension, Principles 4 – 6 are linked more to substantive effectiveness, Principles 7 and 8 fall under the transactive effectiveness dimension and Principles 9 and 10 linked to legitimacy (denoted horizontally in the figure). The principles have also been mapped in accordance with the level at which they are to be evaluated, distinguishing between micro level (through project level evaluation) and macro level (through jurisdiction level evaluation); these levels are denoted vertically in the figure. It is important to note the overall evaluation at macro level requires both micro and macro level assessment (see Chapter 4 for more detailed discussion).

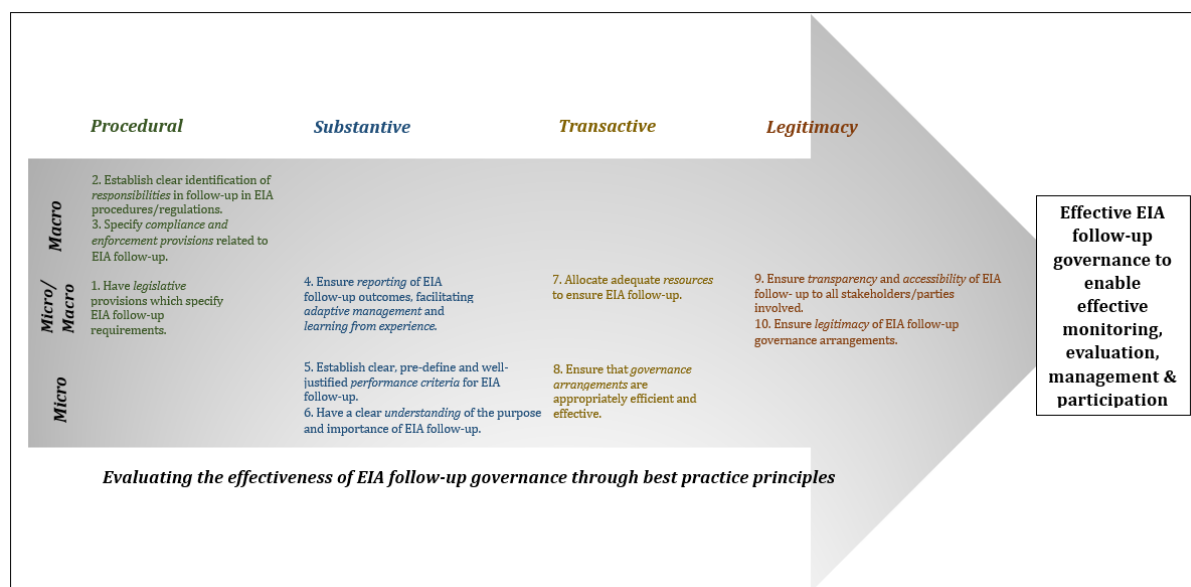


Figure 3.1: The framework for the evaluation for effective EIA follow-up governance

(Source: Author)

The 10 principles are broad statements that can be utilised to guide initial thinking about EIA follow-up governance at a high level. In the next section (Section 3.3), more specific criteria to guide or explain what might be accomplished for each principle are provided, along with some further suggestions on how they might be implemented in practice.

3.3 Implementing the best practice principles and criteria

Each of the best practice principles and criteria are discussed in more detail in this section, with a focus on how these should be interpreted and implemented in the evaluation of the effectiveness of EIA follow-up governance. Boxes 3.2 – 3.11 discuss the best practice principles individually, as identified in Section 3.2. The first column in each box provides the detailed criteria for effective EIA follow-up governance, to be utilised as a guide in evaluating the jurisdiction being assessed. The second column indicates the level at which each criterion is being analysed. As this research is a macro-level study, micro-level analysis (through the project-level case studies) is being included to support the macro-level evaluation (as is discussed in detail in Chapter 4).

At times, a criterion may apply to either macro or micro only, or it may apply to both. For example, in Box 3.2, Criterion 1A is relevant only to the macro level as it is evaluating the legislative provisions for EIA follow-up at a macro/jurisdiction level. Criterion 1B(i), on the other hand, is relevant to both, providing the possibility to evaluate the respective EIA follow-up governance arrangements at both the micro and macro levels.

It should be noted that meta-level is not considered relevant in terms of the purpose of the research therefore it has not been included in the proposed framework.

Principle 1 – Have legislative provisions which specify EIA follow-up requirements

Detailed criteria for effective EIA follow-up governance	Evaluation level: Macro and/or Micro
A. Is follow-up a requirement for all EIAs?	Macro
B. Are provisions in place for each component of EIA follow-up?	Micro/Macro
(i) Are provisions in place for monitoring?	Micro/Macro
(ii) Are provisions in place for evaluation?	Micro/Macro
(iii) Are provisions in place for management?	Micro/Macro
(iv) Are provisions in place for stakeholder communication and engagement?	Micro/Macro
C. Are the above provisions implemented in practice?	Micro/Macro
D. Have any guidance documents to aid the appropriate implementation of EIA follow-up provisions been published?	Macro

Box 3.2 – EIA follow-up governance best practice principle 1

(Source: Author)

Principle 1 focuses on the identification of the legislative provisions, required for EIA follow-up (Criteria 1A – 1D), as follows (Arts et al., 2001; IAIA & IEA, 1999; Morrison-Saunders & Arts, 2004a):

- Criterion 1A: *Is follow-up a requirement for all EIAs?* – EIA follow-up is an inherent component of best practice in EIA therefore this criterion is to be analysed at the macro/jurisdiction level, through the analysis of legislative provisions for EIA follow-up (e.g., through an analysis of legislative documents related to EIA) that identify specific requirements for EIA follow-up.
- Criterion 1B: *Are provisions in place for each component of EIA follow-up?* – This links to the previous criterion and identifies whether there are provisions in place for (i) monitoring, (ii) evaluation, (iii) management and (iv) participation, to be analysed both at the macro level (through an analysis of legislative documents related to EIA) and the micro level (through an analysis of development consent conditions for projects that may include requirements for monitoring, evaluation, management and participation).
- Criterion 1C: *Are the above provisions implemented in practice?* – As in the case of Criterion 1B, this is to be verified both at the macro and micro level (through an analysis of the same documentation mentioned in Criterion 1C above).
- Criterion 1D: *Have any guidance documents to aid the appropriate implementation of EIA follow-up provisions been published?* – This criterion is to be analysed at the macro/jurisdiction level, through the analysis of guidance documents that may have been published discussing the in-practice implementation of EIA follow-up provisions (mentioned in Criteria 1A – 1C).

Having legislative provisions in place is a key principle in terms of EIA follow-up governance (addressed through Criteria 1A and 1B). They can be considered an important first step in initiating EIA follow-up (Morrison-Saunders et al., 2003). As an example, in their evaluation of EIA follow-up in South Africa, Hulett and Diab (2002) indicate that the lack of such legislative provisions should be considered a retrograde step in environmental management. Therefore, whilst acknowledging that the presence of dedicated regulations does not necessarily guarantee that follow-up consequently occurs in practice, having targeted legislative provisions in place can further assist its implementation (addressed through Criterion 1C). The presence of legislative provisions may also lead to the formulation of guidance documents aimed towards EIA follow-up implementation (Morrison-Saunders & Arts, 2004a, 2004b).

Legislative provisions for EIA follow-up might establish responsibilities for follow-up monitoring and performance management (e.g., by the proponent), oversight of follow-up programs (e.g., set responsibilities for regulators) including provisions for prosecution and for public disclosure of these activities. At the very least, some mechanism for enabling follow-up provisions to be established (e.g., either in EIA guidance or within conditions of approval for each project assessed) would be expected in the EIA legislation. This reflects the fundamental position that follow-up is intrinsically part of EIA by definition and thus an expectation in best practice principles (e.g., IAIA & IEA, 1999).

Principle 2: Establish clear identification of responsibilities in follow-up in EIA procedures/regulations

Detailed criteria for effective EIA follow-up governance	Evaluation level: Macro and/or Micro
A. Are there staff within the regulatory authority with specific responsibilities for EIA follow-up?	Macro
B. Are the responsibilities of all stakeholders for follow-up, i.e., regulator/s, project proponent/s, eNGOs and the public clearly identified?	Macro

Box 3.3 – EIA follow-up governance best practice principle 2

(Source: Author)

Principle 2 ensures that there is clear identification of the roles and responsibilities of each of the parties involved in EIA follow-up, such as, project proponents including consultants, regulators, communities and the public, Indigenous Peoples, independent parties, or a combination of all (Morrison-Saunders et al., 2024). This is to be evaluated through the following criteria:

- Criterion 2A: *Are there staff within the regulatory authority with specific responsibilities for EIA follow-up?* – Information regarding staff within the regulatory authority, having specific responsibilities on EIA follow-up, is to be gathered directly from the respective authorities at the macro/jurisdiction level.
- Criterion 2B: *Are the responsibilities of all stakeholders for follow-up, i.e., regulator/s, project proponent/s, eNGOs and the public clearly identified?* – Linking back to Principle 1, data required to evaluate this criterion at the macro level is to be gathered from the respective legislative and guidance documents.

Ensuring that there is adequate staff complement, particularly within the regulator responsible for EIA follow-up, is a key governance arrangement, ensuring implementation (addressed through Criterion 2A). Together with the role of the regulator, ensuring clear identification of roles and responsibilities in relation to EIA follow-up of all parties can enable its effective implementation (Bashour, 2016) (addressed through Criterion 2B).

A clear definition of who will be responsible for monitoring, including receipt and evaluation of monitoring reports, for who will be coming up with management activities in response these evaluation results, and for who will be engaging the public and reporting to stakeholders, needs to be made either through dedicated legislative provisions (linking back to Principle 1) or through their inclusion in development permission conditions (Morrison-Saunders et al., 2024). For example, if outcomes-based conditions of development permission approval are utilised, follow-up would be easier for regulators as compliance is directly linked to performance. This may be straightforward for countries such as Malta where there is one national regulator for EIA, while for other countries this may prove far trickier to determine (e.g., local, regional, national jurisdictions).

Principle 3: Specify compliance and enforcement provisions related to EIA follow-up.

Detailed criteria for effective EIA follow-up governance	Evaluation level: Macro and/or Micro
A. Do the regulations include provisions for compliance and enforcement, in relation to EIA follow-up?	Macro
B. If yes, is a penalty system related to compliance and enforcement in place?	Macro

Box 3.4: EIA follow-up governance best practice principle 3
(Source: Author)

Principle 3 notes that compliance and enforcement provisions, related to EIA follow-up should be clearly specified. Besides being good practice, identifying compliance and enforcement provisions helps identifying the consequences for non-compliance within EIA follow-up provisions (Arts & Morrison-Saunders, 2022a; Morrison-Saunders et al., 2024). This is to be evaluated through the following criteria:

- Criterion 3A: *Do the regulations include provisions for compliance and enforcement, in relation to EIA follow-up?* – This is linked to Principle 1, with the evaluation of legislative provisions related to EIA follow-up. As per Criteria 1A and 1B, this criterion is to be analysed at the macro/jurisdiction level, through the analysis of specific legislative provisions for EIA follow-up, identifying compliance and enforcement provisions.
- Criterion 3B: *If yes, is a penalty system related to compliance and enforcement in place?* – Linking back to Principle 1, data required to evaluate this criterion at the macro level is to be gathered from the respective legislative and guidance documents.

Linked to both Principles 1 and 2, ensuring that there is a verification system in place for compliance and enforcement of EIA follow-up, is crucial towards effective governance. Other examples of methods beyond legislative provisions include, for example, independent environmental verification (Wessels, 2015). This is often done by individuals and/or groups of independent verifiers such as independent environmental monitoring agencies in Canada (Ross, 2004) and environmental checkers in Hong Kong (Au & Hui, 2004). Environmental management systems and standards such ISO14001 (ISO, 2015) and EMAS (European Commission, n.d.), as discussed in Chapter 2, can also assist in ensuring compliance and enforcement related to EIA follow-up.

In summary, Principles 1 – 3 focus on the procedural effectiveness of EIA follow-up governance, and their respective criteria align with Pope et al.’s (2018) definition of procedural effectiveness (*‘Have appropriate processes been followed that reflect institutional and professional standards and procedures?’*) in view of their procedural nature. This is reflected in the theoretical framework for effective EIA follow-up governance presented in Figure 3.1 above.

Principle 4: Ensure reporting of EIA follow-up outcomes, to facilitate adaptive management and promote continuous learning from experience to improve future practice.

Detailed criteria for effective EIA follow-up governance	Evaluation level: Macro and/or Micro
A. Are EIA follow-up outcomes reported to all stakeholders, including the public?	Macro
B. Have all (significant) impacts of a project identified in the EIA been addressed through the identification of appropriate mitigation measures?	Micro
C. Have all mitigation measures, included as development permission conditions, been implemented?	Micro
D. Is there opportunity/evidence of learning within project/s?	Micro
E. Is there opportunity/evidence for adaptive management?	Micro
F. Is there opportunity/evidence for learning/sharing with other proponents and/or stakeholders?	Micro

Box 3.5: EIA follow-up governance best practice principle 4

(Source: Author)

Principle 4 focuses on the reporting of EIA follow-up outcomes, facilitating adaptive management and promoting continuous learning from experience to improve future practice (Morrison-Saunders & Arts, 2004a; Au & Hui, 2004), through the following detailed criteria:

- Criterion 4A: *Are EIA follow-up outcomes reported to all stakeholders, including the public?* – This criterion is also linked to Principle 1, with the evaluation of legislative provisions related to EIA follow-up, most notably those ensuring that EIA follow-up outcomes are made available to all stakeholders. As per criteria for Principles 1 and 4, this criterion is to be analysed at the macro/jurisdiction level, through the analysis of specific legislative provisions for EIA follow-up.
- Criteria 4B and Criterion 4C: *Have all (significant) impacts of a project identified in the EIA been addressed through the identification of appropriate mitigation measures?; Have all mitigation measures, included as development permission conditions, been implemented?* – These criteria are to be analysed at micro level, through the analysis of development consent conditions for projects.
- Criterion 4D, 4E and 4F: *Is there opportunity/evidence of learning within project/s?; Is there opportunity/evidence for adaptive management?; Is there opportunity/evidence for learning/sharing with other proponents and/or stakeholders?*– Criterion 4D is to identify opportunities for learning from experience through active feedback processes to improve EIA practice (Arts & Morrison-Saunders, 2022a; Morrison-Saunders et al., 2024). Criterion 4E identifies whether provisions for adaptive management have been provided for in development permissions, including the related EIA follow-up programs (Arts & Morrison-Saunders, 2022a; Morrison-Saunders et al., 2024). Criteria 4F seeks to identify whether are opportunities or evidence for learning sharing with other project proponents or stakeholders. These three criteria are to be analysed at the micro level, through the analysis of development consent conditions for projects and post-consent documentation for approved development projects.

There are various in-practice examples of how the reporting of EIA follow-up outcomes can improve future practice. For example, continuous online availability of information related to EIA follow-up outcomes (through both the proponent and the EIA regulator), versus only having documents physically available at the offices of the EIA regulator, can lead to a situation where the increase in availability of information regarding EIA outcomes leads to increased engagement and public participation, as in the case of Hong Kong (Au & Hui, 2004).

In turn, increased knowledge on EIA follow-up outcomes, coupled with increased participation, may create opportunities twofold. Increased opportunities of adaptive management can be considered best practice in response any unforeseen events impacting the design, implementation and operation of developments (Fitzpatrick & Williams, 2020). Meanwhile, learning for all stakeholders can be consolidated through establishing a central independent advisory body (e.g., like the Netherlands Commission for Environmental Assessment, or monitoring agencies established in some IA approvals in Canada) to offer support and maintain data and good practices in facilitating learning for all stakeholders (Morrison-Saunders et al., 2024).

Principle 5: Establish clear, pre-defined and well-justified performance criteria for EIA follow-up.

Detailed criteria for effective EIA follow-up governance	Evaluation level: Macro and/or Micro
A. Are clear EIA follow-up performance criteria pre-identified in order to appraise information, results and outcomes emerging from follow-up actions?	Micro
B. Are follow-up results and outcomes compared to these performance criteria?	Micro

Box 3.6: EIA follow-up governance best practice principle 5
(Source: Author)

Principle 5 focuses on the importance of performance criteria for EIA follow-up, i.e., quantitative or qualitative measures of outcomes, such as community satisfaction, or process criteria, such as submission of completed reports within a specific timeframe (Morrison-Saunders et al., 2024). This is to be analysed through the following criteria:

- *Criterion 5A: Are clear EIA follow-up performance criteria pre-identified in order to appraise information, results and outcomes emerging from follow-up actions?* – This criterion is to be analysed at the micro level, through the analysis of the recommendations identified in the environmental statement and the development consent conditions for projects.
- *Criterion 5B: Are follow-up results and outcomes compared to these performance criteria?* – This criterion is directly related to Criterion 5A and should also be analysed, at the micro level, through the analysis of the recommendations identified in the environmental statement, the development consent conditions for projects and post-consent documentation for projects.

Performance criteria can be either quantitative or qualitative measures of outcomes (e.g., community satisfaction and participation) and also process criteria (e.g., with requested reports

to be completed within a certain number of days). The criteria themselves can include either threshold indicators, i.e., selected to represent the limit of acceptable impact or trigger indicators, i.e., set to forewarn that an impact is approaching the threshold for acceptable change (Morrison-Saunders et al., 2024). This method has been utilised, for example, by the environmental regulator in Western Australia (EPA, 2021) in identifying the two levels of environmental performance indicators for an EMP, appraising performance against environmental outcomes (addressed through Criterion 5A).

Performance criteria that are outcomes-based, rather than process-based, can be considered more useful in understanding the performance of EIA follow-up outcomes, e.g., EMS is often process-based, rather than outcomes based (Hollands & Palframan, 2014; Ridgway, 2005), noting that meeting specific targets and standards is given more importance than continuous improvement through learning (addressed through Criterion 5B).

Principle 6: Have a clear understanding of the purpose and importance of EIA follow-up.

Detailed criteria for effective EIA follow-up governance	Evaluation level: Macro and/or Micro
A. Are all stakeholders informed of the purpose of EIA follow-up?	Micro
B. Are there provisions for communicating the importance of follow-up?	Micro
C. Is there clear and ongoing collaboration between regulatory authorities who are responsible for EIA follow-up?	Micro

Box 3.7 EIA follow-up governance best practice principle 6
(Source: Author)

Principle 6 emphasises the importance of having a clear understanding of the purpose and importance of EIA follow-up (Morrison-Saunders & Arts, 2004a, 2004b), ensuring that all stakeholders are duly informed. This needs to be reinforced through appropriate governance arrangements that ensure this is communicated to the same stakeholders. This is to be analysed through the following criteria:

- Criteria 6A, 6B and 6C: *Are all stakeholders informed of the purpose of EIA follow-up?; Are there provisions for communicating the importance of follow-up?; Is there clear and ongoing collaboration between regulatory authorities who are responsible for EIA follow-up?* – These three criteria can be analysed at the micro level, particularly through the analysis of post-consent documentation for projects which can indicate (i) whether all stakeholders are informed of the purpose and importance of EIA follow-up, for example, through stakeholder meetings or information sessions; (ii) whether there are any development permission conditions requesting dissemination of information related to EIA follow-up and (iii) evidence of collaboration between regulatory authorities, through regular meetings at post-consent stage.

Ensuring that all stakeholders are informed of the purpose of EIA follow-up is key in understanding what is being planned, undertaken and monitored (Morrison-Saunders et al., 2024)(addressed through Criteria 6A and 6B). Public involvement in EIA is considered essential,

having a role in every step of the follow-up process for the lifecycle of a specific project (Baker, 2004).

The learning and sharing of knowledge aspect of EIA follow-up outcomes between all stakeholders, including regulatory bodies, researchers and any other interested party is also crucial (Fitzpatrick & Williams, 2020; Pinto et al., 2019). For example, regulators may ensure that stakeholder participation occurs through specific provisions in permission conditions, as in the case of Western Australia (Morrison-Saunders et al., 2024). This can consequently lead to all stakeholders being kept informed of EIA follow-up, but also guaranteeing that both the proponents and the regulators engage effectively with the local community and other affected and interested stakeholders.

In summary, Principles 4 – 6 and their respective criteria focus on substantive effectiveness of governance arrangements for EIA follow-up. Both the principles and criteria align with Pope et al.’s (2018) definition of substantive effectiveness (*‘To what extent does the assessment lead to changes in process, actions, learning and outcomes?’*). This is reflected in the theoretical framework for effective EIA follow-up governance presented in Figure 3.1 above.

Principle 7: Allocate adequate resources to ensure EIA follow-up

Detailed criteria for effective EIA follow-up governance	Evaluation level: Macro and/or Micro
A. Are adequate human resources provided to carry out EIA follow-up (e.g., by regulators and project proponent/s alike?)	Micro/Macro
B. Is appropriate time being allocated towards EIA follow-up (e.g., by regulators and project proponent/s alike?)	Micro/Macro
C. Are enough financial resources being allocated towards EIA follow-up (e.g., by regulators and project proponent/s alike?)	Micro/Macro

Box 3.8: EIA follow-up governance best practice principle 7
(Source: Author)

Principle 7 stresses how adequate resources (i.e., time, budget, staff) are necessary from both the regulatory authorities and the project proponents (Morrison-Saunders & Arts, 2004a, 2004b) to ensure EIA follow-up implementation. This is to be analysed through the following criteria:

- Criteria 7A, 7B and 7C: *Are adequate human resources provided to carry out EIA follow-up (e.g., by regulators and project proponent/s alike?); Is appropriate time being allocated towards EIA follow-up (e.g., by regulators and project proponent/s alike?); Are enough financial resources being allocated towards EIA follow-up (e.g., by regulators and project proponent/s alike)?* These three criteria can be analysed at both the micro and the macro level. At micro level, the analysis of the post-consent documentation in the respective project case file can indicate whether the project proponents would have allocated the necessary resources to carry out EIA follow-up. As discussed previously for Criterion 2A, information regarding resources allocated towards EIA follow-up, is to be gathered directly from the respective authorities at the macro/jurisdiction level.

Whilst acknowledging that appropriate funding and resources need to be in place to ensure the implementation of EIA follow-up, it is also important to consider context-specific realities and culturally appropriate arrangements towards it (Morrison-Saunders et al., 2024). For example, for a diamond mine project in Canada (Ekati Diamond Mine), information gathered from Indigenous Peoples and their Traditional Knowledge of the territory, and most notably on caribou migratory patterns through community-based monitoring, proved essential (MacKenzie Valley Review Board, 2016). In contrast, the setting up of sophisticated structures such as the system of environmental control officers in South Africa (Wessels, 2015) may be more resource intensive and yet equally efficient in ensuring implementation of EIA follow-up.

Principle 8: Ensure that governance arrangements are appropriately efficient and effective

Detailed criteria for effective EIA follow-up governance	Evaluation level: Macro and/or Micro
A. How did the environmental outcomes come about? (i.e., to what extent can the outcomes be attributed to EIA follow-up governance specifically?)	Micro
B. Was there evidence of redundancy or inefficiency in EIA follow-up processes by the regulator? (e.g., did the stakeholders identify ways these processes could have been done more efficiently and effectively by regulators?)	Micro

Box 3.9 EIA follow-up governance best practice principle 8

(Source: Author)

The importance of having EIA follow-up governance arrangements which are appropriately efficient and effective is highlighted through Principle 8. Having governance arrangements which are tailored to the specific EIA follow-up context in which they are implemented ensures both efficiency and effectiveness (Sadler, 1996; Arts & Morrison-Saunders, 2022a; Morrison-Saunders et al., 2024; Pinto et al., 2019). This is to be analysed through the following criteria:

- Criteria 8A & 8B: *How did the environmental outcomes come about? (i.e., to what extent can the outcomes be attributed to EIA follow-up governance specifically?; Was there evidence of redundancy or inefficiency in EIA follow-up processes by the regulator? (e.g., did the stakeholders identify ways these processes could have been done more efficiently and effectively by regulators?)* – These two criteria are to be analysed at the micro level, through the analysis of post-consent documentation for projects, linking EIA follow-up outcomes to the governance arrangements already in place. For Criterion 8B, the feedback link between the regulator and the stakeholders in terms of feedback mechanisms needs to be identified through the analysis of the same documentation.

Understanding how governance arrangements have influenced EIA follow-up outcomes can be compared to understanding cause and effect pathways. Causal networks have been used in EIA since its early years, mostly as an analytic technique in relation to impact identification, prediction and assessment (Barrow, 1997; Canter, 1996; Perdicoúlis & Glasson, 2006; Wathern, 1988). The same can be applied in understanding the efficiency and effectiveness of EIA follow-up governance, for example, through the identification of linkages between EIA follow-up outcomes

and governance arrangements or by identifying whether there are means in place for any stakeholder to raise issues regarding the implementation of EIA follow-up processes.

Both Principles 7 and 8 and their respective criteria align with Pope et al.'s (2018) definition of transactive effectiveness (*'To what extent, and by whom, is the outcome of conducting the assessment considered worth the time and cost involved?'*). This is also reflected in the theoretical framework for effective EIA follow-up governance presented in Figure 3.1 above.

Principle 9: Ensure transparency and accessibility of EIA follow-up to all stakeholders/parties involved

Detailed criteria for effective EIA follow-up governance	Evaluation level: Macro and/or Micro
A. Have reasonable steps been taken (by regulators and/or project proponents alike) to make EIA follow-up accessible to all stakeholders, including the public? (e.g., provision of non-technical summaries, printed material, dedicated websites, social media accounts?)	Micro/Macro
B. Are there appropriate mechanisms in place where all stakeholders and the public can provide feedback in relation to EIA follow-up, ensuring transparency and legitimacy?	Micro/Macro

Box 3.10: EIA follow-up governance best practice principle 9

(Source: Author)

As discussed in Chapter 2, the legitimacy of EIA follow-up governance arrangements is to be ensured through both transparency and accessibility of all related processes (Arts & Morrison-Saunders, 2022a; Morrison-Saunders et al., 2024). This aspect to be analysed through the following criteria:

- *Criterion 9A: Have reasonable steps been taken (by regulators and/or project proponents alike) to make EIA follow-up accessible to all stakeholders, including the public? (e.g., provision of non-technical summaries, printed material, dedicated websites, social media accounts?)* – This criterion is to be assessed at both the micro and the macro level, through the analysis of the actions taken by the project proponent via the post-consent documentation for development project proposals, and an analysis of the methods available to the regulators in making EIA follow-up available to all stakeholders, including the public.
- *Criterion 9B: Are there appropriate mechanisms in place where all stakeholders and the public can provide feedback in relation to EIA follow-up, ensuring transparency and legitimacy?* – This criterion is to be assessed at the micro and macro levels by determining where the project proponents and/or the regulators had feedback mechanisms in place regarding the implementation of EIA follow-up.

Transparency and accessibility to all stakeholders are key aspects of good governance. Ensuring that all information is readily accessible to all stakeholders is essential. For example, presenting data, information, reports and outcomes through visual media aids or visual mapping, may be easier to understand by the non-technical public, e.g., the local community (McHenry et al., 2015).

This can also be done by ensuring that relevant reports and information are legible to all members of the impacted community (Morrison-Saunders & Arts, 2024). For example, wherever communities are multi-cultural, it may be necessary to translate published follow-up materials into other languages as appropriate, as is the case of the Ekati Diamond Mine in Canada (MacKenzie Valley Review Board, 2016; Ross, 2004) where a non-technical version of their annual report is published alongside a technical one.

Transparency and accessibility can also be guaranteed through continuous public involvement and engagement. Recalling the example mentioned for Principle 4 above, the increase in public access to online EIA follow-up in Hong Kong, led to increased opportunities for community oversight and increase community feedback and input to development proponents. (Au & Hui, 2004).

Principle 10: Ensure legitimacy of EIA follow-up governance arrangements

Detailed criteria for effective EIA follow-up governance	Evaluation level: Macro and/or Micro
A. Were the EIA follow-up governance arrangements (for the project) upheld or delivered appropriately by regulators in the views of stakeholders?	Micro/Macro

Box 3.11: EIA follow-up governance best practice principle 9
(Source: Author)

Noting how Principles 9 and 10 aligns directly with Pope et al.’s (2018) definition of legitimacy (*‘Was the assessment process perceived to be legitimate by a wide range of stakeholders?’*), reflecting the EIA follow-up best practice principles (Arts & Morrison-Saunders, 2022a) related to governance aspects in terms of legitimacy (i.e., 5. Be transparent, 6. Be accessible to all impact assessment stakeholders, 7. Provide clear accountability for impact assessment follow-up procedures). This is to be analysed as follows:

- Criterion 10A: *Were the EIA follow-up governance arrangements (for the project) upheld or delivered appropriately by regulators in the views of stakeholders?* – This criterion is to be assessed at both the micro and the macro level, through two methods: (i) the analysis of the actions taken by the regulators via the post-consent documentation for development project proposals, and (ii) an analysis of stakeholders’ perceptions of the implementation of EIA follow-up governance arrangements.

Peer reviews and independent checks can assist in establishing whether governance arrangements for EIA follow-up would have been delivered appropriately, contributing to the legitimacy of EIA follow-up. For example, the Independent Environmental Monitoring Agency for the Ekati Diamond mine in Canada is subject to independent audits every five years (MacKenzie Valley Review Board, 2016). Similar independent checks and verifications can safeguard the governance of the EIA follow-up process (checking whether the agreed processes and procedures are delivered – relating closely to an auditing role).

It should also be noted that the principles and criteria can also be analysed at a macro level through the stakeholders' perceptions regarding EIA follow-up, particularly governance and EIA effectiveness (see Chapter 5, Section 5.3).

3.4 Conclusions

Based on the theoretical discussion on EIA follow-up governance and EIA effectiveness in Chapter 2, this chapter has linked both concepts leading to the formulation of the best practice principles for EIA follow-up governance at the macro level, which are essential in evaluating its performance. The best principles refer to procedural, substantive and transactive effectiveness, and legitimacy, focusing on: (1) legislative provisions, (2) identification of responsibilities, (3) compliance and enforcement, (4) EIA follow-up outcomes, facilitating adaptive management and learning from experience, (5) clear, pre-defined EIA performance criteria, (6) clear understanding of purpose and importance of EIA follow-up, (7) resource allocation, (8) efficient and effective arrangements, (9) transparency and accessibility, and (10) legitimacy. This framework is utilised throughout Chapters 5 – 7 to evaluate the effectiveness of EIA follow-up governance at the macro-level.

The next chapter looks into the research methods utilised to analyse and to further address the research questions.

Chapter 4 – Research Methods

Chapter 4 – Research Methods

4.1 Introduction

This chapter outlines the methodological framework utilised in this research and provides the rationale behind the approach chosen to analyse the two research questions identified in Chapter 1, replicated below:

Research Question 1 (RQ1): What would constitute effective governance of EIA follow-up at the macro scale?

Research Question 2 (RQ2): How effective is EIA follow-up governance in Malta?

With the research questions as presented in Chapter 1 and the literature review, discussed in Chapters 2 and 3, Figure 4.1 below, based on Crotty (1998), Grix (2002) and Saunders et al. (2019) provides a visual illustration of the research design adopted for the study.

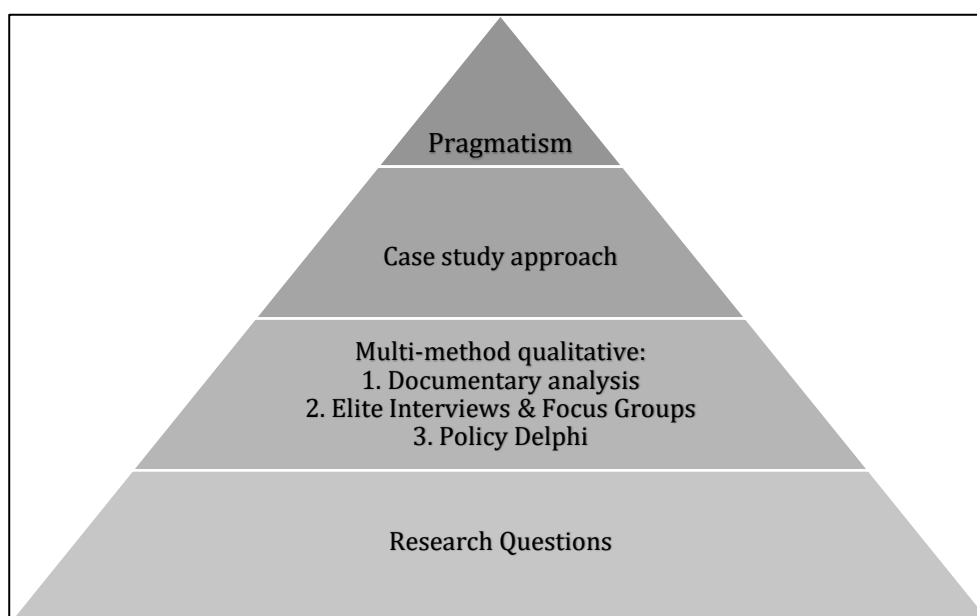


Figure 4.1: The research design adopted for the study

Section 4.2 provides a detailed discussion of the data collection methods identified for this research (i.e., the multi-method qualitative approach), discussing in depth the different methods utilised, the issues encountered, the ethics considerations and the data analysis approaches adopted. Section 4.3 discusses the research strategy and the choice of the case study approach, with Section 4.4 framing the epistemological and theoretical perspectives under the pragmatist worldview.

4.2 Data collection and data analysis

The use of a multi-method qualitative approach was considered to be the most suitable approach to collect the data and information relevant to addressing the research questions above. Multi-method refers to those combinations where more than one data collection technique is used with associated analysis methods, but this is restricted within either a quantitative or qualitative

worldview (Creswell, 2015; Denzin & Lincoln, 2017; Morse, 2003; Saunders et al., 2019; Silverman, 2020; Tashakkori & Teddlie, 2003). This is done with the objective of emphasising the value of each of the chosen methods (Mik-Meyer, 2020). The combination of different qualitative methods is seen to provide richer accounts of the issue being researched, but also provides a deeper understanding and offers a stronger trustworthiness while, ostensibly, providing a less biased analysis (Abramovich, 2017; Kerins et al., 2019; Mik-Meyer, 2020; Pratesi, 2012; Sade-Beck, 2004; Tierney et al., 2019).

The use of a multi-method approach towards data collection was adopted in order to minimise the possibility that any weakness that the utilised methods may have had was effectively compensated for, through a triangulation of data. This method was also adopted by Hapuarachchi (2014), who in a study of the effectiveness of EIA in addressing development-induced disasters, notes that where qualitative methods are associated with a number of limitations, triangulation of a variety of data needs to be used to address such weaknesses. This would involve data from different sources, from different places and from different people, through different methods of data collection. Bergamini and Pérez (2022) also utilised triangulation of different qualitative research techniques in their assessment of EIA follow-up in Chile.

In addition, this choice was made because the qualitative approach was seen as garnering a sense of intimacy and ownership with the research and aiding in achieving first-hand knowledge of the research setting. Mason (2002) presents qualitative research as an exciting approach, in that it engages the researcher into things that matter, in ways and methods that matter. It is very much in line with the stance taken by Collins (1984) where he notes that “... much of the best work in sociology has been carried out using qualitative methods and without statistical tests” (p. 340). The data collection process was carried out sequentially as follows (Figure 4.2 below refers).

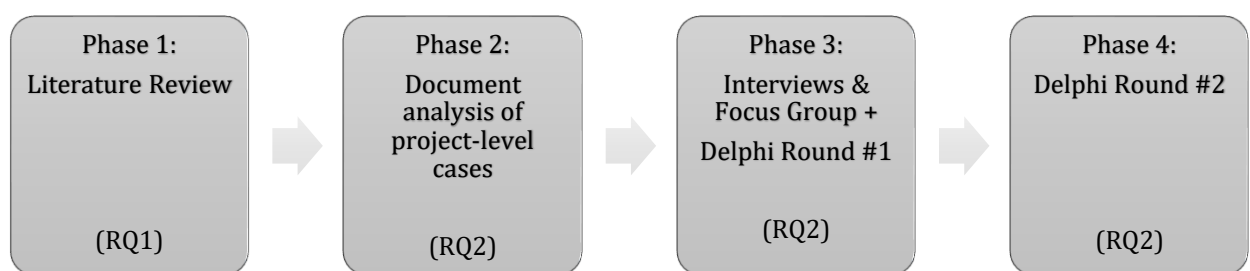


Figure 4.2: Overview of the data collection process

Phase 1 provides a review of the literature relevant to both research questions, namely that related to EIA follow-up, particularly governance, and EIA effectiveness (Chapters 2 and 3). As discussed in detail in Chapter 3, the review leads to the derivation of the framework for the evaluation of the effectiveness of EIA follow-up governance, through the best practice principles and criteria, framing the objectives of Research Question (1). It is also worth highlighting that, whilst Figure 4.2 implies a chronological sequence of events, the literature review (Phase 1) was

ongoing throughout the entire research period. Furthermore, the derivation of the conceptual framework (presented in Chapter 3) came to fruition in the final months of the research journey.

It is also important to note that the primary data collected (Phases 2 – 4) was not explicitly oriented towards this framework in terms of how it was gathered (e.g., the specific wording of the interview and the focus group questions, and the questions posed during the policy Delphi), but it was evaluated within that context.

In this regard, Phases 2, 3 and 4 seek to gather relevant data and information to be in a position to address both research questions. The documentary analysis of project-level cases, and the information pertinent to EIA governance in Malta, are utilised to look into the best practice principles at the macro-level. This is further supplemented by the interviews, the focus group discussion and the policy Delphi which inform the research in terms of the stakeholders' perceptions of EIA follow-up, EIA follow-up governance and EIA effectiveness. These insights are then utilised to address Research Question (2), in understanding the effectiveness of EIA follow-up governance in Malta, but also in applying and refining the best practice principles and criteria for EIA follow-up governance at the macro/jurisdiction level.

4.2.1 Document analysis

Document review is considered an unobstructive and non-reactive method, which can be carried out without disturbing the setting being studied (Marshall & Rossman, 2006). Document analysis is a systemic procedure utilised to review, assess and evaluate documents, both in printed and digital form (Bowen, 2009). This process also involves a close look at the content to extract meaning, gain insights, and build knowledge based on evidence (Bowen, 2009; Corbin & Strauss, 2008; Rapley, 2007).

This research utilises document analysis alongside other qualitative methods as a means of triangulation. Triangulation, as defined by Denzin (1970), is “the combination of methodologies in the study of the same phenomenon” (p. 291). Triangulation is utilised to gather evidence from multiple sources (at least two), seeking to converge and corroborate their findings (Bowen, 2009), through, for example, interviews and observations, participatory or not (Yin, 1994). By looking at an issue from these different angles, researchers aim to achieve “a confluence of evidence that breeds credibility” (Eisner, 1991, p. 110). This type of approach is taken by Isaksson and Storbjork (2012), who discuss their study of strategy-making and power in environmental assessments in Sweden through the use of both documentary analysis and semi-structured interviews.

Bowen (2009) notes that documents can serve five specific functions as part of a research study, namely: (i) providing data for the research context, (ii) information contained in documents can suggest some questions that need to be asked and situations that need to be observed as part of the research, (iii) providing supplementary data, (iv) offer means for tracking change and development, and (v) documents can be analysed as a means for the verification of findings or corroborate evidence from other sources. This approach was utilised for this research where the

data and information gathered through the documentary analysis provided context and further insight into the themes being discussed, and informed the interviews, the focus group and the policy Delphi in terms of which questions needed to be posed to the research participants.

The documentation related to applications for development permission and EIA is considered one of the main sources of information for this research. Table 4.1 below maps out the information that was accessed in order to gain further understanding vis-à-vis EIA follow-up, particularly in Malta.

Table 4.1: Details regarding documentation collected for analysis

Documentation	Authority consulted	Reason for data required
Applications for development permission	Planning Authority (Malta)	Applications for development permission, which were subject to an EIA and for which development consent had already been granted and the project executed. The identified projects were either public projects or private sector ventures. The information perused for the scope of this research included: (1) The physical case file for the development application that is kept at the Planning Authority offices, which is used by the respective case officers. The said file contains all the documentation and correspondence pertinent to the case in question, including correspondence between applicant, architect and case officer processing the file. Internal correspondence is also included. It should also be noted that recent cases (i.e., most cases dated 2016 onwards) are also available for viewing on the online PA portal E-Applications⁸(www.eapps.pa.org.mt). (2) The DPAR (Development Permission Application Report⁹) which is the report prepared by the case officer, following the assessment of the development permission application, which includes the final recommendation by the relevant Directorate, which is then referred to the decision-taking bodies for the final decision on the proposal.

⁸ E-Applications is a digital online portal, managed by the Planning Authority in Malta, providing access to electronic documents and plans on development permission applications. Access to the portal is obtained through the Maltese electronic ID card system, where the same e-ID account username and password is used to access the E-Applications portal (<https://eapps.pa.org.mt>). Through this system, anyone from interested stakeholders to the general public can view documents which are made available to them. Architects can submit development permission applications and related documentation through this system, and consultees can submit comments on relevant applications.

⁹ As per the Development Planning (Procedure for applications and their determination) Regulations, 2016 (S.L. 552.13), 'report' means the report prepared by the Executive Chairperson in relation to an application for a development (Government of Malta, 2016b).

Documentation	Authority consulted	Reason for data required
		(3) The conditions arising from the development permission, should the proposal be considered favourably and granted the necessary development consent.
Environmental Statements/EIA Reports ¹⁰	Environment and Resources Authority (Malta)	The Environmental Statements/Reports carried out as part of the evaluation and assessment of these development consent applications and the associated EIA, in order to identify the mitigation measures that were proposed in the Environmental Statement/EIA Reports and determine whether these were actually included in the development planning permission. The information perused for this research included: (1) The case file records for the specific EIA carried out for the development permission applications referred to above. (2) The Environmental Statement/EIA Report carried out by the consultant in line with the requirements of the EIA regulations. (3) The final report and the recommended conditions drafted by the EIA regulator.
Enforcement/Compliance Case files	Planning Authority ¹¹	Any case files for the development consent applications, and related EIAs, located at the Enforcement Directorate, part of the Planning Authority, which may contain additional information associated with (1) and (2) above.

In order to gain access to the data mentioned in Table 4.1 above, a formal request (a copy of which can be found in Appendix A, dated June 2018) was sent to the Executive Chairperson of the PA and the Chief Executive Officer of the ERA, both of which were received positively. Following the granting of access to the above, the necessary information was gathered through a number of visits (throughout 2018 and 2019) at both the offices of the PA and the ERA, respectively. In addition, through the help of key officials, a complete list of the EIA-related documentation that was available at the library of the Environmental Assessment Unit at the ERA, was obtained. The said list of EIAs, which included cross-references to the development permission applications that were subject to EIAs, was utilised for carrying out the sampling process.

Given that the voluminous amount of information associated with EIAs spanning over 20 years would be virtually impossible to review and analyse all cases available, the sampling of a set of

¹⁰ Environmental Statements are now referred to as EIA Reports in the 2017 and 2020 Maltese EIA regulations.

¹¹ It should be noted that the Compliance and Enforcement Directorate of the ERA was not consulted at the data collection stage in view of the fact that the pre-2016 physical case files are located at the Planning Authority. Post-2016 documentation is available online on the E-Apps portal.

cases was seen to be the most effective way to carry out a detailed analysis. Non-probability sampling techniques, however, were deemed more appropriate, particularly since with this type of sampling (Neuman, 2014):

- there is no need to determine sample size in advance and have limited knowledge about the larger group or population from which the sample is taken, and
- gradually selects cases with the specific content of a case determining whether it is chosen.

The non-probability sampling technique considered the most appropriate to the research was purposeful (also known as purposive or judgemental) sampling, where the researcher utilises a wide range of methods to locate all possible cases of a highly specific and difficult to reach population (Mabry, 2008; Neuman, 2014; Palys, 2008). Emmel (2013) notes that purposeful sampling is generally designed before the research commences and may possibly be redesigned as the research progresses as it is not driven by theoretical categories, but through practical and pragmatic considerations. Purposeful sampling is also seen as the method with which information-rich cases are identified for in-depth analysis (Patton, 2002). This also requires access to key informants in the field who can help accessing these information-rich cases (Suri, 2011).

For the scope of this research, two approved projects from each year (one government/public funded and one privately funded) since the first implementation of EIA in Malta – dating from 1994 to 2017 were sampled. It should be noted that this specific timespan was chosen, for two reasons:

1. The records/documentation related to EIA available at the ERA span back to 1993/1994 (coinciding with the publication of the first EIA guidelines in Malta), therefore an attempt to gain access to earlier information would prove futile, with records being either scanty or inexistent.
2. The timeframe provides insights through four different EIA legislative frameworks: (a) the 1994 EIA policy and design guidance, (b) the 2001 EIA regulations, (c) the 2007 EIA regulations, and (d) the 2017 EIA regulations. The exclusion of development applications and their associated EIAs following 2017 from the sampled cases is not an oversight. This is due to the fact that no post-2017 development applications, subject to an EIA, have been approved and their construction and/or follow-up completed at the time of writing. For example, it would not have been possible for cases which were subject to an EIA in 2020 to have completed construction and commenced operations by the time of data collection. This also applies to the carrying out of monitoring and, subsequently, to EIA follow-up.

In this regard, a total of 39 cases¹² (2 per year, for a 23-year timeframe¹³) were sampled as discussed earlier, which were subsequently analysed in three phases, in respect to their content, as per Table 4.2 below.

¹² The approach vis-à-vis the sample number is similar to that adopted by Androulidakis and Karakassis (2016) in their evaluation of the EIA system performance in Greece, using quality indicators.

¹³ A number of years did not include both publicly funded or privately funded projects and no cases for 2015 were available. In this regard, a total of 39 cases, instead of the expected 46 cases, are studied.

The information and data gathered through this process served as the basis for the further analysis of the case studies (Appendix K refers). Out of the 30 cases with complete relevant information, as indicated in Table 4.2 below, five (5) cases were chosen at random utilising an online random number generator (<https://www.calculator.net>). These were consequently utilised in the practical application of the best practice principles and criteria for EIA follow-up governance, addressing Research Question 2 related to the effectiveness of EIA follow-up governance in Malta. These five cases provided the required information for micro-level assessment, which was then utilised in the macro-level assessment of EIA follow-up governance in Malta.

As indicated earlier in the introduction to Section 4.2, the data collected through the documentary analysis was originally not explicitly oriented towards the framework discussed in Chapter 3, however it was evaluated within that specific context (Section 5.2 refers).

Table 4.2: The documentary analysis process

Phase 1 – The data collection phase	This phase included the collection of all the data required from the cases chosen through the sampling. The data (as detailed in Table 4.1 above) was inputted into <i>Microsoft Excel</i>, to verify whether all data required for the analysis was available to this author. It was noted that out of the 39 sampled cases, 30 provided all the necessary data¹⁴. The incompleteness of 9 of the sampled cases being mentioned is attributed to the fact that some of the information required was missing from the actual case files. Of these 30 cases: - 20 cases (67%) had complete information required for the analysis. - 10 cases (33%) failed to have a monitoring file or any follow-up included in the PA file of the post-consent case file. - 18 cases (60%) are public projects, of which 14 cases (78%) have a monitoring file which may include post-consent EIA follow-up. - 12 cases (40%) are private developer-proposed projects, of which 8 cases (67%) have a monitoring file which may include post-consent EIA follow-up. Figures 4.3 – 4.5 below illustrate these results in more detail.
Phase 2 – The preliminary analysis phase	Phase 2 of the analysis of the data included the compilation of the said information in tabular format, under the following headings: (i) conditions recommended by the EPD (MEPA) or the ERA, (ii) development permission conditions, and (iii) EIA follow-up measures. The said information was inputted in tabular format (in <i>Microsoft Word</i>) for further analysis. Issues regarding data availability and its content could be identified at this stage.
Phase 3 – The detailed analysis phase	Following the tabulation of the data and the preliminary observations made in Phase 2, the subsequent phase in the analysis provided the actual issues and themes arising from each of the cases being studied. The information extracted from each of the analysed cases was inserted into a case fact sheet for each of the cases (Appendix B, provides an example of the template utilised). 5 of these cases were subsequently analysed in further detail in Chapter 5. The analysis of the sampled cases can be found in Appendix K.

¹⁴ 'All necessary data' is referring to all the data required from the three sources mentioned in Table 4.1, i.e., the Planning Directorate within the PA, the Environment and Resources Authority and the Compliance and Enforcement Directorate within the PA.

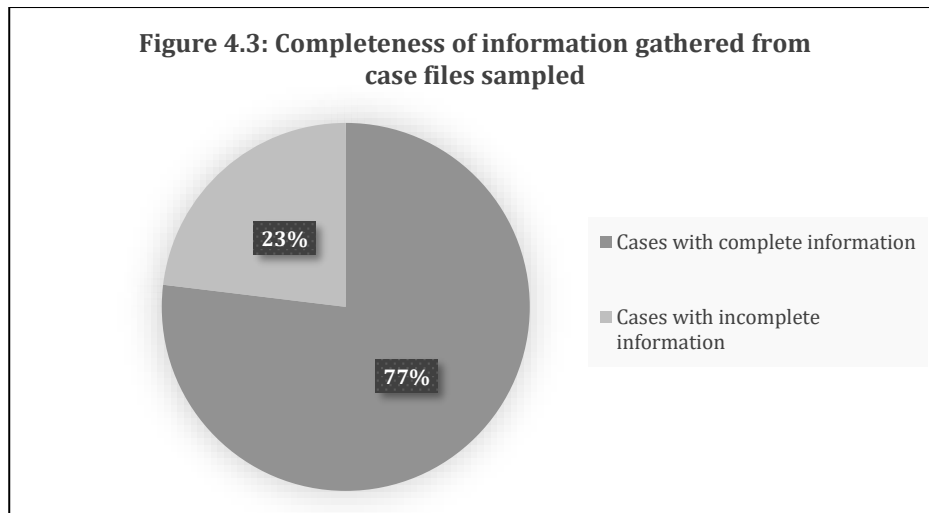
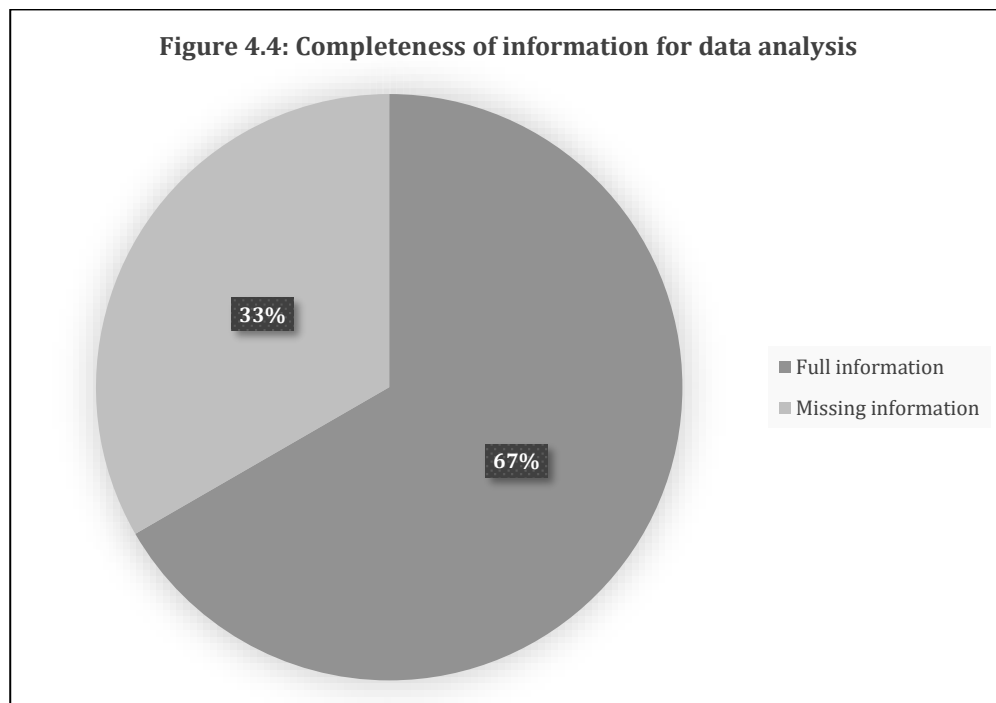


Figure 4.3: Completeness of information gathered from the 39 case files sampled



**Figure 4.4: Completeness of information for data analysis
(i.e., all information available from all sources)**

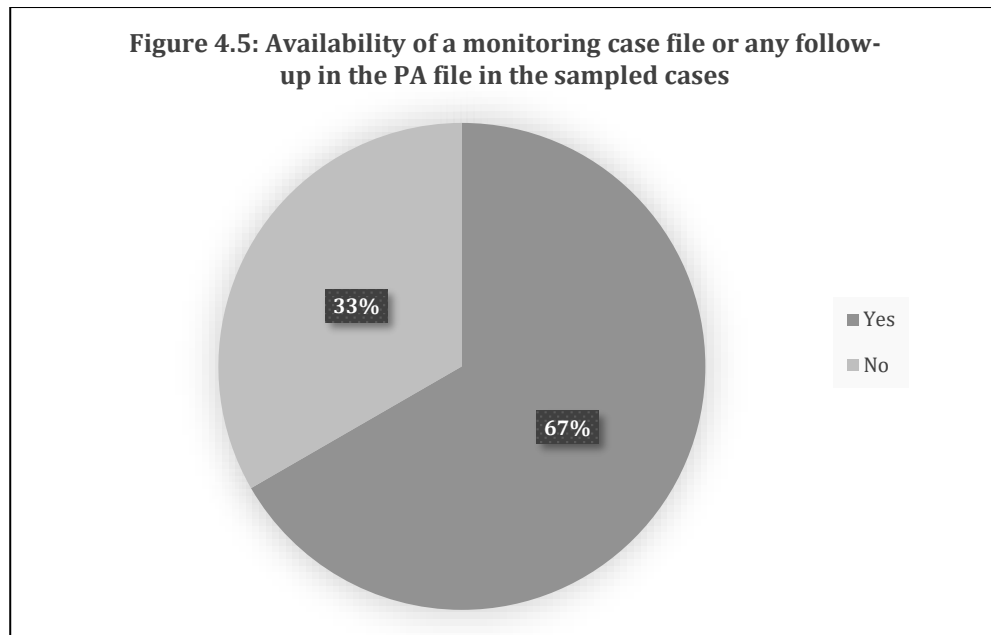


Figure 4.5: Availability of a monitoring case file or any follow-up in the PA file in the complete sampled cases

Gaining access to the said information may have, prima facie, proven to be less complicated given this author's contacts within the two regulators; however, a number of problems were still encountered:

1. *Fragmentation of the required information:* Whilst acknowledging that the information needed for the research had to be accessed from multiple sources (i.e., the PA archives which are not located all on the same site, the library at the ERA and the Enforcement Directorate archives at the PA) for hard copies of documentation pertaining to old cases, and online portals (two separate ones for the PA and the ERA)¹⁵ – the loss or lack of traceability of certain documents may be seen as one of the setbacks of the research. This is supplemented through the other data collection methods, namely the interviews and focus groups with key stakeholders and later, the policy Delphi.
2. *Withholding of documentation:* An issue that was encountered during the data collection phase included a sense of initial hesitation when requesting access to the post-consent case files at the PA, contrary to the earlier requests made regarding the PA case files. The earlier requests were replied to negatively, initially indicating that such files were not accessible.¹⁶ Subsequently, following a number of attempts over a span of a few months and discussions with key individuals within the PA, access was granted, and files could be accessed successfully at the authority's offices.¹⁷
3. *Inconsistency of the information/documentation:* The 20+ year timespan covering the sampled cases may lead to inconsistency in the amount and quality of the information available, also taking into consideration that: (i) case officers, in the planning and environmental directorates, change through the years. Different officers have different skills and levels of commitment, which may result in inconsistencies whenever officers are replaced, (ii) environmental statements/EIA Reports are carried out by different EIA

¹⁵ The PA portal being: www.eapps.pa.org.mt; the ERA portal being: www.era.org.mt.

¹⁶ Correspondence between the PA and this author dated 27th September 2018.

¹⁷ Correspondence between the PA and this author dated 25th February 2019.

consultancy firms, and (iii) procedural requirements have also changed throughout the years. In addition, both the planning and the EIA processes have gone through a learning curve which is mostly evident from the data and information acquired from consultants.

4. *Avoidance of bias or conflict of interest:* The utilised sampling method aimed to limit any possible bias that may arise given this author's role as an EIA officer during part of these years (namely, 2006 – 2016) and the principal supervisor's role as an EIA Coordinator for a number of Environmental Statements/EIA Reports that were assessed in the research. In view of the fact that the research questions do not focus on the assessment of the quality of the EIA documentation per se, but focusing on EIA follow-up, such an issue was not seen to be pertinent. In addition, this author's role at the time of writing¹⁸ does not include direct involvement in EIA in Malta from a professional point of view.
5. *Missing information:* It should be noted that for some of the sampled years (particularly the earlier years), certain documents, e.g., the DPARs (see Table 4.2 above) or the conditions arising from the EPD assessment, could not be traced.

The next section now discusses how elite interviews, focus groups and subsequently, the policy Delphi are utilised to understand stakeholders' perceptions vis-à-vis EIA follow-up, governance and effectiveness.

4.2.2 Elite interviewing

In-depth interviewing is typically considered a conversational approach, particularly when compared to formal questionnaires with pre-determined replies (Marshall & Rossman, 2006; Neuman, 2014). In spite of their open-ended nature, in-depth interviews may also require some degree of systematisation, particularly in light of the data analysis phase. In conjunction with observation, interviews contribute to the understanding of meanings and behaviours for everyday activities. The downside of interviewing, however, is related to the intimacy of the method – that is, interviewees may feel uncomfortable, or not in a position to share certain opinions or thoughts about particular subject matters. For the purposes of this research, elite interviewing was identified as the more appropriate method, focusing on a particular type of interviewee, namely influential, prominent, and/or well-informed in an organisation or community, that is selected for interviews on the basis of their expertise in the field of research (Marshall & Rossman, 2006).

Why elite interviewing?

Elite interviewing is considered to hold a crucial role in political science and policy research, in view of its examination of political institutions, processes and decisions (Ntuenjom Mbohhou & Tomkinson, 2022). Through this interviewing method, researchers can gain insights into the perspectives of those who have central political roles and track the processes that lead to key political decisions (Aberbach & Rockman, 2002; Beamer, 2002; Boucher, 2017; Kapiszewski et al., 2015; Ntuenjom Mbohhou & Tomkinson, 2022; Richards, 1996).

¹⁸ Team Manager within the Environmental Assessment Unit, ERA, from 2016 to June 2023. Currently, Team Manager within the Environment Coordination Unit, EU & Multilateral Affairs Team, ERA, July 2023 to date.

The interviewees were chosen on the basis of their influence or role in both the planning and EIA processes in Malta, them being either policy-makers, drafters of legislation or decision-makers. In addition to this, it was also possible to pose the same interview questions to the former Head of the 'Cohesion Policy and Environmental Impact Assessments' Unit within DG Environment at the EU Commission, Mr. Georges Kremlis, who provided his personal insight on the Maltese EIA process from the perspective of the EU Commission¹⁹.

These semi-structured elite interviews were identified as the ideal way to supplement the documentary case study data collected for this research. In view of their interactional nature with respect to dialogue, their relatively informal and flexible style, a theme-centred approach and their clear contextual focus (Mason, 2002), together with this author's approach to understanding the stakeholder's perceptions of EIA, particularly follow-up; the semi-structured interviews were seen to be the most appropriate data collection method for this stage of the research. This is also confirmed by Denzin and Lincoln (2017), who note that semi-structured interviews allow for more leeway in respect to dialogue between the interviewer and the interviewee, with both roles actively participating in the process. In addition, the interviewer would actually have a much greater say in focusing the conversation on the most relevant issues pertaining to the actual research.

A similar approach, which includes the use of semi-structured interviews, was taken on board by Hansen and Wood (2016) who based their study on EIA scoping on a total of 20 semi-structured interviews, chosen from submissions of a range of statutory consultees involved in the UK EIA process, particularly from professionals in the UK Environment Agency. Isaksson and Storbjork (2012) discuss their study of strategy-making and power in environmental assessments in Sweden through the use of both documentary analysis and semi-structured interviews. Kruopiene et al. (2009) use a mix of both quantitative and qualitative methods in their analysis of EIA effectiveness in Lithuania, with semi-structured interviews chosen as one of the data collection techniques. Table 4.3 below provides an overview of the questions posed in the elite interviews. The analysis of the case study documentation and the research questions assisted in the formulation of the questions posed to the interviewees (Appendix C includes the guide utilised during the elite interviewing).

¹⁹ Interview with Mr. Georges Kremlis was carried out during February 2020.

Table 4.3: Overview of the elite interview questions

Question	Content of question
1	General overview/perception of EIA: this question was posed in order to orientate the interviewee towards the general concepts being discussed in the research, that is: environmental impact assessment, its definition and its role within the spatial planning process both conceptually and in Malta.
2	Question related to the EIA and post-consent processing, in light of the research questions, one of the interview/focus group questions focused on post-consent processing and EIA follow-up: this question was asked in order to gauge the interviewees' experience in the field together with their perception of the current state-of-play.
3	Question related to the EIA and post-consent processing, focusing on mitigation and monitoring, and is linked to the previous question posed: this question was asked to further substantiate and discuss in detail the issues arising from EIA follow-up and EIA effectiveness.
4	Question was related to fragmentation of information pertaining to cases discussed in the previous questions, linking to EIA processes and in order to open discussion towards possible measures to further improve EIA in Malta.
5	Question was related to the overall perspective of EIA in Malta.

In addition to the elite interviews, the carrying out of focus group discussions with a broader spectrum stakeholder group (aside from high-ranking decision-makers) was considered to be appropriate and is discussed in more detail in the following section.

4.2.3 Focus group discussion

Focus group research is a qualitative research technique in which people are 'informally' interviewed in a group discussion setting (Morgan, 1996; Neuman, 2014). It has been used extensively to understand the perceptions and feelings of participants in relation to a particular area of inquiry (Bloor et al., 2001; Chase & Alvarez, 2000; Parker & Tritter, 2006). Unlike other data collection methods such as observation, one-to-one interviewing and questionnaire surveys, focus groups provide an in-depth exploration of respondents' attitudes, feelings, beliefs, experiences, and reactions (Gibbs, 1997; Nicholson & Shrives, 2024).

Why focus groups?

Whilst it may be seen as complementary to in-depth interviews (Morgan, 1996), the data generated by focus groups is different in nature as it is based on the interactions between group participants (Finch & Lewis, 2003; Kitzinger, 1994, 1995; Nicholson & Shrives, 2024; Smithson, 2000; Wibeck et al., 2007), and it was the basis of the rationale for adopting this method to this research. Focus group participants have the opportunity to share and present their own views, perceptions and experiences, but they can also hear from other participants, leading to a form of a 'group interview' (Finch & Lewis, 2003), and may also be able to generate new ideas formed within the group context (Breen, 2006).

Focus group interviewing involves discussions with small groups (not more than 12) of individuals who are unfamiliar with one another, who are selected to share their views, perceptions and opinions on a particular subject matter, under the guidance of a moderator

(Marshall & Rossman, 2006; Neuman, 2014). Specific groups would require clear instructions with respect to the subject matter and moderators would need to ensure that participants are carefully selected to ensure the maximum output. Such research can be carried out simultaneously or in conjunction with documentary analyses and elite-interviewing (Neuman, 2014). In the case of this research, the focus groups were scheduled to be carried out after the documentary analysis and the elite interviews.

This research originally involved the formation of three groups of stakeholders as follows:

1. Focus Group #1 – Project proponents/Architects/EIA consultants
2. Focus Group #2 – Local Councils' Association and Government Entities: These entities are consulted at specific EIA stages (scoping and review of the Environmental Statement/Report) and could provide their opinion/perspective with respect to: (1) the EIA process itself, (2) its effectiveness, and (3) their own input as part of the process, together with providing their own recommendations towards its improvement.
3. Focus Group #3 – Non-Governmental Organisations (NGOs): As in the case of the Local Councils' Association and government entities, these groups are consulted at specific stages of the EIA process (scoping and review of the Environmental Statement/Report) and could provide their opinion/perspective with respect to: (1) the EIA process itself, (2) its effectiveness, and (3) their own input as part of the process, and as in the case of the participants in Focus Group #2, also providing their own recommendations towards the improvement of such process.

A focus group guide (Breen, 2006) was prepared to assist the discussion with the stakeholders during the focus group meetings, based on the knowledge gathered through both the documentary analysis and elite interviewing (Appendix E refers).

Table 4.4 below provides an overview of the questions posed during the focus group discussion:

Table 4.4 : Overview of the focus group questions

Question	Content of question
1	General overview/perception of EIA: this question was posed in order to orientate the interviewees towards the general concepts being discussed in the research, that is: environmental impact assessment, its definition and its role within the spatial planning process both conceptually and in Malta.
2	Question related to the EIA and post-consent processing, in light of the research questions, one of the interview/focus group questions focused on post-consent processing and EIA follow-up: this question was asked in order to gauge the interviewees' experience in the field together with their perception of the current state-of-play.
3	Question related to the EIA and post-consent processing, focusing on mitigation and monitoring, and is linked to the previous question posed: this question was asked to further substantiate and discuss in detail the issues arising from EIA follow-up and EIA effectiveness.
4	Question was related to fragmentation of information pertaining to cases discussed in the previous questions, linking to EIA processes and in order to open discussion towards possible measures to further improve EIA in Malta.
5	Question was related to the overall perspective of EIA in Malta.

The carrying out of the focus groups, however, faced a number of issues including a political crisis in Malta and the COVID-19 pandemic, which affected the research methodology and the participation rates, both of which are discussed in more detail in the next section.

4.2.4 Issues encountered with the interviews and focus groups

As hinted above, the research faced two critical setbacks due to two major events that occurred during the research years, namely: the 2019 Malta political crisis and the COVID-19 pandemic.

The 2019 Malta political crisis

Following the collection of data through the document analysis, which was carried out between 2018 and 2019 at the offices of the PA and the ERA in Malta, the sequential step in the process was to carry out the elite interviews with the individuals identified as being key individuals in respect to their positions or roles in policy/decision making. Table 4.5 below provides a list of the political figures identified for the elite interviews, including the then Prime Minister and Leader of the Opposition as the national key decision-makers and drafters of legislation and policy, to the Ministers and shadow Ministers responsible for planning and the environment. Top decision-makers in the respective competent authorities were also identified²⁰. A sample of the correspondence sent to the interviewees can be found in Appendix D.

²⁰ The names of these individuals are not included to preserve anonymity.

Table 4.5: Details of the political figures that were originally identified for the interviews to be carried out in November 2019

Name of Interviewee	Position
Dr. Joseph Muscat	Prime Minister of Malta, Leader of the Partit Laburista
Dr. Adrian Delia	Leader of the Opposition, Leader of the Partit Nazzjonalista
Dr. Ian Borg	Minister of Transport, Infrastructure and Capital Projects (at the time responsible for Planning and the PA)
Dr. Marthese Portelli	Opposition spokesperson for Capital Projects, Planning and Property Market
Dr. José Herrera	Minister of Environment, Sustainable Development, and Climate Change (at the time responsible for the ERA)
Dr. Jason Azzopardi	Opposition Spokesperson for Environment, Maritime Affairs and Green Initiatives

The interviews were scheduled to be carried out towards the end of 2019, however this happened to be the period when Malta passed through a political crisis, following revelations surrounding the murder of an investigative journalist, Daphne Caruana Galizia, in October 2017 (Borg, 2017; Chan, 2017; Cocks & Sansone, 2017; Garside, 2017; The Malta Independent, 2017; Masters, 2017; Micallef Decesare, 2017). The period around November-December 2019 was characterised by a number of significant revelations associated with the same murder, mass protests, resignations of holders of key posts (including individuals who had been identified for interviews), and dramatic events (Carabott, 2019; Grech, 2019; The Malta Independent, 2019a, 2019b; Watson, 2019). In this regard, the elite interviewing process was halted since none of the interviewees would give due importance to the invite, and there would also be the possibility that any replies would be nuanced or biased therefore it was decided to postpone the process to 2020, following the holiday season.

Following the elapse of some weeks with a relative calming down of the situation, the appointment of a new Prime Minister (Borg, 2020; The Malta Independent, 2020; MaltaToday, 2020; The Times of Malta, 2020a) and the reshuffle of ministerial portfolios (Carabott, 2020; Hudson, 2020); invites for the interviews were eventually sent to a new participant list (Table 4.6 below refers).

Table 4.6: Details of the revised list of political figures to be interviewed in February 2020

Name of Interviewee	Position
Dr. Robert Abela	Prime Minister of Malta, Leader of the Partit Laburista
Dr. Adrian Delia	Leader of the Opposition, Leader of the Partit Nazzjonalista
Dr. Aaron Farrugia	Minister for the Environment, Planning and Climate Change (responsible for both the PA and the ERA)
Dr. Marthese Portelli	Opposition Spokesperson for Capital Projects, Planning and Property Market
Dr. Jason Azzopardi ²¹	Opposition Spokesperson for Environment, Maritime Affairs and Green Initiatives

Out of the nine interviewees identified (i.e., the five political figures, plus the other key individuals in the decision-making process), four accepted the invitation and set a meeting to carry out the interview (one of such interviews did not occur due to circumstances that are discussed in the next section), which were carried out throughout February 2020. The remaining invitees declined the invite due to: (i) busy schedules, (ii) referred the invite to other individuals, or (iii) did not reply at all. The three (3) interviews were carried out at the interviewees' respective offices, recorded and eventually transcribed for analysis purposes. None of the interviews took more than two hours in total.

The COVID-19 pandemic²²

One of the four interviewees who had agreed to be interviewed (a political figure) was caught up in the uncertainty of the early weeks of the COVID-19 pandemic situation. Following an initial agreement to set up an appointment for an interview, the situation regarding the pandemic started worsening by mid-March 2020 (the first cases in Malta were confirmed during the first week of March 2020, according to the Times of Malta, (2020b)) with the gradual introduction of specific strict measures to contain the spread of the virus, which included the use of teleworking and stay-at-home orders. Eventually, it was not possible to carry out this particular interview and, as indicated earlier in this chapter, three (3) interviews were carried out with key individuals in policy-making roles in Malta.

With the sudden shift from in-person meetings to meetings via online platforms, the planned methodology for the focus group meetings also had to be modified to address the circumstances in question and to ensure that the research schedule could go on as planned as much as possible (Chase & Alvarez, 2000; Falter et al., 2022; Woodyatt et al., 2016). Despite this change, the focus groups were carried out with the aim of shedding more light on the issues being analysed in this research, and in order to complement the documentary data gathered a year earlier and also to compare these to the results from the interviews.

²¹ Mr. David Thake, Opposition Spokesperson for the Environment, was also invited to participate in June 2020 due to a reshuffle in the shadow cabinet, however no response was received.

²² The World Health Organization (WHO) declared the novel coronavirus (COVID-19) outbreak as a global pandemic on the 11th March 2020. Detailed information can be found on: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019>

The invites for the online focus groups were sent in September 2020 (see Appendix F), with reminders sent to ensure that all potential participants received the invitation (due to the initial lack of response). By the elapse of the deadline, only five (5) individuals/entities agreed to participate to the discussion, which led this author to take the decision to organise only one online focus group meeting. Of the participants, two (2) of these were EIA consultants, with the remaining three (3) hailing from environmental non-governmental organisations (eNGOs). Eventually from the five (5) who initially agreed, three participants actually attended the discussion (two EIA consultants and an eNGO representative). For both the interviews and the focus group meeting, these took on average around 1.5 hours each to be carried out and were all successfully recorded, transcribed and safely stored.

The responses from both the interviews and the focus group provided: (i) a generic overview of the implementation of EIA and EIA follow-up in Malta, (ii) the role of EIA in decision-making within the spatial planning process, and (iii) the role of post-consent evaluation and EIA follow-up in ensuring overall EIA effectiveness. The data collected from the elite interviews and the focus group discussion was analysed and the results are subsequently presented in Chapter 5. In addition, as indicated earlier in this chapter, the data collected through the interviews and the focus group was originally not explicitly oriented towards the framework discussed in Chapter 3, however it was evaluated within that specific context (Section 5.3 refers).

The disappointing lack of interest in the focus groups can be possibly attributed to two factors: (i) the effect of the ongoing pandemic on the scheduling of a research-related meeting with different entities, and (ii) the general reluctance to discuss the subject matter. Upon further reflection on these results, it was deemed appropriate to carry out additional data collection, focusing specifically on EIA follow-up, particularly governance, and EIA effectiveness, discussed in the next section. The policy Delphi was seen to be the most appropriate to address this issue.

4.2.5 The Delphi technique

The limited feedback from the interviews and the focus group discussion led this author to consider an additional research method that could complement the information gathered by the documentary analysis, the interviews and the focus group. The Delphi technique was deemed most appropriate in supplementing the research with relevant additional information, pertinent to address the research questions. The below provides an overview to why the Delphi was chosen and its implementation.

What is the Delphi technique?

The Delphi technique is a method to organise, manage and structure a discussion among well-informed persons meant to generate insights on either current or prospective contentious issues/problems within an information network. It is intended to identify, predict, and explore group attitudes, needs and priorities (Beiderback et al., 2021; Hasson & Keeney, 2011; Hung et al., 2008). It is considered a useful tool, well suited for inquiry into complex issues where there are

multiple perspectives and solutions with no one clear normative solution (de Loë et al., 2016). Pill (1971) notes that the Delphi is considered an investigative approach which:

- is a rapid and relatively efficient way to ‘cream the top of the heads’ of a group of knowledgeable people, and
- if properly managed, can be a highly motivating environment for respondents.

Originally conceived in the 1960s, the technique was used for obtaining generic consensus among ‘experts’ or individuals through a series of intensive questionnaires interspersed with controlled feedback and structured group communication in order to solve a complex problem (Dalkey & Helmer, 1963; Hasson et al., 2000; Mukherjee et al., 2015). It is seen to function as a tool for developing criteria for evaluation and audit of processes and systems, and for reaching relative consensus about attributes, objectives, and broad metrics (Hanna & Noble, 2015). The use of this technique often involves two or more rounds of structured questionnaires, each followed by an aggregation of responses and feedback to the participants who are usually experts in the subject matter (Mukherjee et al., 2015; Turoff, 1970).

In cases where strongly polarised opinions are expressed or face-to-face interaction precludes serious discussion, the technique has substantial potential to enable participants to think in depth before taking a position. It also enables specialists to share their knowledge and experiences with a degree of serenity and peace of mind (i.e., without the time restrictions an interview or focus group may present), without them being physically present (Mukherjee et al., 2015).

The Delphi technique can also be adapted to suit the needs of the problem or question being addressed and enables knowledge exchange (Hasson & Keeney, 2011). It is understood to be a method through which the organiser and the participants can: (i) document and assess judgements, (ii) capture areas of collective knowledge held by professionals and experts which is not often verbalised and explored and, (iii) force new ideas to emerge about the subject matter being analysed (Franklin & Hart, 2007).

A key element of the Delphi is that it operates in an anonymous and confidential manner. Anonymity is ensured as much as possible since the process is coordinated by a facilitator, who is responsible for sending invites, distributing and receiving questionnaires, and analysing the group response (von der Gracht, 2012). As a consequence, the Delphi technique has advantages over other group communication methods, particularly since anonymity: (i) reduces the implications of dominant individuals being present during the discussions, (ii) has no socio-psychological pressure on the participants, including the facilitator, (iii) opinions may be expressed more freely, removing the fear of potential repercussions and embarrassment and no single participant is singled out or needs to commit themselves publicly to a particular view, and (iv) usually leads to higher response rates, as participants may feel more at ease in replying (von der Gracht, 2012; Landeta, 2006; Turoff, 1970).

The increased utilisation of the Delphi eventually led to its modification into more specialised methods such as ‘modified Delphi’, ‘policy Delphi’, and the ‘real-time Delphi’ amongst others

(Hasson & Keeney, 2011). The latter note that more experience into the Delphi implementation led to the realisation that not all types of Delphi aspire to achieve consensus as originally intended. The simplest classification of the Delphi technique as put forward by Franklin and Hart (2007) is as follows:

- Classical Delphi - functions as a forum for establishing facts about a specific situation or topic, and is considered a tool for obtaining a group opinion about forecast statements (Rauch, 1979),
- Decision Delphi - seen to encourage collaborative decision-making, including the preparation and assistance in making decisions and influencing social developments (Rauch, 1979),
- Policy Delphi - aims at charting the breadth of views relating to the policy being analysed and seeks to identify potential resolutions (Hasson & Keeney, 2011; Mukherjee et al., 2015; Turoff, 1970). Needham and Loë (1990) rightly note that it is not the scope of the Delphi to reach a consensus between participants, but to produce a critical debate about opposing options on a policy issue and to support decisions by discussing the diverse views of the preferred future.

Noting that information and literature related to EIA follow-up governance (i.e., the processes and structures for ensuring that there is commitment to implement the principles of EIA follow-up) and its link to effectiveness on a macro (jurisdiction) scale is considered limited to date, a policy Delphi was considered most appropriate in order to gauge opinions, experiences and knowledge from individuals knowledgeable in the field, who may shed more light on the research questions themselves. In addition, as discussed in the following section, the absence of face-to-face interaction and the anonymity of the participants were two of the elements that led to the choice of the policy Delphi as an additional data collection method, supplementing the documentary analysis, the interviews and the focus group discussion.

Why the policy Delphi?

The policy Delphi was chosen and utilised to address the limitations presented by the low participation rate that both the interviews and the focus groups suffered from, as discussed earlier in this chapter. This technique was identified for its potential to preclude direct confrontation between participants which could possibly lead to (Dalkey & Helmer, 1963, p. 459):

- “hasty formulation of pre-conceived notions,
- an inclination to close one’s mind to novel ideas,
- a tendency to defend a stand once taken, and
- alternatively, and sometimes alternately, a predisposition to be swayed by persuasively stated opinions of others.”

The choice of a policy Delphi for this research is also based on the fact that this method is intended to identify options and alternatives and to aid in establishing pro and con arguments for differing positions (Franklin & Hart, 2007). It is an organised approach for correlating views and information pertaining to a specific policy area and for providing the participants with an opportunity to react to and assess differing viewpoints (Turoff, 1970). With respect to benefits, the policy Delphi (Franklin & Hart, 2007):

- presents appropriate time for thinking and reflection due to the sequential nature of the questionnaires,
- ensures that participants remain problem-centred and focused because of the structured nature of the communication methods,
- uses questionnaires instead of focus group interviews to avoid face-to-face debate, ensuring that there is less undue influence of dominant personalities in the group, and
- avoids group think.

In light of the above, the following section presents the key steps in the policy Delphi which were also followed as part of this research.

Key steps in the policy Delphi

Table 4.7 below presents an overview of the steps taken for the policy Delphi technique:

Table 4.7: Overview of the key steps of policy Delphi for this research

(adapted from Beiderback et al., 2021)

<i>Phase</i>	<i>Key steps involved</i>
Preparing	<i>Identification of the research questions:</i> Determination/refinement of criteria and identification of issues related to EIA follow-up governance and effectiveness.
	<i>Identification of the research setting:</i> Present-related; establishing how EIA follow-up governance is currently affecting EIA effectiveness on the macro scale and what can be done to address this in the future.
	<i>Determination of policy Delphi format:</i> Sequential; with two rounds of questionnaires, with the aim of presenting the issues related to EIA follow-up governance and EIA effectiveness.
	<i>Preparation of Delphi questions:</i> It is not the scope of this Delphi to present complicated questions, therefore simple open-ended questions based on the research questions, were presented in both the first and second round (Appendices I and J). The responses from the first round were reviewed to compile a summary report, which was subsequently presented to the participants. The second round of the Delphi was a reflection of the results of the first round, and was eventually referred to the participants for their views, with the aim of polling expert opinion through the administration of sequential questionnaires (Franklin & Hart, 2007; Richey et al., 1985). The second round of the Delphi adopted a similar method, in the form of open-ended questions, reflecting on the results from the interviews, the focus group discussion and the first round of the Delphi.
	<i>Identification of facilitator:</i> Noting the important role of the facilitator in respect to the carrying out of the Delphi, the role was carried out by this author.
Conducting	<i>Software selection:</i> In order to keep the communication channels as simple as possible, questions were referred via email.
	<i>Participant selection:</i> Two options were considered for the Delphi participants: (i) utilising the same pool of experts/stakeholders that were invited for the focus groups (and did not reply), or (ii) a more restricted pool of experts, including EIA consultants and EIA experts from the competent authority, are invited. However, with respect to the latter, approvals for participation would have been complicated and lengthy as it is unlikely that such experts would participate on a personal level (unlike the other experts). From an academic point of view, the pool of EIA experts in Malta is extremely limited and therefore was not considered.

<i>Phase</i>	<i>Key steps involved</i>
	In this regard, (i) above was considered the preferred option, as one of the objectives of the policy Delphi is to provide a sample of policy-specific experts (Franklin & Hart, 2007). The invite (Appendix H) and the respective consent form (Appendix G), together with a brief overview of the research questions, were referred to the expert pool. Approximately 50 invites were distributed, counting on a critical minimum participation threshold of 10 participants (Needham & Loë, 1990). The experts identified were the same as those who had been invited for the focus groups, as follows: - Developers, applicants, architects and EIA consultants: This group had been originally identified in order for it to share its perspective on the EIA process in respect to the applicant/developer point of view as the instigator of the actual EIA process. EIA consultants were also included to ensure a balanced discussion between all parties involved. A number of active EIA consultancy firms also invited. - Local Councils' Association and Government Entities: These entities are consulted at specific stages of EIA (scoping and review of the Environmental Statement/Report) and could provide their opinion/perspective with respect to: (1) the EIA process itself, (2) its effectiveness, and (3) their own input as part of the process. - Non-Governmental Organisations (NGOs): As in the case of the Local Councils' Association and government entities, these groups are consulted at specific stages of the EIA process (scoping and review of the Environmental Statement/Report) and could provide their opinion/perspective with respect to: (1) the EIA process itself, (2) its effectiveness, and (3) their own input as part of the process. <i>Feedback format expected:</i> Qualitative comments.
Analysing	<i>Qualitative analysis:</i> Content analysis was planned following conclusion of Delphi rounds, through the use of <i>NVivo</i>, as necessary.

The invites for participation to the Delphi were issued at the end of October 2023 (Appendix H), with two rounds of reminders sent. 18 of the invitees responded positively and returned the signed consent form (Appendix G). The Delphi first round was referred to the participants in November 2023 for two weeks (Appendix I), with 12 of the participants responding. The participants of the policy Delphi included: three (3) representatives of government entities, three (3) representatives of eNGOs, five (5) representatives of EIA consultancy firms and one (1) representative of project proponents.

Table 4.8 presents the questions posed in the first round of the Delphi as follows:

Table 4.8: Questions presented in the Delphi first round

Question No.	Question	Explanation
1	What is EIA effectiveness, in your understanding?	General understanding of EIA concepts, in this case related to EIA effectiveness, seeking the experts' interpretation of this aspect. This reflects the general scope of the research questions.
2	What are, in your opinion, the factors contributing to EIA effectiveness?	General understanding of EIA concepts, in this case related to the factors contributing to EIA effectiveness, seeking the experts' interpretation of this aspect. This reflects the general scope of the research questions.

Question No.	Question	Explanation
3	What is EIA follow-up, in your understanding?	General understanding of EIA concepts, in this case EIA follow-up, seeking the experts' interpretation of this aspect. This reflects the general scope of the research questions.
4	What are, in your opinion, the factors contributing to effective EIA follow-up, in respect to its scope and purpose?	General understanding of EIA concepts, in this case related to the factors contributing to effective EIA follow-up, seeking the experts' interpretation of this aspect. This reflects the general scope of the research questions.
5	Which processes and structures (i.e., governance mechanisms) should be in place to ensure that there is commitment towards the implementation of EIA follow-up?	Further insight into EIA follow-up governance, reflecting the general scope of the research questions.
6	In your opinion, does effective EIA follow-up governance ensure EIA effectiveness? Please explain by providing examples.	Further insight into EIA follow-up governance, reflecting the general scope of the research questions.

The responses were reviewed and analysed, and a summary report for the Delphi first round was referred to all the participants. The second round of the policy Delphi reflects on both the responses arising from the first round, together with those provided by the participants of the interviews and the focus group discussion (discussed earlier in this chapter), taking into consideration those aspects that reflected a relative consensus within the participants.

Whilst acknowledging that consensus is considered to be one of the most debated methodological issues related to the application of the Delphi technique; what is accepted as consensus, or how it is reached, remains unclear (Barrios et al., 2021; Boulkedid et al., 2011; von der Gracht, 2012). The policy Delphi carried out for this research (noting that two Delphi rounds, with the first posing general questions regarding EIA follow-up, particularly governance, and EIA effectiveness; and the second focusing on those issues which were consistently indicated by the participants) aimed for achieving consistent opinions vis-à-vis EIA follow-up, governance and EIA effectiveness, in the form of a relative consensus (as opposed to an absolute consensus). This is also similar to how Hanna and Noble (2015) utilise the Delphi technique as a tool aiding the development of criteria for evaluation and audit of processes systems and for reaching relative consensus regarding research objectives.

In order to encourage participation rates (contrasting with that for the interviews and the focus group), and therefore ensure this relative consensus, the questions for the second round were distributed during January 2024 (following the holiday period), with the participants having two weeks to respond (Appendix J). 10 complete responses were subsequently received within a two-week consultation window for the Delphi second round.

Table 4.9 presents the questions posed in the second round of the Delphi as follows:

Table 4.9: Questions presented in the Delphi second round

Question No.	Question	Explanation
1	What changes in the Maltese legal EIA framework are needed to ensure EIA follow-up governance?	Following the first and second phases of the data collection, questions are now focused on EIA follow-up governance, reflecting the scope of the research questions. The questions take into account the participants' experience in the field, with Malta being the case study. Q1 focuses on the legislative aspects of EIA follow-up governance.
2	How can the current administrative/institutional arrangements in Malta be improved to ensure better implementation of EIA follow-up?	Same as per Q1; Q2 focuses on the administrative/institutional arrangements for EIA follow-up governance in Malta.
3	What initiatives can be taken by the regulatory authority to encourage participation of all stakeholders at the post-consent stage?	Same as per Q1; Q3 focuses on the participation arrangements by the regulatory authority for EIA follow-up governance in Malta.
4	What initiatives can be taken by the project proponents to encourage participation of all stakeholders at the post-consent stage?	Same as per Q1; Q4 focuses on the participation arrangements by the project proponents for EIA follow-up governance in Malta.
5	What can the regulatory authority do to ensure appropriate allocation of resources for effective EIA follow-up in Malta? Please provide examples.	Same as per Q1; Q5 focuses on the resource allocation arrangements by the regulatory authority for EIA follow-up governance in Malta.
6	What can the project proponents do to ensure appropriate allocation of resources for effective EIA follow-up in Malta? Please provide examples.	Same as per Q1; Q6 focuses on the resource allocation arrangements by the project proponents for EIA follow-up governance in Malta.

The results of the policy Delphi, following the compilation of summarised data from the two rounds, were analysed and are subsequently presented in Chapter 5. In addition, as indicated earlier for the other data collection methods, the data collected through the policy Delphi was not explicitly oriented towards the framework discussed in Chapter 3, however it was evaluated within that context (Section 5.3 refers).

4.2.6 Ethics considerations

With respect to the interviews and the focus group discussion, all individuals who gave their verbal and written consent to their participation (Appendix G), were made aware that the proceedings were being recorded and would be eventually transcribed to be analysed in more detail. The participants were also informed that only the researcher, the supervisors and the examiners had access to the full recordings and that direct quotes would be used in the presentation of the results and the subsequent discussion. Ethics clearance regarding the interviews and the focus groups was first provided in August 2018, with a further confirmation of such in August 2020 (in view of the change, referred to earlier, from in-person focus groups to online discussions due to the COVID-19 pandemic).

Confidentiality of the participants' responses is ensured through the assignment of pseudonyms throughout Chapter 5 (Interviewee 1, Interviewee 2 and Interviewee 3 for the elite interview participants, and Participant 1, Participant 2 and Participant 3 in relation to the focus group attendees).

With respect to the policy Delphi, ethics clearance was acquired in October 2023. As in the case of the interviews and the focus group, all individuals who gave their verbal and written consent to their participation (Appendix G), were informed that their responses would be treated with confidentiality and anonymity, with the possibility of the use of direct quotes.

On noting the nature of the data collected through the interviews, the focus group and the policy Delphi, the following section discusses how such data was organised and analysed, to enable its effective evaluation.

4.2.7 Data analysis

For the purposes of this research and considering the nature of the collected data, coding was deemed to be the most appropriate method for its analysis (Ayres, 2008; Boyatzis, 1998; Braun & Clarke, 2006; Denzin & Lincoln, 2017; Gibbs, 2018; Neuman, 2014; Saldaña, 2021).

Coding is considered an integral part of the qualitative analysis, with the research questions acting as its guide. Coding attempts to assign labels to data with the primary aim of summarising and categorising it in an organised way, but also aids in defining what the data being analysed is about (Creswell & Báez, 2021; Gibbs, 2018; Richards, 2020; Saldaña, 2021) – therefore in a way 'making sense' of the data collected. It involves the identification and recording of one or more passages of text or other data items such that they, in a way, represent the same theoretical or descriptive idea. These words, phrases or passages are then linked to the same label or name, that being the actual code (Denzin & Lincoln, 2017; Gibbs, 2018). The code itself is either a single word or a short phrase linked to a specific attribute, with the process itself being a link between the data collection phase and the more in-depth data analysis (Naeem et al., 2023; Saldaña, 2021).

Coding enabled the analysis of the data collected through the interviews, the focus group and the policy Delphi through the assigning and organising of the different labels derived through the exercise. Specific passages of text (e.g., quotes from research participants) having the same label could be combined to understand a concept, phenomenon, idea, explanation or activity, enabling a thorough analysis and examination of the data collected (Gibbs, 2018).

Coding then facilitates the derivation of themes, in turn enabling thematic coding. A theme identifies something of particular relevance about the data in relation to the research question, and corresponds to some level of patterned response or meaning within the data set (Braun & Clarke, 2006; Gavin, 2008; Ryan & Bernard, 2003). The derivation of themes includes the organisation of the identified codes into groups to enable the identification of patterns and relationships within the data, which in turn offers deeper insights into the research questions (Braun & Clarke, 2006; Naeem et al., 2023). In this way, the researcher takes the analysis a step

further, from the detailed analysis of codes, to a more abstract interpretation by creating themes, providing the essential link between the data and the research questions (Naeem et al., 2023).

Coding was carried out with the aid of the qualitative analysis software *NVivo 14 for Mac*²³, which is a tool used to conduct qualitative data analysis, facilitating data reduction and coding (Jonsen & Jehn, 2009; Welsh, 2002), together with ensuring validity and reliability of the methods utilised (Ryan & Bernard, 2003). The transcripts gathered from both the interviews, the focus group discussion and the responses from the policy Delphi were inputted into the software and coding was carried out in order to organise the data, and in turn identify any trends, patterns and relationships within the data. An inductive coding approach was adopted, with the development of codes based on the data gathered, as opposed to having preconceived codes or categories. Inductive approaches in coding of data gathered through qualitative research aim to understand meaning in complex data through the development of summary themes or categories from the raw data (Creswell, 2014; Patton, 2005; Thomas, 2006; Vears & Gillam, 2022).

The analysed data was subsequently utilised as part of the case study research strategy, identified as being the most appropriate to address the exploratory nature of the research questions. Case studies are selected with the explicit aim of maximising the opportunities for developing hypotheses or theories that explain the [social] phenomenon in question (Bleijenbergh, 2010). Be it an in-depth enquiry into a topic or phenomenon in a real-life setting (Saunders et al., 2019), the case study strategy is adopted two-fold: (1) at a micro-level through the discussion of project-level cases, and (2) at the macro-level through the analysis of the implementation of EIA follow-up in Malta. The following section discusses this approach in more detail, looking at how this research strategy appropriately addresses the research questions.

4.3 The research strategy – the case study approach

Case study strategy is one of the most frequently utilised qualitative research approaches (Harrison et al., 2017) and is considered to be a choice of what is to be studied (Flyvbjerg, 2011; Stake, 2000). It has undergone substantial development and has grown in reputation as an effective in-depth method for investigating and understanding complex issues, topics or phenomena in real world settings (Crowe et al., 2011; Harrison et al., 2017; Mabry, 2008; Merriam, 1998; Priya, 2021; Saunders et al., 2019; Stake, 1995; Yazan, 2015; Yin, 2002, 2013).

Changes in the case study strategy have emerged from parallel influences from historical approaches to research and individual researcher's preferences, perspectives on, and interpretations of, the case study approach (Harrison et al., 2017). In terms of its design and implementation however, Yazan (2015) argues that research methodologists have not reached consensus, with three main approaches which, albeit different, are still considered to be the most pertinent (i.e., Merriam, 1998; Stake, 1995 and Yin, 2002).

²³ <https://lumivero.com/products/nvivo/>

Yin (2002) defines case study strategy as “a contemporary phenomenon within its real-life context, especially when the boundaries between a phenomenon and context are not clear and the researcher has little control over the phenomenon and context” (p. 13). Stake (1995) argues that researchers should view the case study strategy as “a bounded system” and inquire into it “as an object rather than a process” (p. 2), looking into a case study as “a specific, a complex, functioning thing,” more specifically “an integrated system” which “has a boundary and working parts” and is purposive (p. 2). Merriam (1998) understands case study strategy as “an intensive, holistic description and analysis of a bounded phenomenon such as a program, an institution, a person, a process, or a social unit” (p. xiii). Creswell (2014) defines the case study approach as “a qualitative design in which the researcher explores in depth a program, event, activity, process, or one or more individuals. The case/s are bound by time and activity, and researchers collect detailed information using a variety of data collection procedures over a sustained period of time.” (p. 241).

Creswell et al. (2007) distil these key approaches into case study research, providing the following comprehensive definition, with Table 4.10 below illustrating its key characteristics:

Case study research is a qualitative approach in which the investigator explores a bounded system (a case) or multiple bounded systems (cases) over time through detailed, in-depth data collection involving multiple sources of information (e.g., observations, interviews, audiovisual material, and documents and reports) and reports a case description and case-based themes. (p. 245).

Table 4.10: Characteristics of case-study research
(adapted from Creswell et al., 2007)

<i>Characteristics</i>	<i>Details</i>
Type of problem best suited for design	When researcher has a case bounded by time or place that can inform a problem.
Discipline background	Psychology, law, political science, medicine.
Unit of analysis	An event, program, activity, or more than one individual.
Data collection forms	Multiple forms: interviews, observations, documents, artifacts.
Data analysis strategies	Description of the case and themes of the case as well as cross-case themes.
Degree of structure in methods	Some structure.

As in the case for this research, the use of in-depth data collection, utilising multiple sources of information, such as observations, interviews, audio-visual material, and documents and reports, enables the case study strategy to qualitatively explore a bounded system (a case) or multiple bounded systems (cases) over time, reporting a case description and case-based themes (Creswell et al., 2007; Mabry, 2008).

The nature of the case study design adopted for this research is two-fold:

- it is instrumental, as the case study is being examined and assessed to provide insight into a specific issue and redraw general inferences and theoretical principles from it (Gomm et al., 2009; Stake, 2000). This is of particular relevance to Research Question 1 which aims to explore effective EIA follow-up governance through the case study of

Malta, while informing and refining the best practice principles and criteria for effective EIA follow-up governance, distilled from the reviewed literature, and

- it is also intrinsic, with the focus also being on the case because it presents an unusual or unique situation (Creswell et al., 2007; Stake, 1995, 2000). As per Research Question 2, EIA follow-up governance in Malta is being assessed at the macro/jurisdiction-level, with the aid of micro/project-level case studies.

Complementary to the nature of the case study strategy, Flyvbjerg (2011) highlights its strengths and weaknesses. In terms of strengths, these include: (i) depth of information and data, through appropriate detail, richness and completeness, (ii) high conceptual validity, (iii) understanding context and process, (iv) understanding of what causes a phenomenon, linking causes and outcomes, and (v) promoting new hypotheses and new research questions. The following weaknesses are also identified: (i) selection bias may overstate or understate relationships, (ii) weak understanding of occurrence in a population of phenomena under study, and (iii) statistical significance often unknown or unclear.

In order to strengthen the validity of the case study approach, triangulation through the use of multiple data collection methods (see Section 4.2 above) was deemed most appropriate (Harrison et al., 2017; Yazan, 2015; Yin, 2013). Case study evaluations, particularly those focusing on broad or complex interventions, can involve a combination of two or more data collection methods as in the case of this research (i.e., document analysis, elite interviews and focus group discussion and policy Delphi). When the methods are designed to explicitly collect some overlapping data, the possibility for triangulation is present, if the results are convergent, greater confidence may be placed in the evaluation's overall findings. Similarly, any convergence over the examination of causal relationships may strengthen the evaluation's internal validity (Yin, 2013).

Yin (2013) also indicates generalisation as another concern with respect to case study research strategy. Internationally, generalisations form the basis for transferring lessons from one country to another as well as for 'scaling-up' a desirable intervention within the same country. In the case of this research, the outcomes of the case study approach led to: (i) a deeper understanding of the effectiveness of EIA follow-up governance, and consequently (ii) enabling the application of the same research framework for the evaluation of EIA follow-up governance for other macro-level jurisdictions, both taking into account generalisation and transferability.

In conclusion, following the framing of the research strategy, the final section of this chapter looks into the theoretical and epistemological positioning of the research, noting that the case study approach does not imply a commitment to any particular one and allows for numerous possibilities (Takahashi & Araujo, 2020).

4.4 The pragmatist theoretical perspective

On noting that the research is based on practice, pragmatism has been identified as its theoretical underpinning. Pragmatism refers to a worldview that focuses on the practical aspect of research and on the 'what works' elements, rather than focusing on the epistemological stalemates and

metaphysical debates regarding the nature of truth and reality (Allmendinger, 2009; Biesta, 2010; Frey, 2018; Kelly & Cordeiro, 2020; Patton, 2005; Pratt, 2016; Rorty et al., 2004; Tashakkori & Teddlie, 1998). It also accepts that, philosophically, there are singular and multiple realities that are open to empirical inquiry and orient themselves towards solving practical problems in the 'real world' (Creswell & Plano Clark, 2007; Dewey, 1925; Feilzer, 2010; Rorty, 1999). For pragmatism, "theories are meant to be instruments and enquiry is meant to be problem-driven" (Pratt, 2016, p. 5).

In terms of ontology and epistemology, the approach adopted by pragmatism is not seen to be committed to any single system of philosophy and reality. Founded on the writings of the classical American pragmatists (Peirce, Dewey and James), pragmatism looks at reality in a more practical way, and is seen as an actively ongoing creation by individuals. Frey (2018) continues to note that pragmatism sees reality as being in constant evolution, based heavily on human experience, and oriented towards solving problems practically. Pragmatism is also seen as insisting on treating research as a human experience (rather than a scientific experiment), which is based on the beliefs and actions of actual researchers (Morgan, 2007, 2014a, 2014b). Truth is what actually works at the time and is not based on the dualism between a reality independent of the mind and within the mind.

Table 4.11 below provides an overview of the pragmatist theoretical perspective.

Table 4.11: Ontological and epistemological foundations of pragmatism
(adapted from Saunders et al., 2019)

	Pragmatism
Ontology	External; multiple; view chosen to best enable answering of research question.
Epistemology	Either both observable phenomena and subjective meanings can provide acceptable knowledge dependent upon the research question. Focus is on practical applied research, integrating different perspectives to help interpret the data. Researcher adopts both objective and subjective points of view.
Data collection techniques used most often	Mixed and multiple methods and designs; qualitative and quantitative.

Kelly and Cordeiro (2020) summarise the methodological principles for pragmatic enquiry as follows (Friedrichs & Kratochwil, 2009; Morgan, 2007, 2014a, 2014b): (1) an emphasis on actionable knowledge, (2) recognition of the interconnectedness between experience, knowing and acting, and (3) a view of inquiry as an experiential process. Pragmatism has also often been viewed as a research philosophy underpinning a mixed methods research approach (Greene & Caracelli, 2003; Maxcy, 2003), encouraging a methodological pluralism and multi-perspectival style of inquiry (Pratt, 2016).

The desire to generate knowledge aimed towards real-world application (i.e., through the exploration of effective EIA follow-up governance and the identification of related best practice principles and criteria) led to the choice of pragmatism as the overarching philosophical approach for this research. Pragmatist epistemology, emphasizing the link between experience, knowing and acting, and its focus on practicality, underpinned the choice of data collection methods (i.e., documentary analysis, elite interviews, focus group discussion and policy Delphi, discussed earlier) within the identified research strategy (i.e., case study research). Morgan (2007, 2014a, 2014b) highlights that pragmatists place emphasis on interrogating the value and meaning of research data through examination of its practical consequences. Feilzer (2010) notes that pragmatism provides the researcher with freedom to choose whichever method or technique they deem more appropriate (Creswell & Plano Clark, 2007; Feilzer, 2010; Robson, 1993). Pragmatism is seen to favour methodological appropriateness, seeking the best match for the intended evaluation user's information needs (Howe, 1988; Jonsen & Jehn, 2009; Patton, 1990).

This methodological appropriateness, in turn, ensured the adoption of a pragmatic, flexible research approach (Harrison et al., 2017), with knowledge anchored in the stakeholders' experiences. Pragmatist epistemological principles also influenced the approach and techniques used to analyse the data, discuss the results and draw the final conclusions (Kelly & Cordeiro, 2020), together with guiding the derivation of the evaluation framework for effective EIA follow-up governance, through the formulation of the best practice principles and criteria as one of the main outcomes of the research.

4.5 Conclusions

This chapter has provided a detailed overview of the research design, based on Crotty (1998), Grix (2002) and Saunders et al. (2019), through the discussion of the data collection and analysis methods, the research strategy and the epistemological and theoretical foundations behind the approach adopted.

The grounding of this research in a pragmatist approach enabled for the data collection and analysis methods to provide the data relevant to addressing the research questions. This included a multi-method qualitative approach, including documentary analysis, elite interviewing, focus group discussion and a policy Delphi. This data, collected through these different qualitative methods, ensured data triangulation, compensating any weaknesses that the data may have presented originally due to low participation rates and the challenges that arose from the singular events occurring throughout the research timeline, which may have had a direct or indirect impact on the research.

Framing the research strategy within a case study approach ensured that the in-depth data and information collected, enabled further insight into a specific issue and a unique situation, in this case related to the implementation of EIA follow-up governance in Malta. In adopting pragmatism as the epistemological and theoretical foundation to this research, the process could be as flexible

as possible and inductive reasoning could be supported, particularly noting the ideas emerging from both the literature review and the data collection and analysis process themselves.

The following chapter (Chapter 5) discusses the results in more detail, framed against the main themes arising from the research questions, with the subsequent chapter (Chapter 6) further reflecting on these outcomes.

Chapter 5: Understanding EIA follow-up governance – presenting the results

Chapter 5 – Understanding EIA follow-up governance – presenting the results

5.1 Introduction

This chapter presents the results arising from the data collection and analysis process, and is structured as follows:

- Section 5.2 is a macro-level review of Maltese EIA follow-up procedures, supported by five micro/project-level case studies assessed as part of the documentary analysis. This design aids in further understanding EIA follow-up governance in Malta and at the macro-level.
- Section 5.3 is a macro-level assessment of stakeholders' perceptions of EIA follow-up, governance and EIA effectiveness, derived from the elite interviews, the focus group discussion and the policy Delphi, as discussed in Chapter 4.

Figure 5.1 below provides a conceptual visual representation of how the results are presented in this chapter, with the review of micro/project level case studies feeding into the understanding of EIA follow-up governance at the macro-level.

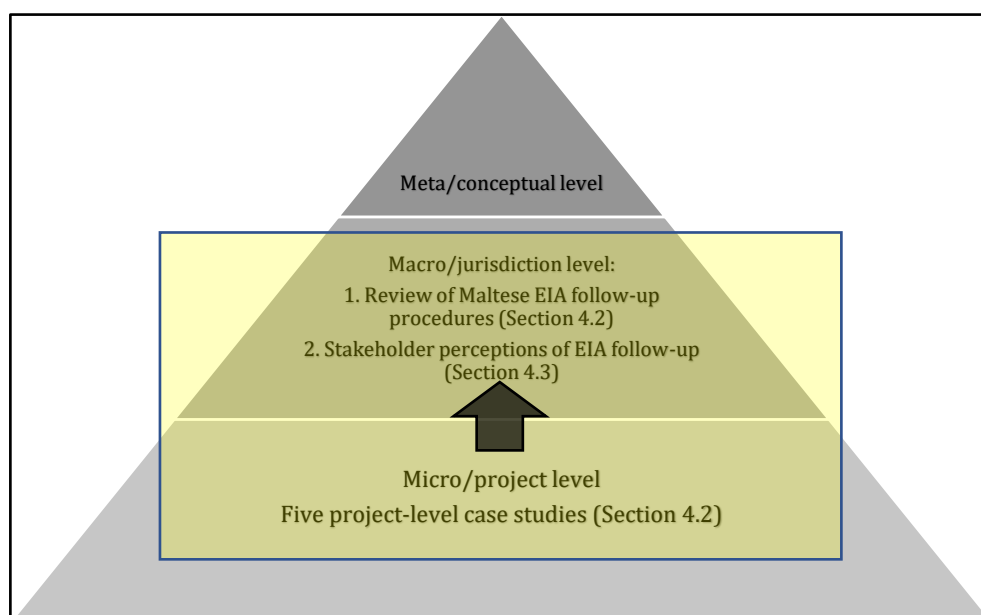


Figure 5.1: Visual representation of the presentation of results

The sections are structured to mirror the best practice principles for effective EIA follow-up governance, derived from the literature review in Chapter 2 and presented in Chapter 3. The respective criteria are subsequently utilised to evaluate how governance arrangements contribute to EIA effectiveness and effective EIA follow-up, via the use of evaluation tables and to the below traffic-light evaluation system.

■	Yes
■	Partial
■	No
■	Unable to judge
N/A	Not applicable

Box 5.1: Traffic-light system adopted for the evaluation tables

Responses to the criteria questions are categorised as per above: (1) 'Yes', (2) 'Partial', (3) 'No', and (4) 'Unable to judge' where no information is available or provided to trigger a definitive response.

5.2 Presenting Malta as a case study

As indicated earlier, this section of Chapter 5 delivers a macro-level review of Maltese EIA follow-up procedures, supported by five micro/project-level case studies assessed as part of the documentary analysis. The case studies presented below present a sample of projects of a varied nature, namely:

Case Ref:	Description	Year of approval
Case #1:	Coastal works in relation to an extension of a quay	1999
Case #2:	A beach replenishment project	2002
Case #3:	A poultry farm	2003
Case #4:	Upgrading of road infrastructure	2012
Case #5:	Construction of a new road	2019

Box 5.2: Case study descriptions

No further details in terms of specific cases are provided to preserve the anonymity of both the officers and EIA consultants who were involved in their processing. Detailed information regarding all the cases sampled as part of this research can be found in Appendix K.

The following sections each present the macro-level evaluation of EIA follow-up governance in Malta, together with an accompanying commentary presenting a more detailed analysis of the results, reflecting the research objectives. As discussed in Chapter 3, the results are presented through the framework for the evaluation of the effectiveness of EIA follow-up governance, through the use of the best practice principles and respective criteria, as per Columns 1 and 2. Columns 3 to 7 relate to the micro-level evaluation carried out through the data collected from the case studies. Column 8 provides an evaluation of EIA follow-up governance in Malta at the macro-level. Column 9 provides additional comments and observations, distinguishing between the macro and micro level analysis.

5.2.1 Procedural effectiveness of EIA follow-up governance

Table 5.1 below provides a qualitative evaluation of the procedural effectiveness of EIA follow-up governance arrangements for Malta. Results are presented and discussed in more detail following the table. Principles 1 – 3 and their respective criteria provide an in-depth macro-level review of EIA follow-up governance arrangements from a procedural point of view.

Table 5.1: Procedural effectiveness of EIA follow-up governance arrangements

<i>EIA follow-up governance principles</i> <i>Procedural</i>	<i>Detailed criteria for effective EIA follow-up governance</i>	<i>Case #1 (Coastal Works)</i>	<i>Case #2 (Beach Rep.)</i>	<i>Case #3 (Poultry Farm)</i>	<i>Case #4 (Road infra. u)</i>	<i>Case #5 (New road)</i>	<i>Malta (Macro-level)</i>	<i>Comments</i>
1. Have legislative provisions which specify EIA follow-up requirements.	A. Is follow-up a requirement for all EIAs?	N/A	N/A	N/A	N/A	N/A	Partial	<i>Macro:</i> Partial. The Maltese EIA regulations have included references to mitigation and monitoring since 2001. The current regulations (2017) include provisions specific to monitoring, surveillance and other post-permit analysis. No direct references to EIA follow-up were identified.
	B. Are provisions in place for each component of EIA follow-up?	Partial	Partial	Partial	Partial	Partial	Partial	<i>Micro:</i> Partial. For the five case studies, in terms of EIA follow-up, only monitoring requirements have been included in the development permission conditions (see Table 5.9 for more details). No information regarding the other aspects of EIA follow-up has been identified in any of the conditions. <i>Macro:</i> Partial. The only provisions specifically related to EIA follow-up are monitoring-related, which are included in the EIA regulations; references to evaluation are very limited. There are no provisions related to

<i>EIA follow-up governance principles</i> <i>Procedural</i>	<i>Detailed criteria for effective EIA follow-up governance</i>	<i>Case #1 (Coastal Works)</i>	<i>Case #2 (Beach Rep.)</i>	<i>Case #3 (Poultry Farm)</i>	<i>Case #4 (Road infra. u)</i>	<i>Case #5 (New road)</i>	<i>Malta (Macro-level)</i>	<i>Comments</i>
								No. No provisions for management are in place in the EIA regulations.
	(iv) Are provisions in place for stakeholder communication and engagement?	No	No	No	No	No	No	<i>Micro:</i> No. No development permission conditions related to stakeholder communication and engagement were identified in the case studies. <i>Macro:</i> No. No provisions for stakeholder communication and engagement are in place in the EIA regulations. Of note is that the 2001 and 2007 regulations included a reference to engagement and communication.
	C. Are the above provisions implemented in practice?	Unable to judge	Unable to judge	Unable to judge	Unable to judge	Unable to judge	Partial	<i>Micro:</i> Unable to judge. It is not possible to determine whether all of the above provisions are implemented in practice in view of the limited project-level information available from the case studies. <i>Macro:</i> Partial. Regulations are in place only in relation to monitoring requirements. Post-permit analysis is not being implemented.
	D. Have any guidance documents to aid the	N/A	N/A	N/A	N/A	N/A	Partial	<i>Macro:</i>

<i>EIA follow-up governance principles</i> <i>Procedural</i>	<i>Detailed criteria for effective EIA follow-up governance</i>	<i>Case #1 (Coastal Works)</i>	<i>Case #2 (Beach Rep.)</i>	<i>Case #3 (Poultry Farm)</i>	<i>Case #4 (Road infra. u)</i>	<i>Case #5 (New road)</i>	<i>Malta (Macro-level)</i>	<i>Comments</i>
	appropriate implementation of EIA follow-up provisions been published?							Partial. No guidance document specific to EIA follow-up provisions has ever been published in Malta; however, the 1994 EIA guidelines include brief references to monitoring.
2. Establish clear identification of responsibilities in follow-up in EIA procedures/ regulations.	A. Are there staff within the regulatory authority with specific responsibilities for EIA follow-up?	N/A	N/A	N/A	N/A	N/A	Partial	<i>Macro:</i> Partial. No dedicated staff for EIA follow-up activities; however, the EIA Team within the PA/MEPA/ERA has always been responsible for all aspects of EIA, including any follow-up.
	B. Are the responsibilities of all stakeholders for follow-up, i.e., regulator/s, project proponent/s, eNGOs and the public clearly identified?	N/A	N/A	N/A	N/A	N/A	Partial	<i>Macro:</i> Partial. Only the responsibilities of the regulator in relation to monitoring (and very limitedly to evaluation through post-permit analysis) are identified in the EIA regulations.
3. Specify compliance and enforcement provisions related to EIA follow-up.	A. Do the regulations include provisions for compliance and enforcement, in relation to EIA follow-up?	N/A	N/A	N/A	N/A	N/A	Partial	<i>Macro:</i> Partial. Generic provisions (Regulation 33) in relation to enforcement are included in the EIA regulations covering the implementation of all mandatory provisions, technically including EIA follow-up.

<i>EIA follow-up governance principles</i> <i>Procedural</i>	<i>Detailed criteria for effective EIA follow-up governance</i>	<i>Case #1 (Coastal Works)</i>	<i>Case #2 (Beach Rep.)</i>	<i>Case #3 (Poultry Farm)</i>	<i>Case #4 (Road infra. u)</i>	<i>Case #5 (New road)</i>	<i>Malta (Macro-level)</i>	<i>Comments</i>
	B. If yes, is a penalty system related to compliance and enforcement in place?	N/A	N/A	N/A	N/A	N/A	Partial	Macro: Partial. The penalty system in place is related to the provisions stipulated in 3B but not directly related to EIA follow-up.

Principle 1 - Have *legislative* provisions which specify EIA follow-up requirements

Criterion 1A: Is EIA follow-up a requirement for all EIAs?

Partial. As noted in the response to Criterion 1A in Table 5.1 above, from a macro-level perspective, EIA follow-up is partially implemented in the Maltese EIA system. The legislative provisions for EIA follow-up stem from the requirements of the Maltese EIA regulations, with the latest version of regulations having been published in 2017 (Government of Malta, 2017), and amended twice in 2020 (Government of Malta, 2020a, 2020b). The regulations are, at the time of writing, issued under the 2016 Environment Protection Act (Government of Malta, 2016d), with the Environment and Resources Authority (ERA) designated as the regulator (i.e., the competent authority) responsible for EIA and its implementation.

Table 5.2 below provides a summary of the chronological development of EIA legislation in Malta, with a detailed overview being provided in Appendix M. Additionally, an overview of the development of spatial planning in Malta (which laid the foundations to the introduction of EIA in Malta) is found in Appendix L.

Table 5.2: A summary of the chronological development of EIA in Malta

Legal instrument	Year	Description	Parent legislation	Regulator (i.e., the competent authority for EIA)
/	1994	Policy & Design Guidance on EIA	DPA, 1992	PA
L.N. 204/ 2001	2001	The EIA Regulations, 2001	DPA, 1992	PA
L.N. 114/ 2007	2007	The EIA Regulations, 2007	DPA, 1992; EPA, 2001	MEPA
L.N. 412/ 2017 (S.L. 549.46)	2017	The EIA Regulations, 2017	EPA, 2016	ERA
L.N. 448/ 2020; L.N. 455/2020 (S.L. 549.46)	2020	The EIA (Amendment) Regulations, 2020 & EIA (Amendment No. 2) Regulations, 2020	EPA, 2016	ERA

The Maltese EIA regulations have included references to mitigation and monitoring as early as in 2001 and the 2007 versions (Tables 5.3 and 5.4 below refer). No direct references to EIA follow-up were included in the actual legal texts. Whilst being managed by the EIA regulator (i.e., the competent authority for EIA and its implementation), the formulation of mitigation and monitoring requirements was tasked to the EIA consultants. These would then be taken into consideration or otherwise during the drafting of the permission conditions in the development consent by the EIA regulator and eventually, the permitting authority.

Of note is that both the 2001 and the 2007 regulations (Government of Malta, 2001c, 2007) included a reference to engagement and communication of monitoring results/outcomes to the public, as follows:

- (f) make available to the public at such intervals as the Authority deems proper the results of **monitoring** carried out throughout the construction or operation phase of the project, whether such monitoring has been carried out by the Authority itself or by the developer as a

direct result of a condition in the development permission. (Government of Malta, 2001c, 2007).

It is not clear as to why this provision has been removed from the more recent versions of the regulations as this would have appropriately addressed the engagement and communication element of EIA follow-up.

Table 5.3: Mitigation and monitoring provisions in the 2001 EIA regulations
(adapted from Government of Malta, 2001c)

Legal Notice 204 of 2001 (Government of Malta, 2001c)	
<i>Reference</i>	<i>Legal provision</i>
General Provisions; Interpretation; 2.	Mitigation was included in one of the definitions of the Legal Notice, as follows: 'Mitigation' includes: (a) <i>Avoiding the impact altogether by not taking a certain action or part of an action;</i> (b) <i>Minimising negative impacts by limiting the degree or magnitude of the action and its implementation;</i> (c) <i>Maximising the positive impacts of developments;</i> (d) <i>Rectifying the impact by repairing, rehabilitating, or restoring the affected environment;</i> (e) <i>Reducing or eliminating the impact over time by conservation operations during the life of the action;</i> (f) <i>Compensating for the impact by replacing or providing substitute resources or environments.</i>
Regulation 5(3)	As part of the information to be included in the Project Description Statement (PDS), information regarding mitigation would need to be provided: (o) <i>Proposals for mitigating the negative effects of the development.</i>
Regulation 13	As part of the procedures to be followed in the preparation of a full EIA; Regulation 13 included the following: <i>A full environmental impact assessment for development listed under Category I of Schedule I to these regulations shall involve the following procedures:</i> ... (d) <i>designing mitigation measures;</i> (e) <i>formulating monitoring and auditing requirements;</i>
Regulation 17	In respect to mitigation measures, Regulation 17 included the following: <i>17. Where adverse effects are identified, the consultants shall state clearly what significance they attribute to these effects and the mitigation measures they propose to be incorporated in the development and evaluate their effectiveness.</i>
Regulation 18	In respect to monitoring requirements, Regulation 18 included the following: (1) <i>The consultants shall devise a scheme to monitor the impacts of the development which may arise during the construction and operational phases.</i> (2) <i>The consultants shall, subject to approval being granted by the Director of Planning and the Director of the Department, also identify which records the applicant shall keep for the purpose of monitoring the environmental impacts of the development.</i> (3) <i>The Authority and the Department shall have access to any such records both during the construction and operational phases of the development.</i>
Regulation 34	With respect to transboundary impacts, Regulation 34 (7) noted that: (7) <i>When, following monitoring of a development with potential transboundary impacts, significant adverse transboundary impacts or factors that may result in such an impact are discovered, the Minister shall immediately inform the affected State and enter into consultations on the necessary measures that may be undertaken to reduce or eliminate such impact.</i>
Part VII – Enforcement	Regulation 43 included provisions for the monitoring of the implementation of an approved development during the construction and the operational phases.

Legal Notice 204 of 2001 (Government of Malta, 2001c)	
Reference	Legal provision
	In respect to data and information gathered throughout this phase, sub-regulation (f) of the same Regulation provided that: <i>(f) make available to the public at such intervals as the Authority deems proper the results of monitoring carried out throughout the construction or operation phase of the project, whether such monitoring has been carried out by the Authority itself or by the developer as a direct result of a condition in the development permission.</i>
Part VIII – Miscellaneous Provisions	With respect to decision-making, Regulation 44(4)(b)(iii) requested that: <i>Where, after environmental information has been taken into consideration, an application listed in Schedule I to these regulations is determined by the Authority, the Authority shall:</i> <i>(b) make available for public inspection, at all reasonable hours and free of charge, a statement containing:</i> <i>(iii) a description, where necessary, of the main measures to avoid, reduce and if possible, offset the major adverse effects of the development.</i>

Table 5.4: Mitigation and monitoring provisions in the 2007 EIA regulations
(adapted from Government of Malta, 2007)

Legal Notice 114 of 2007 (Government of Malta, 2007)	
Reference	Legal provision
Part I, General Provisions, 2, Interpretation	Mitigation was once again included in one of the definitions of the Legal Notice, as follows: “Mitigation” includes: <i>(a) avoiding the impact altogether by not taking a certain action or part of an action;</i> <i>(b) minimizing negative impacts by limiting the degree or magnitude of the action and its implementation;</i> <i>(c) maximizing the positive impacts of developments;</i> <i>(d) rectifying the impact by repairing, rehabilitating, or restoring the affected environment;</i> <i>(e) reducing or eliminating the impact over time by conservation operations during the life of the action;</i> <i>(f) compensating for the impact by replacing or providing substitute resources or environments.</i>
Regulation 5(3)	As part of the information to be included in the Project Description Statement (PDS), information regarding mitigation would need to be provided: <i>(m) list of the major environmental impacts likely to be generated by the project, including reference to cumulative impacts, proposals for mitigating the negative effects of the development, and...</i>
Regulation 6	As part of the voluntary submission of a scoping statement, the 2007 Regulations requested that: <i>(5) The baseline surveys prepared in accordance with the provisions of sub-regulation (3) of this regulation, shall be taken account of in the formulation of the project proposal with a view to mitigate the impacts of the proposed development at the design stage and shall, for the purposes of these regulations be deemed to constitute part of the environmental impact statement or environmental planning statement, as the case may be, once the latter is commissioned.</i>
Regulation 13	As part of the procedures to be followed in the preparation of a full environmental impact assessment; Regulation 13 included the following: <i>A full environmental impact assessment for development listed under Category I of Schedule I to these regulations shall involve the following procedures:</i> ... <i>(d) designing mitigation measures;</i> <i>(e) formulating monitoring and auditing requirements;</i>
Regulation 17	In respect to mitigation measures, Regulation 17 included the following:

Legal Notice 114 of 2007 (Government of Malta, 2007)	
Reference	Legal provision
	17. Where adverse effects are identified, the consultants shall state clearly what significance they attribute to these effects and the mitigation measures they propose to be incorporated in the development and evaluate their effectiveness.
Regulation 18	In respect to monitoring requirements, Regulation 18 included the following: (1) The consultants shall devise a scheme to monitor the impacts of the development which may arise during the construction and operational phases. (2) The consultants shall also identify which records the applicant shall keep for the purpose of monitoring the environmental impacts of the development. (3) The Authority shall have access to any such records both during the construction and operational phases of the development.
Regulation 22	As part of the review of the draft environmental impact statement, the Regulations (Regulation 22(1) and (3)) required that: 22. (1) The draft environmental impact statement shall be reviewed by the Director of Environment Protection and shall be assessed against the terms of reference, the quality of the data used and the objectivity of analysis for the prediction of impacts. Comment may also be made on the suitability of the mitigation measures proposed and on any other matter that is deemed by the Director of Environment Protection to be relevant.” (3) On completion of the consultation stage and of this review, the Director of Environment Protection shall send a report incorporating these and other comments, including any mitigation measures he may deem fit, to the consultants for their consideration and revision of the draft environmental impact statement.
Regulation 34	With respect to transboundary impacts, Regulation 34(7) noted that: (7) When, following monitoring of a development with potential transboundary impacts, significant adverse transboundary impacts or factors that may result in such an impact are discovered, the Minister shall immediately inform the affected State and enter into consultations on the necessary measures that may be undertaken to reduce or eliminate such impact.
Part VII – Enforcement	Regulation 43 of the 2007 Regulations, included provisions for the monitoring of the implementation of an approved development during the construction and the operational phases. In respect to data and information gathered throughout this phase, sub-regulation (f) of the same Regulation provided that: (f) make available to the public at such intervals as the Authority deems proper the results of monitoring carried out throughout the construction or operation phase of the project, whether such monitoring has been carried out by the Authority itself or by the developer as a direct result of a condition in the development permission.

The strengthening of mitigation and monitoring requirements in the latest version of the EIA Directive (EurLex, 2014) is of relevance to this research in view of the fact that as an EU member state, Malta needs to ensure that these provisions are duly transposed into its own laws and regulations.

The 2017 EIA regulations seemingly emphasised the importance of these two elements of EIA by introducing a separate dedicated section related to decision-taking and monitoring (*Part VII – Decision-taking and monitoring*), as illustrated in Table 5.5 below. It should also be noted that some of the provisions mentioned above were moved to other sections, ostensibly to streamline the same regulations and strengthen the implementation of the same (e.g., the definition of monitoring was omitted from the 2017 version of the regulations). As mentioned earlier, the

provision related to communication of monitoring outcomes to the public is absent from this version of the regulations.

With respect to actual projects, the provisions regarding monitoring of development permission conditions had been introduced in the Maltese 2001 Development Planning (Amendment) Act as Article 33(6) (Government of Malta, 2001a). This has been amended in the 2016 Development Planning Act (Government of Malta, 2016a) through Article 72(7):

‘(7) Where the Planning Board considers it appropriate to closely monitor specific conditions in a development permission by appointing a person competent for the said purpose, it shall do so at the expense of the applicant.’ (p. 53).

Other provisions, such as Article 73(5) in relation to the demand of a bond in favour of the PA, have been included to guarantee compliance with the conditions associated with the development permission; and Part IX in relation to monitoring and enforcement has also been included to ensure appropriate monitoring and enforcement provisions.

Table 5.5: Monitoring provisions in the 2017 EIA regulations
(adapted from Government of Malta, 2017)

Legal Notice 412 of 2017 (Government of Malta, 2017)	
<i>Reference</i>	<i>Legal provision</i>
Regulation 12	As required by the former Regulation 5(3), Regulation 12 determines the content of the Project Description Statement (PDS) and includes specific references to mitigation measures as follows: <i>(2) The project description statement shall be submitted by the developer, or his appointed consultant, upon request or agreement by the Authority, and shall:</i> <i>(c) identify any characteristics or measures envisaged to avoid or prevent any significant adverse impacts on the environment.</i>
Regulation 18	With respect to the content of the EIA Report, the provisions include the following: <i>(18) (1) The EIA report shall cover all the requirements specified in the terms of reference issued by the Authority, and shall include at least:</i> <i>(d) a description of the features of the project and/or measures envisaged in order to avoid, prevent or reduce and, if possible, offset any likely significant adverse effects on the environment;</i>
Regulation 25	With respect to transboundary impacts, Regulation 25(4) notes that: <i>(4) The interested State may enter into consultations with the Minister concerning, inter alia:</i> <i>(a) the potential transboundary effects of the project;</i> <i>(b) possible alternatives to the project, including the no-action alternative where relevant;</i> <i>(c) measures to prevent, reduce, eliminate or offset any significant transboundary impacts;</i> <i>(d) monitoring of the effects of such measures, and of the project;</i> <i>(e) possible mutual assistance in preventing, reducing, eliminating or offsetting any significant adverse impact of the project; and or</i> <i>(f) any other appropriate matters as relevant to the project.</i> <i>To this effect, the interested State shall agree with the Minister on a reasonable time-frame for the consultation period, taking into account the nature, scale and characteristics of the proposed project and its location. The interested State shall also promptly provide the Minister with information relating to the environment under its jurisdiction which may potentially be adversely affected, where such information is necessary or relevant for the assessment.</i> Regulation 25(8) also provides that:

Legal Notice 412 of 2017 (Government of Malta, 2017)	
Reference	Legal provision
	<i>(8) Where the monitoring of a project or any other post-project analysis reveals any significant adverse transboundary impacts or any factors that may result in such impacts, the Minister shall immediately inform the interested State or vice-versa, as relevant. Both parties shall then enter into consultations on the measures that should be undertaken to prevent, reduce, eliminate or offset such impact, including any mutual assistance to this effect.</i>
Regulation 26	With respect to transboundary issues, Regulation 26(8) notes: <i>(8) Where the monitoring of a project or any other post-project analysis reveals any significant adverse transboundary impacts or any factors that may result in such impacts, the Minister shall immediately inform the State in which the project is to be undertaken or shall ensure that such State immediately informs him, as relevant. Both parties shall then enter into consultations on the measures that should be undertaken to prevent, reduce, eliminate or offset such impact, including any possible mutual assistance to this effect.</i>
Part VIII – Decision-taking and monitoring	With respect to monitoring, Regulation 32 notes the following: <i>32. When development consent is granted for a project which had been subjected to an environmental impact assessment or screening under these regulations, the following provisions shall apply:</i> <i>(a) The Authority may recommend to the permitting authority to include any conditions and measures in the development consent. It may also recommend amendments to the project or specifications on any features of the project to ensure that the assessment or screening outcome is duly fulfilled, or to avoid, prevent or reduce and, if possible, offset significant adverse effects on the environment. Such measures may also include inter alia:</i> <i>(i) the imposition of financial guarantees in favour of the Authority;</i> <i>(ii) insurance against damage to the environment;</i> <i>(iii) contributions to the Environment Fund;</i> <i>(iv) the submission of any data, information or documentation; and</i> <i>(v) environmental permit</i> <i>ting requirements, other authorizations, and enforcement considerations.</i> <i>(b) The Authority shall determine the specifications and procedures required to monitor the relevant effects of the project on the environment. The Authority may also require any other post-permit analysis as may be relevant including verification and auditing of predictions and assessments, and implementation of corrective measures.</i> <i>(c) The following provisions shall apply with regard to monitoring undertaken in respect to paragraph (b):</i> <i>(i) the monitoring may be undertaken by the Authority or any other person acting on the Authority's instruction, or in liaison with other authorities, and shall address the effects of the project on the environment;</i> <i>(ii) the type of parameters to be addressed and the duration of the monitoring shall be relevant and proportionate to the nature, location and size of the project, the site environment and the potential effects on the environment;</i> <i>(iii) existing arrangements resulting from other relevant legislation may be used if appropriate, with a view to avoiding duplication; and</i> <i>(iv) the Authority may require any remedial measures, including adjustments to the project or of the works methodology, to address to its satisfaction any impacts, risks or adverse implications identified.</i> <i>(d) The application of any measures in line with paragraphs (a) to (c) shall not be construed as a justification for the project, and shall be without prejudice to the Authority's assessment of the overall merits of the project and of its impacts and implications on the environment.</i>
Schedule III	The screening carried out by the Authority to determine whether a proposal requires the carrying out of an EIA or otherwise, would also need to take the following criterion into account:

Legal Notice 412 of 2017 (Government of Malta, 2017)	
Reference	Legal provision
	<i>(h) the possibility of effectively reducing or avoiding the impact, and the reliability with which the impact can be predicted, determined, monitored, managed and addressed.</i>
Schedule IV	Schedule IV on the content of the EIA Report, includes the following provisions: <i>8. A description of the features of the project and other measures which are envisaged to avoid, prevent, reduce or offset any likely significant adverse effects on the environment and, where appropriate, of the arrangements for monitoring their effectiveness, including any relevant post-project analysis. The description shall identify:</i> <i>(a) the limitations of such features and measures;</i> <i>(b) the extent to which significant adverse effects on the environment are actually avoided, prevented, reduced or offset; and</i> <i>(c) the level of confidence in such features and measures.</i> <i>The description shall cover all phases (including the construction, operational and decommissioning phases) as relevant to the project. The consultants shall endeavour to ensure that the features and measures recommended are feasible, realistically implementable, reliable, not dependent on factors beyond the developer's effective control, verifiable, and enforceable.</i> <i>10. A proposed programme to monitor the site and the environmental impacts of the project during the construction, operational and decommissioning phases, as relevant. The proposal shall also include an identification of the records that the developer should keep for the purpose, as well as an indication of any additional measures which should be undertaken pursuant to the monitoring outcome.</i>

Table 5.6: Monitoring provisions in the 2020 revised EIA regulations
(adapted from Government of Malta, 2020b)

Legal Notice 455 of 2020 (Government of Malta, 2020b)	
Reference	Legal provision
Regulation 32	Regulation 32 of the principal regulations was amended as follows: <i>(b) paragraph (b) thereof shall be substituted by the following:</i> <i>(b) The Authority shall require monitoring of the relevant effects of the project on the environment, in accordance with specifications and procedures as it deems most appropriate and effective in order to avoid, prevent or reduce and, if possible, offset significant adverse effects on the environment;</i> <i>(c) in sub-paragraph (i) of paragraph I thereof, the words “monitoring may be undertaken by the Authority or” shall be substituted by the words “monitoring shall be undertaken either by the Authority or by”;</i> <i>(d) in sub-paragraph (iv) of paragraph (c) thereof, the word “may” shall be substituted by the word “shall”;</i> <i>(e) immediately after paragraph (c) thereof, there shall be added the following new paragraph:</i> <i>(d) The Authority may also require any other post-permit analysis as may be relevant including verification and auditing of predictions and assessments, and implementation of corrective measures; and</i> <i>(f) in paragraph (e) thereof as renumbered, the words “paragraphs (a) to (c)” shall be substituted by the words “paragraphs (a) to (d)”.</i>

As indicated in Tables 5.5 and 5.6, the Maltese EIA regulations have and still do exhibit a distinct increase and consolidation in the provisions linked to mitigation and monitoring. This can be considered a step in the right direction towards further mitigation and monitoring and more consolidated EIA follow-up governance.

The focus of the earlier two versions of the Maltese EIA regulations (2001 and 2007) is on the pre-decision stages of a proposed development, with only a few mandatory legal obligations focusing

on EIA post-consent. Whilst noting that both sets of the Maltese regulations refer to the ‘... formulation of monitoring and auditing requirements’ (Regulation 13 in both the 2001 and 2007 versions), no obligation to carry out such is placed on either the EIA regulator or the project proponent within this legislative framework. This resonates with a 2013 appraisal of the Maltese EIA system (Sciberras, 2013), confirming monitoring and EIA follow-up as two of its major weaknesses. The results from the Sciberras (2013) research also indicated a general scepticism towards the effectiveness of monitoring of environmental impacts at the post-consent stage and towards the EIA follow-up implementation.

The 2017 EIA regulations, and later the 2020 revisions, however, introduce new, more onerous provisions related to decision-taking and monitoring, which, in contrast with the previous iterations of the EIA regulations, indicate a positive way forward with respect to placing more importance on monitoring, surveillance, post-consent analysis and auditing (Government of Malta, 2017).

It is also important to understand how mitigation measures are incorporated within the decision-making processes in Malta and how development permission applications are considered and assessed by the officer in charge of the case file. In Malta’s case, this would fall under the responsibility of an assigned case officer representing the Planning Directorate (within the PA/MEPA), who, following their respective manager’s approval, would eventually present the case with a recommendation in front of the relevant decision-making body. This would be either the Planning Authority/the Malta Environment and Planning Authority (pre-2016 demerger) or the Planning Board or the Planning Commissions (post-2016 demerger to date), depending on the nature and the location of the proposed development.

It is important to note that in its deliberations, the decision-making body had/has to give due regard to multiple considerations, and not simply follow established plans, policies and regulations. This is reflected in relevant legislation as follows:

- (i) The *Development Planning Act, 1992*: Article 33 in this act originally established that “In determining an application the Authority shall have regard to the development plans, to representations made in response to the publication of the proposal and to any other material consideration, including aesthetic, sanitary and other considerations” (Government of Malta, 1992, p. A65). Significant amendments to this article were carried out via the 1997 Development Planning (Amendment) Act. Through Regulation 14, Article 33 of the main Act was amended as follows: “... (1) In its determination upon an application the Authority shall have regard to the following: (a) policies emanating from the existing structure plans, if any; (b) development plans; (c) representations made in response to the publication of the proposal; (d) any other material consideration including aesthetic, sanitary and other considerations which the Authority may deem relevant.” (Government of Malta, 1997, pp. A581 - A582).

This article was once again amended, this time radically, in 2001 via the Development Planning (Amendment) Act, 2001 (Act XXI of 2001, Cap. 356), whereby it then read as follows: “In its determination upon an application, the Authority shall: (a) apply the

following (i) development plans, including the height limitations shown in the Temporary Provision Schemes or in local plans, unless the limitation may be modified by applying a planning policy which deals specifically with the maximum building height which may be permitted on a site, which policy shall take into consideration both the site coverage and the building volume which may be permitted on a site, (ii) planning policies: Provided that subsidiary plans and planning policies shall not be applied retroactively so as to adversely affect vested rights from a valid development permission; and (b) have regard to: (i) any other material considerations, including aesthetic and sanitary considerations, which the Authority may deem relevant; (ii) representations made in response to the publication of the development proposal.” (Government of Malta, 2001a, pp. A1353 – A1355).

- (ii) The *Environment and Development Planning Act, 2010*: Article 69 (in sub-articles 1 and 2) included additional details, when compared to Article 33 of the former DPA, and establishes that: “In its determination upon an application the Authority shall (a) with respect to an application for development permission apply the following (i) plans: Provided that the height limitation may only be modified by applying a policy which deals with the maximum building height which may be permitted on a site, which policy may take into consideration the site coverage, the building volume which may be permitted on a site or any other material consideration; (ii) policies, Provided that subsidiary plans and policies shall not be applied retroactively so as to adversely affect vested rights arising from a valid development permission; (b) with respect to any other application apply such plans, policies and regulations issued under this Act as it may deem relevant and appropriate. (2) In its determination upon an application the Authority shall also have regard to: (a) any other material consideration, including, environmental, aesthetic and sanitary considerations, which the Authority may deem relevant: Provided that no such material consideration including commitment from other buildings in the surroundings may be interpreted or used to increase the height limitation set out in a plan; (b) representations made in response to the publication of the development proposal.” (Government of Malta, 2010a: pp. 27 - 29).²⁴
- (iii) The *Development Planning Act, 2016*: Article 72 consolidates upon previous legislation, and establishes the following through sub-article 2: “In its determination upon an application for development permission, the Planning Board shall have regard to: (a) plans; (b) policies: Provided that subsidiary plans and policies shall not be applied retroactively so as to adversely affect vested rights arising from a valid development permission, or a valid police or trading licence issued prior to 1994; (c) regulations made under this Act: Provided that the Planning Board shall only refer to plans, policies or regulations that have been finalised and approved by the Minister or the House of Representatives, as the case may be, and published; (d) any other material consideration, including surrounding legal commitments, environmental, aesthetic and sanitary considerations, which the Planning Board may deem relevant; (e) representations made in response to the publication of the development proposal; and (f) representations and recommendations made by boards, committees and consultees in response to notifications of applications” (Government of Malta, 2016a, pp. 50 - 52).

²⁴ In both the 2001 amendments to the DPA (Act XXI of 2001) and subsequently the EDPA, the reference to ‘give regard’ was replaced by the term ‘apply’ in the case of plans and policies.

Article 72 in the 2016 DPA provides a clarification to the opaqueness of the discretionary powers of the decision-maker as was originally established in the then Article 33 of the 1992 DPA. In 2001, Article 33 was amended in order to give more legal recognition to development plans and policies, with the choice of wording being unclear. The lack of clarity was retained in Article 69 of the 2010 EDPA and was only clarified through the changes made to Article 72 of the 2016 DPA. Between 2001 and 2016, the applicability of findings arising from detailed assessments, including EIAs, was weakened due to the obligation placed on decision-makers to apply development plans and policies. Between 1992 and 2001 and following the publication of the new laws in 2016, development plans and policies had/have the same legal status as 'other material considerations'. In this regard, in terms of legal status, environmental considerations are currently on a par with development plans and policies.

This also applies to any feedback raised and any submissions made by both the internal and external consultees and any other representees. Besides plans and policies, Articles 33, 69, and the current Article 72 make reference to material considerations which are associated to, amongst others, public health, the environment and aesthetics. This article, thus, implies that the present Planning Board is empowered to identify considerations that may be deemed material. In case the findings of an EIA indicate that the impacts of the development in question are not acceptable, the decision-making board is empowered to apply more weighting to, for example, the findings of the EIA than to the fact that the project in question is provided for in a development plan. In order to make decisions which conform with Article 72, members of the Planning Board are expected to take into account material considerations other than approved statutory development plans and policies. Such considerations would include the findings of EIAs and other types of impact assessments.

In addition to the Acts reviewed above, Regulation 9 of the Development Planning (Procedure for Applications and their Determination) Regulations, 2016 (Government of Malta, 2016b) states that "recommendations by the external consultees, other consultees and representations by the Agricultural Advisory Committee and the Design Advisory Committee are not binding on the final decision of the Planning Board" (p.11). The Planning Board has the choice to disregard such advice, in the same way that it also has the option to disregard the findings of impact assessments, leaving it at the discretion of the Board to give preference or otherwise to material considerations.

Consequently, when a proposed development is considered favourably, the Planning Directorate would need to prepare a set of suitable development permission conditions. These conditions would have the primary aim of ensuring that all issues raised during the processing of the case, including matters pertaining to all phases of the project such as demolition, excavation, construction, compliance, and monitoring all follow a very specific set of criteria in order to ensure the minimum possible disruption to the community whilst ensuring that any impacts on the surrounding environment are duly mitigated or avoided.

As discussed above, the consultation stage is of utmost importance in the development planning process. Consultation with the EIA regulator was carried out as per standard procedure²⁵ in all the cases analysed as part of this research. This specific consultation focused on projects that may have required the submission of a detailed assessment, such as an EIA and/or an Appropriate Assessment (AA),²⁶ in line with the requirements of the respective regulations, or other detailed studies as necessary.²⁷ The conclusions of the EIA and the other studies, together with the recommendations made by the other authorities, would then feed into the development permission assessment process, and would thus be considered during the formulation of the conditions to be imposed by the permitting authority (i.e., PA/MEPA/PA).

In this regard, in terms of governance arrangements, however, this may still not be sufficient in guaranteeing a holistic implementation of EIA follow-up, given the emphasis made on monitoring requirements.

Criterion 1B: Are provisions in place for each component of EIA follow-up?

Criterion 1B and its sub-criteria (i), (ii), (iii) and (iv) have all been evaluated at both the micro and macro levels.

Partial. At the micro level, the generic Criterion 1B has been evaluated through the five case studies, indicating that monitoring requirements have been included in the development permission conditions (see Table 5.9 below for more details). No information regarding the other aspects of EIA follow-up has been identified in these conditions.

Partial. At the macro level, the only provisions specifically related to EIA follow-up are monitoring-related and are included in the EIA regulations. References to EIA follow-up evaluation are very limited. There are no provisions related to management, engagement and communication.

(i) Are provisions in place for monitoring?

Yes. At the micro level, for all of the five case studies analysed, monitoring requirements have been included in the respective development permission conditions (see Table 5.9 for more details).

Yes. At the macro level, specific provisions related to monitoring are included in the EIA regulations as discussed in the response to Criterion 1A. The legislative provisions are, in turn, implemented as conditions in development permission. In this regard, governance arrangements

²⁵ It should be noted that the EPD was consulted as an internal consultee, while the ERA became an external consultee post-demergence in 2016.

²⁶ The purpose of an Appropriate Assessment (AA) is to assess the implications of a plan or project in respect of a protected site's conservation objectives, either individually or in combination with other plans or projects. Its conclusions would inform decision-makers whether a plan or project would adversely affect the integrity of the protected site in question. The focus of the AA is therefore specifically on the species and/or the habitats for which the protected site (in this case a Natura 2000 site) is designated. This assessment is carried out in line with the requirements of Article 6 of the Habitats Directive (EurLex, 2013a), transposed via Regulation 19 of the Maltese Flora, Fauna and Natural Habitat Protection Regulations (Government of Malta, 2006).

²⁷ At the time of writing (2023/2024); the ERA is consulted on all development permission applications submitted to the PA as per Regulation 8 of the Development Planning (Procedure for Applications and their Determination) Regulations, 2016 (Government of Malta, 2016b).

pertaining to the monitoring element of EIA follow-up, through the respective legislative provisions, are in place.

(ii) Are provisions in place for evaluation?

No. At the micro level, no development permission conditions related to evaluation were identified in the case studies.

Partial. At the macro level, as indicated in Table 5.1, the EIA regulations include provisions where the regulator may request post-permit analysis, including verification and auditing.

(iii) Are provisions in place for management?

(iv) Are provisions in place for stakeholder communication and engagement?

No (for both the micro and macro level evaluation). As indicated in Table 5.1, no development permission conditions related to management were identified in the case studies.

In terms of the current EIA regulations, there are no provisions in place for management or stakeholder participation through communication and engagement. Of note is that the 2001 and 2007 regulations included a reference to engagement and communication. As highlighted earlier in this chapter, the latest EIA regulations do include provisions where the regulator may request evaluation to be carried out in the form of other post-permit analysis, including verification and auditing of EIA predictions and assessment, together with implementation of corrective measures. The lack of specific governance arrangements for these elements of EIA follow-up in the form of legislative provisions does not preclude their inclusion on a case-by-case basis.

One practical suggestion to address this lacuna and ensure that all EIA follow-up provisions are implemented, is to consider their inclusion in the consent conditions (Morrison-Saunders & Arts, 2024) rather than amending the actual legislative provisions (given that such processes may be lengthy).

Criterion 1C: Are the above provisions implemented in practice?

Unable to judge. At the micro level, it is not possible to determine whether all of the above processes are implemented in practice in view of the limited project-level information available from the case studies.

Partial. As discussed in the responses for Criteria 1A and 1B, at a macro level, legislative provisions are only in place for monitoring, and partially for post-permit analysis (given that this is not a mandatory requirement). Therefore, EIA follow-up governance arrangements in terms of the other aspects of follow-up are lacking.

Criterion 1D: Have any guidance documents to aid the appropriate implementation of EIA follow-up provisions been published?

Partial. No guidance documents related to the 2001, 2007 and 2017 EIA regulations have ever been published in Malta.

However, as indicated in Table 5.1, one guidance document had been issued in 1994 by the Planning Authority (which was the EIA regulator at the time). The Policy and Design Guidance – Environmental Impact Assessment in Malta (Planning Authority, 1994) included references to monitoring while discussing the steps in environmental impact assessment. As part of the assessment and decision processes, the guidance indicates that the Planning Authority, through the placing of certain conditions in the development permission, would ensure that monitoring programmes are properly carried out. A subsequent section in the same document also determines that the project proponent (referred to in the text as the ‘developer’) is responsible for the carrying out of the monitoring programme and for making regular reports to the Planning Authority. In addition, it also places added responsibility on the former Planning Authority and the Environmental Protection Directorate, requesting the two entities “to ensure that monitoring is done, that planning conditions are met and that agreements are kept” (Planning Authority, 1994, p. 8).

Contrasting with the lack of guidance documents from 2001 onwards, the 1994 document goes a step further and provides a general list of responsibilities for monitoring in EIA for the main stakeholders being:

- the developer (i.e., the project proponent, responsible for carrying out the monitoring programme for an approved project),
- the Planning Authority (i.e., the permitting authority, with respect to evaluating information including that relating to the monitoring programme),
- the Environment Protection Department (in its role as EIA regulator), and
- the public (in terms of assisting with the environmental monitoring programme of an approved development project).

There is no evidence as to why no new guidance documents have been issued since their first publication in 1994 (considering they are now a superseded document given the subsequent legislative changes). The only information on the EIA regulations and the EIA process currently available (not in the form of a guidance document) can be found on the EIA regulator’s web portal (<https://era.org.mt/era-topic-categories/eia-process/>), which includes an overview of the processes leading to the consent decision, with very limited references to EIA follow-up (only references to post-permit monitoring requested by ERA are included).

Principle 2 - Establish clear identification of *responsibilities* in follow-up in EIA procedures/regulations

Criterion 2A: Are there staff within the regulatory authority with specific responsibilities for EIA follow-up?

Partial. Ever since the publication of the 1994 guidelines and the subsequent publication of the EIA regulations in 2001, EIA has been managed by a dedicated Team within the EIA regulator. The staff complement dedicated to EIA never exceeded a total of seven employees, dealing with all the stages of EIA (i.e., screening, scoping, review of environmental statements, preparation of final

reports, including development permission conditions, to be referred to the permitting authority), covering all of Malta.

In terms of post-consent considerations, these are processed by this same team only if a formal consultation from the permitting authority is received. Verifications against the conditions imposed by the ERA are carried out in consultation with the Compliance and Enforcement Unit within the same Directorate. If the situation on site is found to be compliant to the imposed conditions, the ERA would subsequently inform the PA.

However, with respect to EIA follow-up elements such as evaluation, management, engagement and communication, no evidence of this was identified, with no staff responsible for the carrying out of such tasks.

Criterion 2B: Are the responsibilities of all stakeholders for follow-up, i.e., regulator/s, project proponent/s, eNGOs and the public clearly identified?

Partial. As presented in Tables 5.5 and 5.6, only the regulator has its responsibilities vis-à-vis monitoring and, marginally to evaluation ('post-permit analysis'), clearly defined in the regulations. These responsibilities mainly centre around the determination of specifications and procedures required to monitor the relevant effects of the project on the environment. These would need to include:

- determining who would be undertaking monitoring (i.e., either the regulator or any other person acting on the regulator's instructions, or in consultation with other regulators, addressing the effects of the project on the environment),
- determining the type of parameters to be addressed and the duration of the monitoring, while being proportionate to the project, the site environment and the potential effects on the environment, and
- possibly requesting any remedial measures, including adjustments to the project or of the works' methodology, to address to its satisfaction any impacts, risks or adverse implications identified.

Additionally, the regulations also prescribe that the regulator may require any other post-permit analysis, including verification, auditing of predictions and assessments, and implementation of corrective measures. As highlighted in the earlier sections discussing the legislative provisions related to EIA follow-up, despite the presence of these obligations, the post-permit processes are still relatively unstructured and the uptake of other EIA follow-up elements is still very low.

Principle 3 - Specify *compliance and enforcement* provisions related to EIA follow-up

Criterion 3A: Do the regulations include provisions for compliance and enforcement, in relation to EIA follow-up?

Partial. Only generic provisions in relation to compliance and enforcement are included in the EIA regulations, covering the implementation of all its mandatory provisions, technically including EIA follow-up requirements (see Regulation 33, Part IX – Enforcement).

Criterion 3B: If yes, is a penalty system related to compliance and enforcement in place?

Partial. Closely linked to the compliance and enforcement provisions (Regulation 33), a penalty system (with penalties ranging from administrative fines to imprisonment) is associated to the following offences in relation to the EIA process (Government of Malta, 2017):

- “provision of false, fraudulent or misleading information that may jeopardize, or render ineffective any assessment falling within the scope of the regulations or lead to processing errors,
- causing any significant impact, risk or hazard to the environment, as a result of non-compliance, or unsatisfactory, incomplete or late compliance, with any provision of these regulations,
- contravention of any order or instruction given by the regulator, in respect of any aspect that may have an adverse impact on the environment.” (p. 35)

In summary, with respect to procedural aspects, particularly legislative provisions and administrative arrangements, the analysis of the Malta case study suggests that whilst monitoring is an established element in EIA implementation and evaluation is only vaguely referenced, there is an absence of other EIA follow-up elements. The lack of governance arrangements pertaining to the implementation of management, engagement and communication, contributes to a limited implementation of EIA follow-up from a procedural effectiveness perspective.

5.2.2 Substantive effectiveness of EIA follow-up governance

Table 5.7 below provides a qualitative evaluation of the substantive effectiveness of EIA follow-up governance arrangements for Malta, also utilising the data collected from the five case studies referred to earlier in this chapter. Results are presented in more detail following the table. Principles 4 – 6 and their respective criteria provide an in-depth macro-level review of EIA follow-up governance arrangements from a substantive point of view.

Table 5.7: Substantive effectiveness of EIA follow-up governance arrangements

<i>EIA follow-up governance principles</i> <i>Substantive</i>	<i>Detailed criteria for effective EIA follow-up governance</i>	<i>Case #1 (Coastal Works)</i>	<i>Case #2 (Beach Rep.)</i>	<i>Case #3 (Poultry Farm)</i>	<i>Case #4 (Road infra. u)</i>	<i>Case #5 (New road)</i>	<i>Malta (Macro-level)</i>	<i>Comments</i>
4. Ensure <i>reporting</i> of EIA follow-up outcomes, to facilitate <i>adaptive management</i> and promote continuous <i>learning from experience</i> to improve future practice.	A. Are EIA follow-up outcomes reported to all stakeholders, including the public?	N/A	N/A	N/A	N/A	N/A	No	<i>Macro:</i> No. There are no mandatory legislative requirements for the reporting of EIA follow-up outcomes exist.
	B. Have all (significant) impacts of a project identified in the EIA been addressed through the identification of appropriate mitigation measures?	Yes	Yes	Yes	Yes	Yes	N/A	<i>Micro:</i> Yes. All significant impacts identified in the environmental statement have been addressed through the identification of appropriate mitigation measures included as development permission conditions.
	C. Have all mitigation measures, included as development permission conditions, been implemented?	Unable to judge	Unable to judge	Unable to judge	Partial	Partial	N/A	<i>Micro:</i> Partial. No information regarding post-consent documentation was available for Cases 1 – 3. As per Principle 4B above, mitigation measures would be included as development permission conditions. However, in view of the

								fact that post-consent documentation is not necessarily comprehensive, it is difficult to determine whether all mitigation measures have been implemented.
	D. Is there opportunity/evidence of learning within project/s?	Unable to judge	Unable to judge	Unable to judge	No	No	N/A	<i>Micro:</i> No. No information was traced.
	E. Is there opportunity/evidence for adaptive management?	Unable to judge	Unable to judge	Unable to judge	No	No	N/A	<i>Micro:</i> No. No information was traced.
	F. Is there opportunity/evidence for learning/sharing with other proponents and/or stakeholders?	Unable to judge	Unable to judge	Unable to judge	No	No	N/A	<i>Micro:</i> No. No information was traced.
5. Establish clear, pre-defined and well-justified <i>performance criteria</i> for EIA follow-up.	A. Are clear EIA follow-up performance criteria pre-identified in order to appraise information, results and outcomes emerging from follow-up actions?	No	No	No	No	No	N/A	<i>Micro:</i> No. No such criteria are pre-identified in order to assess EIA follow-up performance.
	B. Are follow-up results and outcomes compared to these performance criteria?	No	No	No	No	No	N/A	<i>Micro:</i> No. No such criteria are pre-identified therefore comparison to follow-up results is not possible.

6. Have a <i>clear understanding</i> of the purpose and importance of EIA follow-up.	A. Are all stakeholders informed of the purpose of EIA follow-up?	No	No	No	No	No	N/A	<i>Micro:</i> No. No information was traced.
	B. Are there provisions for communicating the importance of follow-up?	No	No	No	No	No	N/A	<i>Micro:</i> No. No information was traced.
	C. Is there clear and ongoing collaboration between regulatory authorities who are responsible for EIA follow-up?	Unable to judge	Unable to judge	Unable to judge	Yes	Yes	N/A	<i>Micro:</i> Yes. Collaboration between the regulatory authorities, i.e., the PA and the ERA (and their predecessors) is evident for two of cases analysed, particularly through the formal consultation processes.

Principle 4 - Ensure *reporting of EIA follow-up outcomes*, to facilitate *adaptive management* and promote *continuous learning from experience* to improve future practice

Criterion 4A: Are EIA follow-up outcomes reported to all stakeholders, including the public?

No. As highlighted in the discussion earlier in this chapter in relation to legislative requirements for EIA follow-up, there are no mandatory legislative requirements for the reporting of EIA follow-up outcomes. Recalling the fact that there is a significant lack of legislative provisions related to EIA follow-up, the lack of communication arrangements does not come as a surprise. Only two out of the five cases included sporadic documentation in relation to EIA follow-up, which is presented in an unstructured manner and is also dependant on whether consultation between the permitting authority and the EIA regulator is carried out. In addition, such documentation is not necessarily easy to access.

Access to EIA-related documentation has increased over the years, from a situation where only physical copies could be perused at the regulator's premises, to the increased availability of digital versions of documents and reports which are easily downloadable from the authority's web portals. There are still issues, however, vis-à-vis the availability of EIA follow-up documentation since all submitted documents need to be uploaded on e-Apps (see Chapter 4), and neither the stakeholders nor the general public may necessarily have access to all documents. In addition, at the time of writing, there are no arrangements for the EIA regulator to report EIA follow-up outcomes. This is considered a deficiency in terms of governance arrangements, particularly since such reporting could be considered as testament to transparency and open communication, together with ensuring access to information, facilitating the sharing of information between stakeholders and enabling the improvement of EIA outcomes through follow-up results.

Criterion 4B: Have all (significant) impacts of a project identified in the EIA been addressed through the identification of appropriate mitigation measures?

Yes. As indicated in Table 5.7, technically all significant impacts identified in the environmental statements for the case studies were addressed through the identification of appropriate mitigation measures included as development permission conditions. Figure 5.2 below illustrates how the identification of significant environmental impacts translates into recommendations for mitigation measures which are eventually included in the development consent as permission conditions, with Table 5.8 providing a case example of how mitigation measures are translated into development permission conditions, the relevance of which is further explored in the subsequent text.

Table 5.8: Development permission conditions – from the environmental statement to development consent: case example (Case #1)

Case Reference	Recommendations made in environmental statements	Recommended conditions by the EIA regulator	Actual conditions in the development permission
#1	<i>Design oriented</i> (i) Construction works to be limited by a specific, realistic time frame agreed beforehand with the consulting firm – but in no way exceeding one calendar year. (ii) Piling operations and the associated drilling and concrete pumping need to be carefully designed and planned so as to minimise the release of particulate. (iii) Drilling will be kept to a minimum and the excavated material retained (rather than dumping it into the reclaimed area). (iv) Airlifting of any sediments from the excavated holes should also be kept to the minimum required by the operational standards. (v) Barge dumping operations would commence not from the shore but rather at the periphery of the area of be reclaimed. (vi) Heavy industrial vehicles necessary during the construction phase of the project are to utilise routes where it is known that damage to the main sewerage pipes of the locality is not possible. (vii) Reverse-grade paving along the whole extended quay – any runoff would have to be trapped and channels to settling tanks or reservoirs constructed. Spilt oil can thus be trapped before discharge into the sea. (viii) Fuel tanks are to be sealed reinforced containment reservoirs in line with EU standards. These refuelling tanks are to minimise the risk of fuel leakage due to corrosion.	- Full development permission should be issued for Phase A of the development only, Phase B and Phase C should be approved as outline permission and will be held as reserved matters, possibly to be evaluated in conjunction with works proposed for the land area. - The design of the quay along the casemated bastion and the relocation of the fuelling station should also be held as reserved matters. - Systems for the management of liquid wastes from boats and of stormwater run-off including their collection and treatment should be incorporated within the quay structure in accordance to EU standards. The applicants should submit revised plans showing such systems within a specified time period following the issue of the development permission. - Construction works shall be carried out in accordance to the construction methodologies given in the Environmental Planning Statement. - A construction management plan is required prior to commencement of works, to be submitted to the Planning Authority within a defined time period following the issuing of development permission for approval by the Planning Authority. The construction management plan should include the parameters outlined below: • Dates of commencement, expected duration and phasing of works, • Access routes for vehicles and barges, • Zoning of work areas,	1. Full Development permission is hereby given only for Phase A of the project. Phase B and Phase C are approved in principle, but the design details are held as reserved matters to be resolved within the scope of a separate full development permit application. 2. No development permission is granted for the design of the quay along the casemated bastion and the relocation of the fuel station. These are held as reserved matters to be resolved within the scope of a separate full development permit application. 3. Systems for the management of liquid wastes from boats and of stormwater run-off including their collection and treatment should be incorporate within the quay structure in accordance to EU standards. The applicants should submit revised plans showing such systems within one month following the issue of this development permission. 4. Construction works shall be carried out in accordance to the construction methodologies specified in the Environmental Planning Statement. 5. No works shall commence on site until a construction management plan is submitted for the approval of the Planning Authority. The construction management plan should include: • Dates of commencement, expected duration and phasing of works; • Access routes for vehicles and barges; • Zoning of work areas;

Case Reference	Recommendations made in environmental statements	Recommended conditions by the EIA regulator	Actual conditions in the development permission
	(ix) Services are to reach the boats via a proper access ducting system, which will support electricity, telephone, cable TV, fresh water, soil water, and security networks. The soil water network will lead to a land-based sewage retrieval system. This shore base suction system will collect material from holding tanks on board the patrol boats. <i>Construction oriented</i> (x) Access routes and paths within the development site are to be identified and strictly adhered to – no other routes are to be utilised midway during the particular construction phase. (xi) Precautions to prevent deposition of dust and other construction waste onto the adjoining land areas during the excavation, reclamation and construction phases should include: building material to be place on tarpaulins, while for non-active periods such as night-time, aggregate, in particular, should be covered; avoiding to convey dry aggregate onto the area; ready mixed concrete may be conveyed on site via concrete mixer lorries; materials conveyed on site for the purpose of construction need ground space for sorting and temporary storage – such areas should be identified. (xii) Accumulation of domestic litter resulting from the remains of food and drink brought on site daily by the works team necessitate direct enforcement measure to prevent fly tipping. (xiii) A truck wash-down facility is to be erected at the entrance/exit of the construction area.	• Waste management strategy, including quantification and types of liquid and solid wastes which will be generated during construction, and methods of disposal, with approval from the relevant Government Authorities where required, • Specific mitigation measures to be adopted during construction to control possible environmental impacts, particularly the release of particulate matter and debris in the marine environment and impact on marine archaeology. - Construction works should be monitored daily by an independent consultant or by Planning Authority personnel to ensure that works are being carried out as specified in the construction management plan. - A monitoring program of the marine environment during the construction phase shall be agreed with the Planning Authority within a specified time frame following the issuing of development permission. The parameters to be measured shall include water quality parameters (nutrients, PHC, heavy metals and turbidity) and rates of sedimentation within the channel. - Should the monitoring data indicate an unacceptable level of environmental impacts resulting from the construction phase, construction works shall be stopped to be resumed only following the approval of the Planning Authority. - An archaeological survey of the sediment deposits within the development area is required to be completed before commencement of the last phase of the development. The archaeological survey shall be carried out as	• Waste management strategy, including quantification and types of liquid and solid wastes which will be generated during construction, and methods of disposal, with approval from the relevant Government Authorities where required; • Specific mitigation measures to be adopted during construction to control possible environmental impacts, particularly the release of particulate matter and debris in the marine environment and impact on marine archaeology. 6. Planning Authority personnel shall be allowed access to all part of the site at all times to ensure that works are being carried out in accordance with the parameters set out in the Construction Management Plan. 7. A monitoring program of the marine environment during the construction phase shall be agreed with the Planning Authority within a specified time frame following the issuing of development permission. The parameters to be measured shall include water quality parameters (nutrients, PHC, heavy metals and turbidity) and rates of sedimentation with the channel. 8. The Planning Authority reserves the right to halt all works should the monitoring data indicate an unacceptable level of environmental impacts. Construction works will only be allowed to resume following the approval of the Planning Authority. 9. An archaeological survey of the sediment deposits within the development area is required to be completed before commencement of the last phase of the development. The archaeological survey shall be carried out as

Case Reference	Recommendations made in environmental statements	Recommended conditions by the EIA regulator	Actual conditions in the development permission
	(xiv) Concrete slurry is not to be dumped into the sea but into appropriately and specifically designed recipient tanks and/or diverted onto back-filled areas and reclaimed land. (xv) The protection of the fill material being dumped by truck or barge is recommended, such as a geotextile curtain which will eventually be wrapped around the loose material. (xvi) Dumping of fill material by truck is preferable; wherever possible. (xvii) Barge operation and activities should be properly supervised and managed so as to minimise risks of operational release of diesel or fuel oils as well as of any other wastes. <i>Operations oriented</i> (xviii) Avoid operational or accidental spillage of diesels/lubricating oils and other petroleum hydrocarbons into the sea. (xix) Surface storm water and land runoff from the extended quay should be effectively drained first into holding/settling tanks before being discharged into the sea. (xx) Develop a local oil and spill contingency plan in order to control and minimise environmental damages from accidental spills; (xxi) Written procedures for the smooth running of the entire operation are to be formally issued to/by AFM personnel, Boat Captains, Boat Crew, PTA Officials, Police Officers and all users of the service. These procedures should also be prominently displayed at the entrance/exit to the harbours. (xxii) The fuelling station should be equipped with oil combating equipment that should	described in the Environmental Planning Statement for the proposed quay extension and shall be financed by the applicants. The results will be made available to the Planning Authority and the Museums Department.	described in the Environmental Planning Statement for the proposed quay extension and shall be financed by the applicants. The results will be made available to the Planning Authority and the Museums Department. 10 & 11. [Standard conditions].

Case Reference	Recommendations made in environmental statements	Recommended conditions by the EIA regulator	Actual conditions in the development permission
	include mechanical oil containment and retrieval systems such as floating booms, oleophilic absorbers and skimming equipment. Chemical dispersion of any spilt oil should be avoided. (xxiii) A site contingency plan against chemical spillage, is to be incorporated with a fire hazard contingency plan, and should ensure that required continual state of preparedness against such eventualities. The plan is to be implemented by properly trained staff. (xxiv) Solid waste management is to be incorporated within the general management plan of the whole site. Ideally this should include and encourage waste separation at source both for the berths as well as the workshops and office areas. (xxv) Liquid waste management is to be incorporated within the general management plan of the whole site. Ideally this should include and encourage waste separation at source both for the berths as well as the workshops and office areas. <i>Monitoring programs</i> (xxvi) Regular monitoring programs are necessary in order to ensure that environmental and operational safety precautions are being implemented. These include the monitoring of: - Adjoining habitats and land, - Health of filter feeders prone to sedimentation; - Biodiversity within pre-determined quadrants; - Water quality.		

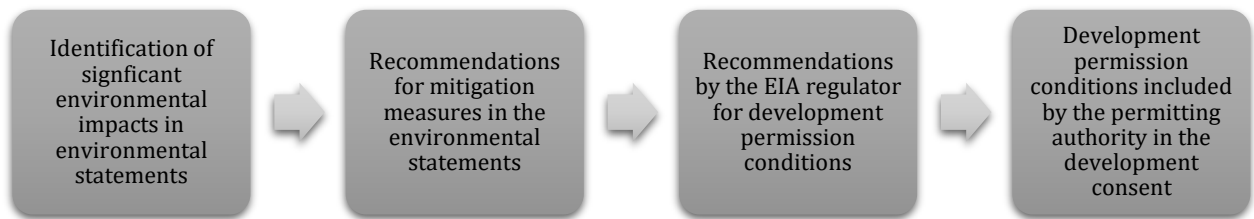


Figure 5.2: From the environmental statement to the development permission

With the earliest of the analysed cases dating back to 1997 (and consequently approved in 1999), when only the 1994 EIA guidelines were available and no legislative framework was in force, the documentary analysis confirmed that recommendations made in environmental statements, following the identification of significant environmental effects and the accompanying detailed studies, were given due consideration and included verbatim as conditions in the development permission.

This trend can be noticed not only in cases dating back to the late 1990s to the early 2000s, prior to the introduction of the first set of EIA regulations in 2001, but also during the early years of implementation of EIA in Malta. Table 5.8 above illustrates, with direct extracts lifted from the relevant documentation related to Case #1, that recommendations made by the EIA regulator were included almost verbatim as conditions in the development permission.

This approach led to a situation whereby the conditions proposed by the EIA regulator were significantly tailor-made to the specific proposal, directly mirroring the content of the EIA. As can be noted above, for each of the aspects studied and assessed in the EIA, the EIA consultants compiled detailed recommendations and requirements aimed at addressing any significant and residual impacts identified in the studies, but also identified specific mitigation measures and monitoring programmes.

The documentary analysis indicated that in the subsequent years (2007 – 2016), through additional experience gained in the implementation of EIA-related processes, the conclusions of the environmental statements still continued to be reflected in the proposed conditions by the regulator.

However, a change could be noted whereby subsequent mitigation measures and conditions in the development permissions started acquiring a more standardised format (in contrast with the verbatim approach of the earlier years). This is observed in the more recent cases, where these recommendations can still be considered as detailed as in the earlier years of implementation of EIA in Malta, but with a hint of standardisation in both structure and content. It is not the scope of this research to analyse the breadth of issues studied by the respective environmental statements in terms of their scientific content, but to understand their implications on EIA follow-up.

As can be observed in Table 5.8, the conditions proposed by the EIA regulator do reflect the mitigation and monitoring recommendations made in the environmental statements. The standardisation of mitigation measures, and therefore the development permission conditions, does not seem evident in the earlier analysed cases, except for the requested submission and the implementation of management plans such as Construction Management Plans (CMPs), Waste Management Plans (WMPs) and Environmental Monitoring Programmes (EMPs).

The documentary analysis indicated that increased standardisation was observed in later cases (i.e., those processed under the 2007 and 2017 legislative frameworks, to date) in relation to both structure (in terms of sections) and content (in terms of wording), generally listed as follows:

- (i) General reserved matters, i.e., conditions requesting the submission of documentation/information following the consent decision, for example, CMPs, WMPs, EMPs, details surveys,
- (ii) Other conditions that would be carried forward from previously approved planning permissions,
- (iii) Operational permitting requirements, and
- (iv) Other conditions concerning waste management requirements, ancillary infrastructure and access, runoff and effluent management, sub-terranean features, trees and landscaping, boundary walls, noise minimisation, external lighting, removal of soil, the inclusion of bank guarantees.

A changing trend, however, could be observed in more recent cases, particularly following the MEPA demerger in 2016 (i.e., when the then environment and permitting regulator split up into two regulatory authorities, the ERA and the PA). While environmental statements continued to consistently provide detailed assessment and recommendations for mitigation of environmental impacts and associated monitoring requirements, recommended conditions by the EIA regulator (i.e., ERA), differ in terms of content and quantity depending on the case type. For example, for four post-2016 cases, the minimum number of conditions recommended by ERA was 1 (i.e., including only a condition requiring the submission of an operational permit), while the maximum recommended conditions in a relatively recent case were 26. While still retaining a sense of standardisation and consistency, the more recent conditions seem to have been streamlined to reflect both the revised legislative framework, together with the changes in the administrative arrangements.

The conditions recommended by the EIA regulator are then referred to the permitting authority for inclusion in the case officers' report (known as the Development Permission Application Report) and if agreed to by the consenting body, are included in the decision. As in the case of the recommendations made by the EIA regulator, the standardisation of development permission conditions does not seem evident in cases dating back to earlier years, except for those conditions requesting the submission of management plans such as CMPs, WMPs and EMPs. These requirements feature throughout most of the cases analysed as part of this research.

These documents would often be submitted at post-consent for further assessment and compliance purposes. The tailor-made approach taken in the earlier years (i.e., having the conditions recommended by the environmental statements included in the development permission verbatim) versus the standardised approach taken in later years could have possibly influenced processing at post-consent, whereby a more standardised approach could prove easier to channel and follow and thus ostensibly be more effective.

It should be noted, however, that towards the 2010s, conditions being recommended by the EIA regulator were highly detailed, which could have made EIA follow-up and monitoring more complicated to carry out (namely due to the volume of requirements and the added complications vis-à-vis the responsibility of carrying out and monitoring their submissions). A number of cases also included the following condition, which would not have been realistically implementable, particularly in terms of the actual implementation of all mitigation measures and their monitoring:

Except where otherwise indicated in the permit [permission], all mitigation measures outlined in the EIS shall be fully complied with to the Authority's satisfaction.

The above-mentioned condition proved to be difficult to implement²⁸ in view of the fact that it was not possible to implement certain recommendations made in the environmental statements. One such example suggested that residents located directly adjacent to a proposed development should keep windows closed throughout the excavation and construction phases to avoid impacts arising from construction works. Conditions in development permissions have to be realistic, implementable and enforceable, in a way that could enable any appropriate follow-up by the regulatory authorities. There have also been instances in specific development permissions, where the DPAR actually included permission conditions with far more detail than the actual requirements recommended by the EIA regulator or by the studies commissioned by the project proponents. One such instance includes a situation where a recommendation provided through the EIA was taken on board directly by the permitting authority and included in the DPAR, rather than being proposed by the EIA regulator itself.²⁹

Another example of mitigation measures identified in the environmental statements and included as development permission conditions are those related to monitoring requirements. Evidence of monitoring requirements could be observed in all cases as presented in Table 5.9 below, providing an overview of the actual conditions related to monitoring. All cases include monitoring requirements tailor-made to the specific project being proposed, reflecting the content of the studies submitted by the project proponent.

²⁸ Issue was discussed through personal communication with former MEPA officers and through own experiences.

²⁹ In this particular case, the EIA regulator did not recommend the submission of a Green Travel Plan to be imposed as a condition in the development permission, however the permitting authority considered this to be necessary and included such as a condition in the development consent. This indicates that even at the final stages of processing, prior to referral to the decision-making board, additional recommendations may be put forward, including those relevant to environmental considerations.

Table 5.9: Monitoring requirements in selected case studies

Case Reference	Monitoring requirements in development permission conditions
1 (Coastal Works)	- A monitoring program of the marine environment during the construction phase shall be agreed with the Planning Authority within a specified time frame following the issuing of development permission. The parameters to be measured shall include water quality parameters (nutrients, PHC, heavy metals and turbidity) and rates of sedimentation with the channel. - The Planning Authority reserves the right to halt all works should the monitoring data indicate an unacceptable level of environmental impacts. Construction works will only be allowed to resume following the approval of the Planning Authority.
2 (Beach Replenishment)	- An Ecological Monitoring Plan shall be submitted with the Full Development Permission application for approval by MEPA. The Plan shall include: - The monitoring of the physical parameters as well as chemical and biological indicators. - The monitoring of the stability of the nourished beach. - Detection of any environmental degradation of the marine ecosystem. - Aerial photography, bathymetric surveys, assessment of the benthic communities. An Ecological Monitoring Programme shall be imposed with the Full Development Permission.
3 (Poultry Farm)	Case did not exhibit any evidence for the carrying out of monitoring however included a development permission condition requesting the project proponent to: ‘keep a log of (a) all types and amounts of wastes generated (weekly), (b) the method, dates, amounts, and destination of disposed wastes (weekly), and (c) inspections of double bottomed cesspits’. It also requested that: ‘every three months, beginning from the commencement date of operation of the farm, a copy of this log would need to be submitted to the Malta Environment and Planning Authority.’ Other than the request for the submission of a log, which in itself is a form of monitoring, no other evidence of EIA follow-up could be traced.
4 (Road Infrastructure Upgrading)	- Works monitoring programme addressing mainly the following aspects: - Ecology - An ecological monitor needs to be submitted for the Environment Protection Directorate’s approval, prior to the commencement of works to ensure compliance with all conditions pertaining to environmental concerns. Monitoring shall be required on the entire project stretch affecting [the protected site] as identified in the Environmental Planning Statement and Appropriate Assessment; - Vibrations and geology – for the monitoring of vibrations resulting during the construction phase seeking to minimize the possibility of damage to buildings; - Cultural heritage and archaeology for the whole area affected by this project, including the site beyond the project footprint that is sought to be used during the construction phase; - Dust monitoring, particularly during the transportation of waste material during the construction phase; - Impacts of noise and vibration on the sensitive receptors identified in the Environmental Planning Statement; - Impacts on the agricultural areas surrounding the proposed development, ensuring that the surrounding agricultural land falling outside the construction phase boundary of the site is not affected by overspills; and

	(vii) Any other issues as considered appropriate by the monitoring consultant or by the Malta Environment and Planning Authority. • A cultural heritage monitoring plan which includes a watching brief which necessitates the presence of archaeologists on site during interventions in areas identified to potentially contain cultural heritage features. The cultural heritage monitoring plan is to be prepared in communication with the Superintendence of Cultural Heritage.
5 (New Road)	The Works Method Statement should include a clear environmental monitoring and reporting programme describing how progress of all works will be monitored, recorded and reported in a timely manner, in order to enable immediate action as required. This should include any requirement for monitoring of the effects of the proposed works, on the physical environment and natural features, such as vegetation, geology, etc., as relevant to the site and its context. Monitoring of works shall be recorded, e.g., by photographic means - before, during and after. A copy of the photographs and other records shall be submitted on a regular pre-agreed basis. The following must be addressed: (i) The environmental monitoring programme addressing the relevant works identified in the WMS and their risks to the natural environment, shall be submitted within a reasonable period of time in advance (e.g., 1 month), prior to the commencement of works on site, for ERA's approval. The monitoring programme shall be in place throughout the construction phases, and shall take into account the concerns and recommendations established in the ERA Assessment and Recommendations report, including associated documents; (ii) The environmental monitoring programme shall identify: the methodologies and frequencies of monitoring; a map-based extent of the areas, which will be monitored; the frequency and mode of reporting; and, any baseline studies that may be required. Where possible, the programme shall also identify the threshold limits beyond which works should be halted or adjusted, due to unacceptable environmental impacts, and any other relevant triggers and parameters for pre-emptive, remedial or damage-limitation intervention. Specialist consultants for each specific monitoring requirement shall also be identified as relevant and their details submitted for ERA's approval; (iii) Specific provisions are to be made vis-à-vis construction-phase effects on ecology and cultural heritage; (iv) The environmental monitoring programme shall be formulated by an environmental monitoring consultant (hereinafter referred to as "the monitor"), who shall have the necessary expertise and track record, to ensure that the monitoring programme is satisfactorily devised and implemented, and that the specialist consultants are duly present on site, as required, for effective monitoring. The monitor is to be approved in advance by ERA, after nomination by the applicant/developer. The monitor will be responsible for the immediate alerting of the relevant authorities when the thresholds are exceeded or in the case of cultural/archaeological/geological or other related discoveries; (v) The monitor and specialist consultants shall be engaged at the expense of the applicant/developer; (vi) The monitor shall ensure that all works are carried out in accordance with the ERA-imposed permit conditions, relevant approved drawings and other ERA-approved specifications, including the MS (as relevant); and (vii) The monitor shall also be responsible for submitting regular monitoring reports in line with the approved arrangements. Both ERA and the monitor shall reserve the right to request further submissions or additional samples, and to impose any further conditions as deemed necessary during the progress of works.

In terms of EIA follow-up governance arrangements, the above indicates that all significant impacts of a project would have been addressed through the identification of mitigation measures, translated into permission conditions by the EIA regulator, which in turn would be implemented as permission conditions by the permitting authority. Evidence for such is provided for all the five case studies.

Criterion 4C: Have all the mitigation measures included in development permission conditions been implemented?

Partial. No information regarding post-consent documentation was available for Cases #1 – #3.

However, for Cases #4 and #5 (the upgrading of road infrastructure and the construction of a new road, respectively), there is evidence for post-consent consultation between the regulators, in relation to the submission of works monitoring programmes and specialist monitoring reports, e.g., noise monitoring, ecology and cultural heritage.

The two cases in question present evidence of monitoring being carried out in practice, as established by the respective conditions in the development consent. Boxes 5.3 and 5.4 below provide an overview of the post-consent processes related to EIA follow-up activities:

Box 5.3: Case #4: Post-consent processes related to EIA follow-up

- Submission of Works Monitoring Programme, including composition of monitoring team.
- Submission of noise monitoring reports.
- Submission of ecology monitoring reports.
- Submission of air quality monitoring reports.

Box 5.4: Case #5: Post-consent processes related to EIA follow-up

- Submission of Environmental Monitoring and Reporting Programme.
- Submission of monitoring reports.

The two cases feature the following:

- The submission of works monitoring programmes, and subsequent review by the EIA regulator. This would also include review of the methodologies being identified for monitoring and the actual professional composition of the monitoring team.
- The submission of environmental monitoring programmes, as determined by the respective development permission conditions.
- The submission of specialist monitoring reports, e.g., noise, ecology, air quality, and archaeology and cultural heritage. Of note is the fact that these reports were reviewed by the EIA regulator with no additional action taken post consent.
- Collaboration and consultation between the permitting authority and the EIA regulator with respect to submissions as requested by the development permission conditions, including the setting up of meetings between the two.

In this regard, whilst noting that there is evidence that monitoring is being implemented in practice as required by the development permission conditions, and in line with the respective legislative provisions; no other EIA follow-up activity can be observed. No evidence or

documentation in case files was traced indicating whether these reports were actually reviewed, any specific issues identified or whether any remedial action was taken in line with the EIA findings and outcomes and the reports drafted by the responsible authorities. For example, for a particular case, the submission of a CMP, an Operations Monitoring Report, and 29 monitoring reports in relation to vibrations monitoring, noise emissions and water quality were noted, however no review of EIA follow-up action was observed.

Therefore, while looking back at Criterion 4C (*Have all the mitigation measures included in development permission conditions, been implemented?*), the lack of information in relation to EIA follow-up processes can only provide partial indications as to whether all the mitigation measures included as development permission conditions have been implemented.

In addition, for some project proposals, the follow-up of EIA-related issues is shifted onto the post-consent operations phase of the development through environmental permitting processes. The first instance where the requirement for an environmental/operational³⁰ permit is included, dates back to 2006, where the then EIA regulator had recommended the implementation of an operational permit as part of the recommended conditions referred to the permitting authority. Another example from 2017, includes only one condition proposed by the EIA regulator related only to the submission of an updated environmental permit. This, and the use of the IPPC³¹ process, was often one of the recommendations put forward in the permission conditions. The reliance upon such a permitting system in order to impose mitigation measures and fulfil post-consent EIA requirements can be considered a step in the right direction.

In this regard, given the lack of post-consent documentation, or if existing, is not comprehensive enough, coupled with the lack of supporting governance arrangements, e.g., mandatory review of such documentation, it is difficult to determine whether all mitigation measures have been implemented, therefore this can be considered as partially addressing this criterion.

Criterion 4D: Is there opportunity/evidence of learning within project/s?

No. No information was traced in the analysed cases, particularly since conditions are set with compliance as their ultimate goal, rather than creating an opportunity towards learning within the project. Opportunities for learning within the project, however, may arise where any issue that is raised during post-consent EIA follow-up requires any corrective measure, such actions are covered through specific legislative provisions. In terms of the cases discussed in this chapter, no such opportunities have arisen as no form of action was taken upon the submission of the monitoring reports to the EIA regulator, as discussed in Criterion 4C.

³⁰ During the earlier years of implementation of environmental permitting requirements, records indicate that the terms 'environmental' and 'operational' permit were used interchangeably. Environmental permitting is currently regulated via the Maltese Environment Protection Act, Cap. 549 (Article 8(2)(g)) and managed by the ERA at the time of writing. An environmental permit is required when: (i) an activity can lead to pollution to air, water or land, (ii) an activity is carried out in a protected area, and (iii) an activity may affect a protected species of flora or fauna (Environment and Resources Authority, 2020).

³¹ Integrated Pollution Prevention and Control Permit, arising from the requirements of the Industrial Emissions (Integrated Pollution Prevention and Control) Regulations, 2013, partly implementing Directive 2010/75/EU.

Criterion 4E: Is there opportunity/evidence for adaptive management?

No. As in the case of criterion 4D, no information was traced in the analysed cases, particularly since any post-consent EIA follow-up documentation in Malta, including monitoring reports, is mainly submitted for compliance purposes. There may be opportunities for adaptive management, however, this may occur should any issue be raised during post-consent EIA follow-up. In terms of the cases discussed in this chapter, no such opportunities have arisen as there is no evidence of any form of action following the submission of the monitoring reports to the respective regulators.

Criterion 4F: Is there opportunity/evidence for learning/sharing with other proponents and/or stakeholders?

No. As in the case of criteria 4D and 4E, no information was traced in the analysed cases. Any post-consent documentation including monitoring reports is submitted to the permitting authority and then referred to the EIA regulator through consultation processes.

With respect to Criteria 4D – 4F, there is an evident lack of EIA follow-up governance arrangements that would provide opportunities for learning within projects, for adaptive management and for learning and sharing with other proponents and/or stakeholders.

Principle 5 – Establish clear, pre-defined and well-justified *performance criteria* for EIA follow-up

Criterion 5A: Are clear EIA follow-up performance criteria pre-identified in order to appraise information, results and outcomes emerging from follow-up actions?

Criterion 5B: Are follow-up results and outcomes compared to these performance criteria?

No (for both 5A and 5B). As indicated by Table 5.7, no EIA follow-up performance criteria were pre-identified for any of the cases presented in this chapter, and consequently it is not possible to compare EIA follow-up results and outcomes to these pre-identified criteria. There is no mandatory requirement for any identification of criteria to be utilised to appraise information, results and outcomes emerging from follow-up actions. In terms of monitoring, which as indicated in Criterion 1B(i) is the EIA follow-up element, which is actually being implemented in Maltese EIA, there are still no clear performance criteria (be it quantitative or qualitative) set out to evaluate the predictions made and the mitigation measures identified against the EIA follow-up outcomes (as discussed in Chapter 3).

One may also argue that the basis of these performance criteria may lie in the baseline monitoring that is carried out as part of the assessment process, however clear governance arrangements establishing such criteria are necessary.

Principle 6 – Have a *clear understanding* of the purpose and importance of EIA follow-up

Criterion 6A: Are all stakeholders informed of the purpose of EIA follow-up?

No. As indicated in Table 5.7, no information was traced in the analysed cases. Recalling the limited implementation of EIA follow-up governance arrangements from a procedural point of view (Principles 1 – 3), this in turn is mirrored onto the limited knowledge available to stakeholders vis-à-vis EIA follow-up activities. From the analysed cases, it is not clear whether any of the stakeholders, including the regulators (both the EIA competent authority and the development permitting authority), are actually aware of the scope and purpose of EIA follow-up and all of its elements (i.e., not just related to monitoring requirements). EIA follow-up governance arrangements need to be in place to ensure that the necessary information is available to all stakeholders (both at micro-level and at macro-level).

Criterion 6B: Are there provisions for communicating the importance of follow-up?

No. As per Criterion 6A above, no information was traced in the analysed cases. There are no arrangements in place to ensure that the importance of EIA follow-up is communicated to all stakeholders, which would in turn potentially encourage increased implementation. Similar to the previous criterion, EIA follow-up governance arrangements need to be in place to ensure that provisions are in place to communicate the importance of follow-up.

Criterion 6C: Is there clear and ongoing collaboration between regulatory authorities who are responsible for EIA follow-up?

Yes. For the two cases with post-consent documentation (Cases #4 and #5), there is evidence of clear and ongoing collaboration between the regulatory authorities, i.e., the EIA regulator and the permitting authority. This is mostly evidenced through the formal consultation processes between the two authorities in the form of referral of post-consent documentation, and more seldomly, through tri-partite meetings between the project proponent, the EIA regulator and the permitting authority.

This collaboration can be traced back to the earlier days of the Planning Authority and the Environment Protection Department (prior to 2002) when frequent consultations, discussions and meetings were carried out, with feedback provided on the development proposals being assessed. The findings arising from the documentary analysis lean in this direction, focusing on the specific case-by-case requirements of each of these development proposals. In addition, the cases exhibit evidence where the development permission conditions were discussed between regulator and the permitting authority, prior to referral to the decision-making body, further consolidating communication between the two.

However, despite acknowledging that there are collaborative channels between the regulatory authorities, it is important that these are appropriately strengthened through the governance arrangements that are discussed in the next section.

5.2.3 Transactive effectiveness of EIA follow-up governance

Table 5.10 below provides a qualitative evaluation of the transactive effectiveness of EIA follow-up governance arrangements for Malta, also utilising the data collected from the five case studies referred to earlier in this chapter. Results are presented in more detail following the table. Principles 7 and 8 and their respective criteria provide an in-depth macro-level review of EIA follow-up governance arrangements from a transactive effectiveness point of view.

Table 5.10: Transactive effectiveness of EIA follow-up governance arrangements

<i>EIA follow-up governance principles</i> <i>Transactive</i>	<i>Detailed criteria for effective EIA follow-up governance</i>	<i>Case #1 (Coastal Works)</i>	<i>Case #2 (Beach Rep.)</i>	<i>Case #3 (Poultry Farm)</i>	<i>Case #4 (Road infra. u)</i>	<i>Case #5 (New road)</i>	<i>Malta (Macro-level)</i>	<i>Comments</i>
7. Allocate adequate resources to ensure EIA follow-up.	A. Are adequate human resources provided to carry out EIA follow-up (e.g., by regulators and project proponent/s alike)?	Unable to judge	Unable to judge	Unable to judge	Unable to judge	Unable to judge	Unable to judge	<i>Micro/Macro:</i> Unable to judge. Information related to the allocation of human resources in relation to EIA follow-up is limited to not available.
	B. Is appropriate time being allocated towards EIA follow-up (e.g., by regulators and project proponent/s alike)?	Unable to judge	Unable to judge	Unable to judge	Unable to judge	Unable to judge	Unable to judge	<i>Micro/Macro:</i> Unable to judge. Information related to the allocation of time to EIA follow-up is not available.
	C. Are enough financial resources being allocated towards EIA follow-up (by regulators and project proponent/s alike)?	Unable to judge	Unable to judge	Unable to judge	Unable to judge	Unable to judge	Unable to judge	<i>Micro/Macro:</i> Unable to judge. Information related to the allocation of financial resources to EIA follow-up is not available.
8. Ensure that governance arrangements are appropriately	A. How did the environmental outcomes come about? (i.e., to what extent can the outcomes be attributed to EIA	Unable to judge	Unable to judge	Unable to judge	Unable to judge	Unable to judge	N/A	<i>Micro:</i> Unable to judge; limited to no information available on EIA follow-up.

<i>efficient and effective.</i>	follow-up governance specifically?)							
	B. Was there evidence of redundancy or inefficiency in EIA follow-up processes by the regulator? (e.g., did the stakeholders identify ways these processes could have been done more efficiently and effectively by regulators?)	Unable to judge	Unable to judge	Unable to judge	Unable to judge	Unable to judge	N/A	<i>Micro:</i> Unable to judge; limited to no information available on EIA follow-up.

Principle 7 – Allocate *adequate resources* to ensure EIA follow-up

Criterion 7A: Are adequate human resources provided to carry out EIA follow-up (e.g., by regulators and project proponent/s alike?)

Criterion 7B: Is appropriate time being allocated towards EIA follow-up (e.g., by regulators and project proponent/s alike?)

Criterion 7C: Are enough financial resources being allocated towards EIA follow-up (e.g., by regulators and project proponent/s alike?)

Unable to judge (both from a macro/jurisdiction level and a micro/project level). As indicated in Table 5.10 above, there is limited to no information available in relation to resource allocation vis-à-vis EIA follow-up.

In terms of human resources (Criterion 7A), limited information is available from the EIA regulator's end. Recalling Criteria 2A and 2B, EIA is managed by a dedicated team within the regulator, responsible for implementing all stages of the process from screening, scoping, review of environmental statements and preparation of reports to be referred to the permitting authority. Any actions related to EIA follow-up, e.g., review of monitoring reports arising from development permission conditions would need to be carried out by the same team, therefore adding more administrative processes and burdens. Throughout the years, the team tasked with the management of EIA at a national level in Malta, has never exceeded a total of 7 employees (at different managerial levels).

This is also linked to both time and financial/budgetary resources allocated to EIA follow-up. Whilst noting that no information was available in relation to such, both time and finances are intricately linked to human resource allocation. Should appropriate governance arrangements be in place to ensure that all EIA follow-up activities are carried out, due planning is to be done at the very early stages of the project development, taking into consideration the human resources, the time and the finances involved to carry out EIA follow-up.

The above also applies to the project proponent's end. No information related to resource allocation (of all types mentioned) was identified in the case studies, however early project planning incorporating EIA follow-up activities could ensure that these are carried out as an integral part of EIA.

Principle 8 – Ensure that governance arrangements are *appropriately efficient and effective*

Criterion 8A: How did the environmental outcomes come about? (i.e., to what extent can the outcomes be attributed to EIA follow-up governance specifically?)

Unable to judge. Similar to Principle 7, there is limited to no information from the case studies (micro level) as to what extent can the environmental outcomes be attributed to EIA follow-up governance specifically. This is also related to the fact that there are limited EIA governance arrangements in place, except for the legislative arrangements as per Principles 1 – 3.

Criterion 8B: Was there evidence of redundancy or inefficiency in EIA follow-up processes by the regulator? (e.g., did the stakeholders identify ways these processes could have been done more efficiently and effectively by regulators?)

Unable to judge. As per Criterion 8A, there is limited to no information in the case studies (micro level) as to whether the stakeholders identified ways the processes could have been done more efficiently and effectively by regulators. Not having any feedback mechanisms in place where stakeholders can comment on issues related to EIA follow-up leads to a situation where one cannot determine whether existing governance arrangements are appropriately efficient and effective.

5.2.4 Legitimacy of EIA follow-up governance

Table 5.11 below provides a qualitative evaluation of legitimacy of EIA follow-up governance arrangements for Malta, also utilising the data collected from the five case studies referred to earlier in this chapter. Results are presented in more detail following the table. Principles 9 and 10 and their respective criteria provide an in-depth macro-level review of EIA follow-up governance arrangements from a legitimacy point of view.

Table 5.11: Legitimacy and EIA follow-up governance

<i>EIA follow-up governance principles</i> <i>Legitimacy</i>	<i>Detailed criteria for effective EIA follow-up governance</i>	<i>Case #1 (Coastal Works)</i>	<i>Case #2 (Beach Rep.)</i>	<i>Case #3 (Poultry Farm)</i>	<i>Case #4 (Road infra. u)</i>	<i>Case #5 (New road)</i>	<i>Malta (Macro-level)</i>	<i>Comments</i>
9. Ensure <i>transparency</i> and <i>accessibility</i> of EIA follow-up to all stakeholders/parties involved.	A. Have reasonable steps been taken (by regulators and/or project proponents alike) to make EIA follow-up accessible to all stakeholders, including the public? (e.g., provisions of non-technical summaries, printed material, dedicated websites, social media accounts?)	Unable to judge	Unable to judge	Unable to judge	Unable to judge	Unable to judge	No	<i>Micro:</i> Unable to judge. Limited to no information is available on EIA follow-up to determine whether such steps have been taken. <i>Macro:</i> No. No such steps have been taken in terms of EIA follow-up.
	B. Are there appropriate mechanisms in place where all stakeholders and the public can provide feedback in relation to EIA follow-up, ensuring transparency and legitimacy?	Unable to judge	Unable to judge	Unable to judge	Unable to judge	Unable to judge	No	<i>Micro:</i> Unable to judge. Limited to no information is available on EIA follow-up. <i>Macro:</i> No. No such feedback mechanisms are in place.
10. Ensure <i>legitimacy</i> of EIA follow-up	A. Were the EIA follow-up governance arrangements (for the	Unable to judge	Unable to judge	Unable to judge	Unable to judge	Unable to judge	Unable to judge	<i>Micro/Macro:</i> Unable to judge. No mechanisms are in

governance arrangements.	project) upheld or delivered appropriately by regulators in the views of stakeholders?							place to seek views of stakeholders.
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Principle 9 - Ensure *transparency and accessibility* of EIA follow-up to all stakeholders/parties involved

Criterion 9A: Have reasonable steps been taken (by regulators and/or project proponents alike) to make EIA follow-up accessible to all stakeholders, including the public? (e.g., provisions of non-technical summaries, printed material, dedicated websites, social media accounts?)

Criterion 9A has been evaluated at both the micro and macro levels.

Unable to judge (micro level) and No (macro level). No evidence of such steps has been observed in terms of EIA follow-up.

From the EIA regulator's end, generic documentation related to EIA is uploaded on its web portal (as already indicated for Criterion 1D), with all documentation related to screening decisions, scoping opinions, environmental statements and the regulator's review, together with the final report that is referred to the permitting authority, are uploaded in real time.³² This is not the case for EIA follow-up documentation, where none is uploaded.

It should be noted, however, that EIA follow-up related documentation (including that related to compliance and enforcement) is uploaded by the project proponent on the permitting authority's portal³³. Whilst noting that having a central repository of such documentation may be commendable, the following issues may be considered to be affecting the accessibility of this information to all stakeholders:

- The portal only includes documentation submitted on or after 1st June 2012. Any documentation, including EIA follow-up documentation submitted earlier would need to be physically viewed at the regulator's offices.
- The documentation on the portal can be only accessed through individuals with an eID (electronic ID).³⁴
- Not all documentation is made available for viewing on the e-Applications portal – the visibility and accessibility of such documentation is at the permitting authority's discretion. It is difficult, therefore, to determine whether all documentation related to follow-up is actually uploaded on the authority's website.

In this context, there is no information linked to any concrete evidence of reasonable steps towards making EIA follow-up documentation accessible to all stakeholders including the public, with no follow-up governance arrangements in place to ensure such. Additionally, as further proof towards this aspect, as discussed previously in Chapter 4, this can be also confirmed via the difficulty encountered in gaining access to EIA follow-up documentation.

Criterion 9B: Are there appropriate mechanisms in place where all stakeholders and the public can provide feedback in relation to EIA follow-up, ensuring transparency and legitimacy?

³² <https://era.org.mt/era-topic-categories/eia-projects/>

³³ <https://eapps3.pa.org.mt/Account/Login?ReturnUrl=%2F>

³⁴ The eID, or electronic identity, is a trusted authentication mechanism for citizens and businesses to identify themselves to electronically access services from across government. Access to eGovernment Services in Malta requires an eID. Any Maltese citizen or eResidence document holder who is over 14 years of age can acquire an eID (Government of Malta, 2024).

Unable to judge (micro level) and No (macro level). No information regarding any such mechanisms was traced. Only consultation between the regulator and the permitting authority was identified, with no discussion beyond the review of monitoring reports and other documentation submitted as part of the compliance with the development permission conditions. The lack of accessibility highlighted through the evaluation in Criterion 9A, together with the lack of appropriate feedback mechanisms denotes an evident limitation in the implementation of governance arrangements.

Principle 10 - Ensure *legitimacy* of EIA follow-up governance arrangements

Criterion 10A: Were the EIA follow-up governance arrangements (for the project) upheld or delivered appropriately by regulators in the views of stakeholders?

Unable to judge (both at the micro and macro levels). Insufficient to no information was available through the case studies, however as highlighted in Criterion 9B, no appropriate governance arrangements are in place to garner the views of stakeholders.

5.2.5 Summary

The analysis of EIA follow-up governance in Malta at macro level, through a review of Maltese EIA follow-up processes and the use of micro-level case studies, has highlighted an almost complete lack of governance arrangements related to EIA follow-up. The only governance arrangements present focus primarily on monitoring provisions and compliance-related requirements. This reflects on the evaluation of their effectiveness, whereby EIA follow-up governance arrangements may be seen as partially effective on the procedural and substantive aspects (albeit lacking in implementing all elements of EIA follow-up), however underlying significant deficiencies in terms of transactive effectiveness and legitimacy.

The following section (Section 5.3) adopts the same approach, with the application of the EIA follow-up principles and criteria on a macro-level, utilising the results from the interviews, focus group discussion and the policy Delphi. Further in-depth critical analysis and reflection on these results, and the link between the two, are subsequently presented in Chapter 6.

5.3 Stakeholders' perceptions of EIA follow-up governance

This section of Chapter 5 presents the data derived from the interviews, the focus group discussion and the policy Delphi, discussed in Chapter 4. This section retains the same structure as Section 5.2, following the best practice principles for effective EIA follow-up governance. The final evaluation (Columns 3 & 4) is based on the responses provided by the research participants at the macro level.

5.3.1 Procedural effectiveness of EIA follow-up governance

Table 5.12 below provides a qualitative evaluation of the procedural effectiveness of EIA follow-up governance arrangements, as argued by the research participants, with results presented and discussed in more detail in the accompanying sections.

Table 5.12: Stakeholders' perception of procedural effectiveness of EIA follow-up governance arrangements

<i>EIA follow-up governance principles</i>	<i>Detailed criteria for effective EIA follow-up governance</i>	<i>Stakeholder Responses</i>	<i>Comments</i>
Procedural 1. Have <i>legislative provisions</i> which specify EIA follow-up requirements.	A. Is follow-up a requirement for all EIAs?	Partial	Partial. Most of the research participants are aware that current EIA regulations do include provisions specific to monitoring, surveillance and other post-permit analysis (Regulation 32b in the relevant legal notice – S.L. 549.46) and that references to EIA follow-up are vague. Whether EIA follow-up should be a requirement for all EIAs was considered debatable.
	B. Are provisions in place for each component of EIA follow-up?	Partial	Partial. Research participants associate EIA follow-up to mostly monitoring arrangements; very limited number acknowledged the evaluation and auditing aspects of follow-up. All acknowledged that there are no processes in place for management, communication and engagement.
	(i) Are provisions in place for monitoring?	Yes	Yes. Research participants acknowledged that monitoring is an essential component of EIA follow-up and is being carried out.
	(ii) Are provisions in place for evaluation?	Unable to judge	Unable to judge. A limited number of research participants acknowledged that processes for evaluation and auditing are in place for EIA follow-up.
	(iii) Are provisions in place for management?	No	No. None of the research participants acknowledged such processes being in place.
	(iv) Are provisions in place for stakeholder communication and engagement?	No	No. None of the research participants acknowledged such processes being in place.

	C. Are the above provisions implemented in practice?	Partial	Partial. Only for monitoring requirements.
	D. Have any guidance documents to aid the appropriate implementation of EIA follow-up provisions been published?	No	No. None of the research participants were aware of any guidance documents related to EIA follow-up.
2. Establish clear identification of <i>responsibilities</i> in follow-up in EIA procedures/ regulations.	A. Are there staff within the regulatory authority with specific responsibilities for EIA follow-up?	Partial	Partial. Research participants acknowledged that there are no staff members within the EIA regulator with specific responsibilities for EIA follow-up except those related to monitoring and compliance.
	B. Are the responsibilities of all stakeholders for follow-up, i.e., regulator/s, project proponent/s, eNGOs and the public clearly identified?	No	No. The research participants indicated that clear identification of responsibilities for follow-up is required.
3. Specify <i>compliance and enforcement</i> provisions related to EIA follow-up.	A. Do the regulations include provisions for compliance and enforcement, in relation to EIA follow-up?	Unable to judge	Unable to judge. Limited information regarding compliance and enforcement provided by research participants; proposed inclusions for specific provisions in regulations.
	B. If yes, is a penalty system related to enforcement and compliance in place?	Unable to judge	Unable to judge. Limited information regarding compliance and enforcement provided by research participants; proposed inclusions for specific provisions in regulations.

Principle 1 - Have *legislative provisions* which specify EIA follow-up requirements

Criterion 1A: Is EIA follow-up a requirement for all EIAs?

Partial. Most of the participants of the policy Delphi acknowledged the fact that the current EIA regulations do include some vague EIA follow-up provisions, mainly related to monitoring:

...The Maltese EIA Regulations do not really enter into EIA follow-up but focus on monitoring “of the effects of a project”, which is usually taken to mean monitoring of the project during construction.

While some of the research participants (three in the first round of the policy Delphi) indicated that they were not sufficiently aware or informed of the provisions of the Maltese EIA legal framework (which in itself should be of concern for stakeholders), most of the participants agreed that the relative absence of post-consent EIA follow-up could be attributed to a lack of mandatory legislative requirements. One of the interviewees noted that whilst both the EIA Directive and the Maltese EIA regulations include specific references to post-consent processing, including the implementation of appropriate mitigation measures and tailor-made monitoring for development proposals, the ‘missing link leading to implementation of this [EIA follow-up]’ was highlighted. The need for an appropriate legislative framework for EIA follow-up was also reiterated by the focus group participants who stated that if the regulatory framework does not exist, such arrangements can only be considered as ‘fictional notions’ and thus EIA would ‘die a natural death’:

... the follow-up on the EIA needs to be owned and streamlined into a particular regulatory process, to have it left as an appendage that doesn’t have any teeth or that doesn’t have any relevance – that’s going to die an automatic death. (Participant 1)

...at the moment it’s very ad hoc, it might be followed up, it might not. If there’s not going to be a framework, quite frankly, I don’t expect any improvements. (Participant 1)

Those participants aware of the legal requirements for EIA follow-up commented that the present provisions are not enough to ensure appropriate implementation. The following proposals were put forward to address the lack of such governance arrangements:

- The inclusion of mandatory mitigation and monitoring requirements in the regulations,
- The legislative provisions should clarify/specify the responsibilities of all parties in post-consent EIA follow-up. For example, with respect to environmental monitoring, the regulations should clarify whether this should be carried out by the project proponent, the regulatory authority or by the EIA consultants,
- The establishment of clear timeframes ensuring the carrying out of post-consent EIA follow-up,
- The inclusion of provisions ensuring transparency in terms of the availability of monitoring data and reports to all stakeholders,
- The preparation of a mandatory post-consent EIA follow-up programme, linked to the approval decision,
- Public participation in post-consent EIA follow-up should be enhanced through mandatory legislative provisions, and,
- Legislative provisions should include a penalty system to ensure compliance and enforcement.

Two of the Delphi participants also agreed that changes in the legislative provisions could go beyond the EIA regulations and that the relevant planning laws could be amended to place an obligation on the project proponent regarding post-consent EIA follow-up, which may include conditions related to its implementation. In actual fact, this is already present in terms of compliance of the development permit conditions through the provisions of the Development Planning Act (Government of Malta, 2016), however as discussed earlier in this chapter, these provisions are currently only related to the development permission per se rather than to an EIA follow-up framework. In this regard, stakeholders' understanding of EIA follow-up is still only partial to some of its elements.

Criterion 1B: Are provisions in place for each component of EIA follow-up?

(i) Are provisions in place for monitoring?

Yes. As indicated in the response for Criterion 1A, the research participants directly associated EIA follow-up to monitoring. In fact, over half of the participants (8) of the policy Delphi linked EIA follow-up to the monitoring of data related to the predictions, conclusions and outcomes of an EIA throughout the life-cycle of the development (or the execution of a plan). This may be related to the fact that the EIA Directive itself (EurLex, 2014), and its associated guidance documents³⁵ only use the term 'monitoring' in relation to any post-consent EIA activities.

The research participants also noted that monitoring would need to ensure compliance and enforcement of any relevant conditions in development permission, to the satisfaction of the responsible authorities. Monitoring needs be carried out to both validate conclusions reached in the EIA and the adequacy of conditions imposed on project execution. The design of effective monitoring programmes was considered important by some of the participants.

(ii) Are provisions in place for evaluation?

Unable to judge. While monitoring was mentioned by almost all the research participants, only a few associated EIA follow-up with evaluation of impacts of a plan or project or the evaluation of the EIA process itself, allowing practitioners to determine whether the impacts of projects or plans at implementation stage reflect what was predicted and analysed during the approval stage. For example, auditing was only mentioned by one of the Delphi participants, indicating that this should be carried out periodically by the EIA regulator.

Recommendations such as the setting up of evaluation committees for EIA follow-up or the carrying out of post-consent EIA auditing could be considered a plausible means through which follow-up could be implemented more efficiently and effectively, should the necessary resources be available. One of the participants highlighted the importance of post-implementation evaluation and how it should be a pre-requisite through specific legislative provisions, e.g., EIA

³⁵ The EU Guidance on the preparation of the Environmental Impact Assessment Report (Directive 2011/92/EU as amended by 2014/52/EU) (European Union, 2017, p. 59) includes a reference to EIA follow-up, specifically to the 2007 EIA follow-up International Best Practice Principles (Morrison-Saunders et al., 2007).

predictions and assessments are to be re-evaluated every 2 to 5 years from the implementation of a project. They also highlighted the need for a comparative report discussing these to be published.

The need for post-consent EIA audits (considering they are not a mandatory requirement in the Maltese EIA regulations) was also raised in the focus group discussion. One of the focus group participants (Participant 2) stated that: “the post-EIA phase... there is still a lot of room for development, in terms of auditing... post-development auditing in Malta does not exist.”

The participants also commented on the fact that audits could be carried out by different consultants to those which would have carried out the EIA, creating a system of ‘checks and balances’ (“...the auditing of the outcome of the EIA and the monitoring of the EIA should not be done by the same coordinator” – Participant 2). This would enable auditing consultants to evaluate and assess the monitoring information, and in turn inform the regulators, the EIA consultants and experts. This recalls Principle 7 – *Inclusion of Independent Verification* – of the IAIA Best Practice Principles for Public Participation in EIA Follow-Up (Morrison-Saunders & Arts, 2023), which introduces some form of independent verification of EIA follow-up activity, as a means of gaining trust of all stakeholders, including the public, together with overall legitimacy (Morrison-Saunders & Arts, 2023; Morrison-Saunders et al., 2023). Evaluation and auditing, however, may be perceived as an additional burden in terms of resource allocation (namely, time, human resources and budgetary requirements), possibly associated to a limited understanding of the scope and purpose of EIA follow-up.

(iii) Are provisions in place for management?

(iv) Are provisions in place for stakeholder communication and engagement?

No. The research participants confirmed the results discussed in Section 5.2, in relation to the lack of processes for management and stakeholder participation. These elements were considered to be important components by the research participants, particularly when noting that aspects of management, communication and engagement were being proposed as part of the tasks of a potential team dedicated to EIA follow-up (see Criterion 2A below).

Criterion 1C: Are the above provisions implemented in practice?

Partial. As indicated in Criterion 1B(i), noting that the research participants associated EIA follow-up only to monitoring, they were aware that it is being implemented in practice. They also pointed out the fact that there needs to be a distinction between monitoring of construction-related impacts such as noise and dust monitoring, and monitoring of post-consent EIA (with verification between EIA outcomes and findings post-consent). None of the participants explicitly mention other processes related to EIA follow-up, save for post-implementation evaluation (discussed in Criterion 1B(ii) above), therefore the implementation of EIA follow-up related process is considered to be partial by the research participants.

Criterion 1D: Have any guidance documents to aid the appropriate implementation of EIA follow-up provisions been published?

No. The Delphi participants linked the general limited understanding of EIA follow-up to a lack of local official guidance (in terms of both documentation and information outreach). The absence of official guidance on the implementation of EIA follow-up provisions or the setting up of strict legal obligations regarding the appropriate procedures to be carried out at post-consent (over and above Regulation 32(d) in the latest EIA regulations), were seen to contribute to the manner in which this aspect of the system appears to be mismanaged or misinterpreted.

Principle 2 - Establish clear identification of responsibilities in follow-up in EIA regulations/procedures

Criterion 2A: Are there staff within the regulatory authority with specific responsibilities for EIA follow-up?

Partial. In their discussions, the research participants also attributed the lack of implementation of EIA follow-up in Malta to poor administrative capacities, including the improper allocation of resources, partially reflecting an overall lack of political will to address this issue, together with a relative lack of understanding of EIA follow-up.

The issue of lack of political will in addressing the implementation of EIA follow-up is also raised by Khan et al. (2020). They note that the extent of implementation of EIA follow-up is also dependent on the political conditions, including the will to ensure capacity to handle and process such issues and the pressure that project proponents may exert on regulators to gain planning permission (Hameed & Nadeem, 2019; Khan & Chaudhry, 2021; Khan et al., 2018; Kruopiene et al., 2009).

In terms of administrative processes, one of the interviewees commented on the fact that any conditions referred by the statutory consultees during the planning process should be followed up by the same consultee at post-consent. The current administrative set-up, whereby conditions imposed by consultees are to be followed-up by the respective authority, should technically make this phase of the EIA process more feasible.

One of the Delphi participants indicated that the EIA regulator should be responsible for all aspects of EIA, including post-consent EIA follow-up. With the clear understanding that there are no staff members specifically tasked with responsibilities related to EIA follow-up, a proposal for the setting up of a dedicated team acting as the coordinator and overseer of all matters pertaining to post-consent EIA follow-up was made by two of the Delphi participants. With the Maltese context in mind (discussed in Section 5.2), one of the participants noted that this team could be either: (1) a sub-team of the present EIA team within the regulatory authority, or (2) a team within the regulator's Compliance and Enforcement Unit, which is normally responsible for post-consent monitoring. Important expertise in this team would include *inter alia* EIA matters, environmental monitoring and discussions with stakeholders.

The main functions of the dedicated team would need to include the following, supported by the necessary legislative provisions in the local regulations:

- To approve the post-consent EIA follow-up programme as prepared by the project proponent's consultant,
- To oversee the project proponent's consultant in carrying out the programme and advise on any amendments to this programme, as necessary,
- To review, evaluate, interpret and validate the monitoring data,
- To advise on further action that may be needed to better protect the environment,
- To provide a feedback mechanism for future EIAs and post-consent EIA follow-up,
- In the case of default of the project proponent's consultant to carry out the programme as agreed with the regulatory authority, the team responsible for EIA follow-up would take over responsibility for environmental monitoring using its own resources or contract out the task. All expenses would be borne by the project proponent,
- To hold information meetings with stakeholders, ensuring their understanding and cooperation in EIA follow-up,
- To ensure that public concerns are being given their due attention,
- To ensure a healthy relationship with the PA and with other regulatory authorities,
- To ensure that monitoring results are accessible in real time to all stakeholders,
- To exchange experiences with overseas colleagues working in the same field,
- To provide training opportunities to personnel involved in EIA follow-up,
- To undergo Continuing Professional Development in their specialised field,
- To regularly review legislation and procedures and update these in the light of experience in the field, and
- To keep abreast with professional development in the field.

The Delphi participants, however, stressed that adequate resources, including additional investment in human resources, are required to carry out these tasks:

More resources and technical expertise are needed to ensure that the administrative and institutional set-ups in place fulfil their tasks and carry out their obligations in a more timely and effective manner.

Capacity building including targeted training, and resources, together with technical expertise, were considered necessary in order to fulfil the obligations that would arise from improved and additional administrative and institutional arrangements, influencing the effectiveness of EIA follow-up governance.

Criterion 2B: Are the responsibilities of all stakeholders for follow-up, i.e., regulator/s, project proponent/s, eNGOs and the public clearly identified?

No. Together with the lack of mandatory regulatory requirements, the research participants attribute the relative absence of EIA follow-up to poor administrative and institutional arrangements. This contrasts with the legislative provisions discussed in Section 5.2, particularly noting the emphasis placed by both the Maltese EIA regulations (Government of Malta, 2017) and by the EU EIA Directive (EurLex, 2014) in relation to monitoring requirements. One would expect further action by the regulator on this front, but as indicated by the results, the lacunae on the implementation of such aspects are significant.

Two interviewees highlighted the issue of ‘ownership’ of the process, in terms of which of the responsible authorities would be in charge of following-up these issues.

The issue of the need for improved coordination between regulators and authorities was also highlighted, with a Delphi participant proposing a collegial joint regulatory body, stressing the importance of the role of the regulatory authorities. The extent of the collaboration between the EIA regulator and the consultants carrying out EIA follow-up would need to be clarified by having relevant legislative provisions in place. This would also clarify who would be carrying out what in terms of procedural requirements. In this regard, therefore, more clarity in terms of stakeholder responsibility, through the necessary governance arrangements, was deemed necessary.

Principle 3 - Specify *compliance and enforcement* provisions related to EIA follow-up

Criterion 3A: Do the regulations include provisions for compliance and enforcement, in relation to EIA follow-up?

Criterion 3B: If yes, is a penalty system related to compliance and enforcement in place?

Unable to judge (for both 3A and 3B). The research participants had limited information regarding compliance and enforcement provisions related to EIA follow-up, and therefore were not able to provide a reply. Echoing the responses from Criterion 1A, and the results from Section 5.2 above, the research participants agreed that legislative provisions are necessary to include an appropriate penalty system, specifically ensuring compliance with and enforcement of EIA follow-up requirements.

For all criteria related to the procedural aspects of EIA follow-up requirements (covering Principles 1 – 3), the stakeholders’ responses corroborate the results in Section 5.2, confirming that clear EIA follow-up governance arrangements beyond mitigation and monitoring are required. The lack of legislative provisions covering all aspects of EIA follow-up influences its implementation, and this has been acknowledged and identified by all the research participants. The stress on the monitoring aspect can be linked to the fact that EIA follow-up is underutilised and is deemed to be only related to the conditions imposed in development permission.

5.3.2 Substantive effectiveness of EIA follow-up governance

Following the discussion of the procedural aspects of EIA follow-up governance, Table 5.13 below provides a qualitative evaluation of the substantive effectiveness of EIA follow-up governance arrangements, as argued by the research participants, with results presented and discussed in more detail in the accompanying sections.

Table 5.13: Stakeholders' perception of substantive effectiveness of EIA follow-up governance arrangements

<i>EIA follow-up governance principles</i>	<i>Detailed criteria for effective EIA follow-up governance</i>	<i>Stakeholder Responses</i>	<i>Comments</i>
<i>Substantive</i>			
4. Ensure reporting of EIA follow-up outcomes, to facilitate <i>adaptive management</i> and promote continuous <i>learning from experience</i> to improve future practice.	A. Are EIA follow-up outcomes reported to all stakeholders, including the public?	Unable to judge	Unable to judge. Very limited information available; organisation of an annual EIA forum to share EIA outcomes, including EIA follow-up outcomes with stakeholders has been suggested by the participants.
	B. Have all (significant) impacts of a project identified in the EIA been addressed through the identification of appropriate mitigation measures?	Unable to judge	Unable to judge. Only the regulators would be aware of whether all significant impacts of a project would have been addressed.
	C. Have all mitigation measures, included as development permission conditions, been implemented?	Unable to judge	Unable to judge. Only the regulators would be aware of whether all mitigation measures would have been implemented.
	D. Is there opportunity/evidence of learning within project/s?	Unable to judge	Unable to judge. No information available.
	E. Is there opportunity/evidence for adaptive management?	Unable to judge	Unable to judge. No information available.
	F. Is there opportunity/evidence for learning/sharing with other proponents and/or stakeholders?	Unable to judge	Unable to judge. No information available.
5. Establish clear, pre-defined and well-justified <i>performance</i>	A. Are clear EIA follow-up performance criteria pre-identified in order to appraise information, results and	No	No. No such criteria are pre-identified in order to assess EIA follow-up performance. None of the stakeholders were aware of such.

criteria for EIA follow-up.	outcomes emerging from follow-up actions?		
	B. Are follow-up results and outcomes compared to these performance criteria?	No	No. No such criteria are pre-identified in order to assess EIA follow-up performance. None of the stakeholders were aware of such.
6. Have a <i>clear understanding</i> of the purpose and importance of EIA follow-up.	A. Are all stakeholders informed of the purpose of EIA follow-up?	Partial	Partial. Most of the participants associate EIA follow-up only to post-consent monitoring, therefore their understanding of EIA follow-up is limited.
	B. Are there provisions for communicating the importance of follow-up?	No	No. No evidence of such outreach or communication was identified.
	C. Is there clear and ongoing collaboration between regulatory authorities who are responsible for EIA follow-up?	Unable to judge	Unable to judge. Research participants noted more collaboration between the regulatory authorities, i.e., the PA and the ERA and other authorities was deemed necessary.

Principle 4 - Ensure *reporting* of EIA follow-up outcomes, to facilitate *adaptive management* and promote continuous *learning from experience* to improve future practice

Criterion 4A: Are EIA follow-up outcomes reported to all stakeholders, including the public?

Unable to judge. The responses from the research participants indicated that there is very limited information with respect to EIA follow-up outcomes. One of the focus group participants was aware of a case where a dedicated committee was set up, involving the local town authority (i.e., the Local Council), the regulator and the project proponent/operator, with the results and outcomes of ongoing monitoring actually presented and discussed. This led to a situation where, in practice, stakeholders were made aware of EIA follow-up results, possibly leading to more tangible outcomes. The participants highlighted the fact that similar arrangements would need to be possibly extended to all cases, however new regulatory set-ups and governance arrangements would be required to ensure this form of implementation.

Additionally, one of the Delphi participants proposed an annual EIA forum to be organised, discussing EIA outcomes (reflecting upon EIA follow-up outcomes) between the regulatory authorities and EIA consultants, possibly including other relevant stakeholders.

...these [EIA follow-up outcomes] could also be presented in a yearly event (link an EIA forum) during which the EIA follow-up findings of a number of projects are presented.

...the requirement for developers to organise periodic (say quarterly) updates on the progress of a project (during construction) for the Local Council and interested stakeholders.

Criterion 4B: Have all (significant) impacts of a project identified in the EIA been addressed through the identification of appropriate mitigation measures?

Criterion 4C: Have all mitigation measures, included as development permission conditions, been implemented?

Unable to judge (for both 4B and 4C). As indicated in Table 5.13 above, only the regulators (namely the EIA competent authority and the permitting authority), together with the project proponent would be aware of whether all significant impacts of a project would have been addressed and the mitigation measures implemented. The issue of limited information in relation to such was also evident in the documentary analysis as discussed in Section 5.2, therefore demonstrating this lacuna in terms of EIA follow-up governance arrangements.

Criterion 4D: Is there opportunity/evidence of learning within project/s?

Criterion 4E: Is there opportunity/evidence for adaptive management?

Criterion 4F: Is there opportunity/evidence for learning/sharing with other proponents and/or stakeholders?

Unable to judge (for 4D, 4E and 4F). As per Criteria 4B and 4C, the research participants indicated that there is no information related to EIA follow-up, highlighting any opportunities or evidence of learning within project/s (Criterion 4D), adaptive management (Criterion 4E) and

learning/sharing with other proponents and/or stakeholders (Criterion 4F). The general perception of the research participants was that EIA governance arrangements are mostly geared towards pre-consent requirements, with post-consent EIA follow-up being reasonably ignored. One of the focus group participants noted that EIA follow-up requirements are perceived as a form of chastisement, with requirements such as monitoring or submission of post-consent documentation only followed up “...till the moment someone accesses the case file due to any amendment and he/she would realise that these things were not carried out.” This, in turn, leads to a situation where stakeholders do not identify opportunities for learning (both within the project or in terms of learning/sharing with other proponents and stakeholders) or for adaptive management.

Principle 5 - Establish clear, pre-defined and well-justified *performance criteria* for EIA follow-up

Criterion 5A: Are clear EIA follow-up performance criteria pre-identified in order to appraise information, results and outcomes emerging from follow-up actions?

Criterion 5B: Are follow-up results and outcomes compared to these performance criteria?

No (for both 5A and 5B). As determined in Table 5.13, none of the stakeholders were aware of any pre-identified EIA follow-up performance criteria. Whilst not making direct reference to the latter, the Delphi participants hinted at the need for methods to ensure increased stakeholder engagement. Regular progress updates related to EIA follow-up would need to include consistent updates and reports on project status, environmental performance, implemented mitigation measures and sharing of information on milestones, challenges and successes to keep stakeholders well-informed. Such updates may be possible only if clear EIA follow-up performance criteria are identified.

Principle 6 - Have a clear understanding of the *purpose and importance* of EIA follow-up

Criterion 6A: Are all stakeholders informed of the purpose of EIA follow-up?

Partial. With most of the research participants associating EIA follow-up only to post-consent monitoring, it is evident that stakeholders have a limited understanding of the actual purpose of EIA follow-up. When asked about their own understanding, monitoring, stakeholder responsibilities and evaluation were the only three aspects that were mentioned in most responses.

Criterion 6B: Are there provisions for communicating the importance of follow-up?

No. None of the research participants identified any provisions in place for the communication of the importance of EIA follow-up. As discussed for the criteria falling under Principle 1 related to legislative provisions, there are no governance arrangements associated with the dissemination of information related to EIA follow-up and its importance, including the publication of guidance documents related to EIA follow-up (as discussed for Criterion 1D).

Criterion 6C: Is there clear and ongoing collaboration between regulatory authorities who are responsible for EIA follow-up?

Unable to judge. Limited information is available to stakeholders regarding collaboration between the regulatory authorities. Research participants indicated, however, that increased collaboration between the regulatory authorities, i.e., the PA and the ERA, together with other regulatory authorities, is deemed necessary. One of the focus group attendees noted that:

In the demerger, what I noticed is that the two entities act like a separated couple, with the two authorities living their own life, each to their own, with the PA actually taking the lead decision-taking role.

The relative lack of collaboration was also noted by the interviewees, with the following comments raised:

PA and ERA work in separate ways. [Interviewee 1]

As, [we] could have had planning-related legislation and environment-related legislation that would have been much more in synergy together. Even when... they were one entity, planning and environment were treated separately. [Interviewee 2]

The problem I see is the aftermath of these studies, as we discussed. Shall we keep this in a box? Or shall we build a process above that which has been carried out in the EIA? It is important that a process is there... and that there is more cooperation between the authorities... that there would shed more light to this report (place it in more limelight). [Interviewee 2]

The most important thing is that there is coordination between the entities, that is... it should work as: Go to Transport, to see what they tell you, go to ERA... you would need to have more, when it comes to EIA or bigger scale projects, how can I say this... a common platform, where everyone can work together and share the same information. [Interviewee 3]

The difference between the stakeholders' perceptions vis-à-vis the collaboration between regulatory authorities (i.e., lack of collaboration between the regulators) and the results of the documentary analysis discussed in Section 5.2 (indicating collaboration between the two), provides additional evidence towards the lack of access to information in relation to EIA follow-up and its governance arrangements. The following two sections now discuss effectiveness of EIA governance arrangements in terms of their transactive elements and their legitimacy.

5.3.3 Transactive effectiveness of EIA follow-up governance

Table 5.14 below provides a qualitative evaluation of the transactive effectiveness of EIA follow-up governance arrangements, as argued by the research participants, with results presented and discussed in more detail in the accompanying sections.

Table 5.14: Stakeholders' perception of transactive effectiveness of EIA follow-up governance arrangements

<i>EIA follow-up governance principles</i> <i>Transactive</i>	<i>Detailed criteria for effective EIA follow-up governance</i>	<i>Stakeholder Responses</i>	<i>Comments</i>
7. Allocate adequate resources to ensure EIA follow-up.	A. Are adequate human resources provided to carry out EIA follow-up (e.g., by regulators and project proponent/s alike)?	Unable to judge	Unable to judge. Information related to the allocation of human resources in relation to EIA follow-up is limited to not available.
	B. Is appropriate time being allocated towards EIA follow-up (e.g., by regulators and project proponent/s alike)?	Unable to judge	Unable to judge. Information related to the allocation of time to EIA follow-up is limited to not available.
	C. Are enough financial resources being allocated towards EIA follow-up (e.g., by regulators and project proponent/s alike)?	Unable to judge	Unable to judge. Information related to the allocation of financial resources and budgetary requirements to EIA follow-up is limited to not available.
8. Ensure that governance arrangements are appropriately efficient and effective.	A. How did the environmental outcomes come about? (i.e., to what extent can the outcomes be attributed to EIA follow-up governance specifically?)	Unable to judge	Unable to judge. Information is limited or unknown in view of the limited information available on EIA follow-up.
	B. Was there evidence of redundancy or inefficiency in EIA follow-up processes by the regulator? (e.g., did the stakeholders identify ways these processes could have been done more efficiently and effectively by regulators?)	Unable to judge	Unable to judge. Information is limited or unknown in view of the limited information available on EIA follow-up.

Principle 7 – Allocate *adequate resources* to ensure EIA follow-up

Criterion 7A: Are adequate human resources provided to carry out EIA follow-up (e.g., by regulators and project proponent/s alike?)

Criterion 7B: Is appropriate time being allocated towards EIA follow-up (e.g., by regulators and project proponent/s alike?)

Criterion 7C: Are enough financial resources being allocated towards EIA follow-up (e.g., by regulators and project proponent/s alike?)

Unable to judge (for 7A, 7B and 7C). The research participants did not have any information regarding the allocation of resources (human, time and budgetary resources) in relation to EIA follow-up. This is in line with the results emerging from the documentary analysis (Section 5.2).

The participants reiterated that the team working on EIA follow-up should have adequate human, financial and material resources. This is considered crucial for ensuring the success of post-consent EIA follow-up. One of the participants also suggested that members of the EIA follow-up team within the regulator should be provided with the opportunity to visit similar teams overseas, and possibly work there for some time. The enhancement of capacity through training was also considered essential, together with the prioritisation vis-à-vis allocation of resources.

[The regulator should] provide training programs to build the expertise of regulatory staff involved in EIA follow-up and ensure that the authority has a proficient team for environmental monitoring... advocate for and secure sufficient financial resources... for EIA follow-up activities, addressing monitoring, reporting and issue resolution. Part of development application fees must be redirected to sustain EIA monitoring.

One of the participants also commented that investment in the latest technologies, including remote sensing, geographic information systems (GIS), and other advanced technologies, possibly including Artificial Intelligence (AI), could be considered in order to streamline data collection and analysis associated with EIA follow-up.

The authority may consider investing in remote sensing, geographic information systems (GIS), and other advanced technologies to streamline data collection and analysis, thereby reducing resource needs... the project proponents should ensure that consultants engaged in environmental monitoring are well trained and experienced in the use of technological innovations, e.g., remote-sensing and other resource-efficient techniques that can optimise resource use and improve the effectiveness of EIA follow-up.

Three (3) Delphi participants also noted that the implementation of fees and bank guarantees can ensure the carrying out of EIA follow-up, and in turn, such finances can be utilised to ensure that resources are channelled towards the capacity needed to ensure appropriate implementation of post-consent EIA follow-up.

Adequate allocation of resources was also deemed important for the project proponents. The Delphi participants stressed appropriate planning, including good communication and collaboration between the project proponents and the regulatory authorities, as early as possible in the proposal's planning phase. It is this early planning that can identify the requirements for

post-consent EIA follow-up including monitoring, aiding better planning and understanding. This would, in turn, ensure better resource allocation. One of the participants also suggested that this early planning should be part of the project proposal's economic feasibility study and overall business plan, which may be carried out even prior to the EIA.

Two examples, provided by the participants, of initiatives that could be taken up by project proponents included:

- The use of shared IT systems between project proponent and the regulator to ensure a transparent exchange of information between the two, and
- The setting up of a central fund with Local Councils, eNGOs and civil society to ensure access and that all stakeholders are in a position to engage meaningfully in the EIA follow-up process with the project proponent.

Two of the Delphi participants (both EIA consultants) however noted that project proponents may not necessarily be keen to allocate sufficient resources, therefore post-consent EIA follow-up needs to be a mandatory legal requirement:

Project proponents will not be keen to allocate resources for this [EIA follow-up] must be a legal requirement.

Principle 8 – Ensure that governance arrangements are *appropriately efficient and effective*

Criterion 8A: How did the environmental outcomes come about? (i.e., to what extent can the outcomes be attributed to EIA follow-up governance specifically?)

Unable to judge. Limited to no information is available with respect to environmental outcomes. None of the research participants could identify to what extent environmental outcomes can be attributed to EIA follow-up governance specifically. This is also related to the fact that there are limited EIA governance arrangements in place, except for the legislative arrangements as per Criteria 1 – 3.

Criterion 8B: Was there evidence of redundancy or inefficiency in EIA follow-up processes by the regulator? (e.g., did the stakeholders identify ways these processes could have been done more efficiently and effectively by regulators?)

Unable to judge. As indicated in previous responses, information regarding EIA follow-up processes is limited or unavailable, therefore it was not possible for the research participants as stakeholders to identify any redundancy or inefficiency by the regulator.

5.3.4 Legitimacy of EIA follow-up governance

Table 5.15 below provides a qualitative evaluation of legitimacy of EIA follow-up governance arrangements, as argued by the research participants, with results presented and discussed in more detail in the accompanying sections.

Table 5.15: Stakeholders' perception of legitimacy of EIA follow-up governance arrangements

<i>EIA follow-up governance principles</i> <i>Legitimacy</i>	<i>Detailed criteria for effective EIA follow-up governance</i>	<i>Stakeholder Responses</i>	<i>Comments</i>
9. Ensure <i>transparency</i> and <i>accessibility</i> of EIA follow-up to all stakeholders/parties involved.	A. Have reasonable steps been taken (by regulators and/or project proponents alike) to make EIA follow-up accessible to all stakeholders, including the public? (e.g., provisions of non-technical summaries, printed material, dedicated websites, social media accounts?)	No	No. No such steps have been taken in terms of EIA follow-up; however, research participants made detailed proposals for addressing this issue.
	B. Are there appropriate mechanisms in place where all stakeholders and the public can provide feedback in relation to EIA follow-up, ensuring transparency and legitimacy?	No	No. No such feedback mechanisms are in place; however, research participants made detailed proposals for addressing this issue.
10. Ensure <i>legitimacy</i> of EIA follow-up governance arrangements.	A. Were the EIA follow-up governance arrangements (for the project) upheld or delivered appropriately by regulators in the views of stakeholders?	Unable to judge.	Unable to judge. Information is limited or unknown in view of the limited information available on EIA follow-up.

Principle 9 - Ensure *transparency and accessibility* of EIA follow-up to all stakeholders/parties involved

Criterion 9A: Have reasonable steps been taken (by regulators and/or project proponents alike) to make EIA follow-up accessible to all stakeholders, including the public? (e.g., provisions of non-technical summaries, printed material, dedicated websites, social media accounts?)

No. All of the Delphi participants noted the lack of steps taken by both regulators and project proponents in relation to accessibility of EIA follow-up. They stressed the importance of the organisation of talks, seminars, webinars and regular meetings between the regulator and all stakeholders, but also between the project proponent and the stakeholders, including the public. These would in turn ensure increased awareness of post-consent EIA follow-up activities. It was also suggested for such meetings to start as early as possible in the process.

One of the Delphi participants also provided a detailed list of initiatives that could be taken up by the regulator, channelling points also raised by other participants as follows:

- Open communication channels, including: (i) establishing transparent communication channels to share information regarding post-consent activities, and (ii) ensuring easy access to relevant details through methods like websites, newsletters, and public notices.
- Stakeholder engagement events: including: (i) arranging workshops and forums specifically dedicated to the post-consent stage, facilitating discussions, progress updates, and issue resolution, and (ii) encouraging open dialogue and feedback from stakeholders.
- Regular progress updates: (i) releasing consistent updates and reports on project status, environmental performance, and implemented mitigation measures and, (ii) sharing information on milestones, challenges, and successes to keep stakeholders well-informed.
- Public consultation sessions: (i) holding periodic public consultation meetings to gather stakeholder input on post-consent activities, and (ii) using these sessions to address queries, clarify uncertainties, and integrate community perspectives.
- Project proponent collaboration: Bank Guarantees, tax reliefs, and fees exemptions are tools that can help to enticing participation from the project promoters and their consultants.
- Community collaboration: (i) collaborating with local communities and community leaders to ensure their active participation in post-consent initiatives, and (ii) considering local cultural nuances in engagement strategies.
- Online platforms and social media: (i) utilising online platforms and social media to reach a broader audience, and (ii) using these channels for public announcements, interactive discussions, and multimedia content sharing to enhance understanding.
- Stakeholder training programs: (i) conducting training programs to enhance stakeholders' understanding of the post-consent stage and their roles in ongoing environmental management, and (ii) raising awareness about the continued importance of their participation.
- Feedback systems: (i) implementing effective mechanisms for stakeholders to provide feedback, report concerns and seek clarification, and (ii) ensuring timely responses to address queries and issues raised by stakeholders.
- Advisory committees: (i) forming advisory committees with diverse stakeholder representation to facilitate ongoing communication and collaboration, and (ii) seeking advice and recommendations from these committees to improve decision-making.

- Inclusive decision-making: (i) involving stakeholders in decision-making processes related to modifications, adaptive management, or unforeseen challenges during the post-consent stage, and (ii) fostering a sense of shared responsibility and ownership among stakeholders.
- Capacity building: (i) enhance the capacity of local communities and eNGOs to actively participate in post-consent environmental monitoring and management, and (ii) provide training on relevant environmental topics and monitoring techniques.

From the project proponents' point of view, the following list of initiatives was also proposed:

- Transparent communication: (i) ensuring transparent and timely communication with all stakeholders, (ii) providing clear and accessible information about the project's environmental impacts and mitigation measures, and (iii) using plain language and various communication channels to reach a diverse audience.
- Public consultation: (i) organising public consultation meetings to gather input on post-development plans and the EIA conclusions, (ii) considering virtual meetings to facilitate broader participation, and (iii) soliciting feedback through written submissions and online platforms.
- Stakeholder engagement workshops: (i) conducting workshops to educate stakeholders about the project's long-term impacts and the significance of their involvement, (ii) facilitating discussions on potential concerns and collaborative solutions, and (iii) collaborating with eNGOs and local community groups to ensure representation and engagement, and (iv) leveraging their expertise to enhance community understanding of the project's implications.
- Information dissemination and feedback mechanisms: (i) developing informative materials, such as brochures, fact sheets, and newsletters, summarising the project's progress and environmental considerations, (ii) utilising various media outlets to disseminate information widely, (iii) establishing feedback mechanisms to receive comments, concerns, and suggestions from stakeholders, and (iv) ensuring that there is a system in place to address and respond to the feedback received, including the use of online portals and social media.
- Capacity building and inclusive decision-making: (i) conducting training programs to build the capacity of local communities and stakeholders in understanding environmental issues, (ii) fostering a sense of ownership and responsibility for the project's environmental aspects, (iii) involving stakeholders in the decision-making process regarding post-development plans and the EIA conclusions, and (iv) establishing mechanisms for resolving conflicts and finding mutually agreeable solutions.
- Regular updates, reporting and auditing: (i) providing regular updates on the project's status, addressing concerns raised during the EIA, (ii) producing comprehensive reports outlining the environmental performance of the project, (iii) considering independent audits or third-party assessments of the project's environmental performance, (iv) sharing the results openly with stakeholders to build trust and credibility, and (v) establishing adaptive management strategies based on monitoring results to address changing circumstances.

Criterion 9B: Are there appropriate mechanisms in place where all stakeholders and the public can provide feedback in relation to EIA follow-up, ensuring transparency and legitimacy?

No. No such mechanisms could be identified by the research participants. Feedback mechanisms, including stakeholder meetings, public consultation events and online feedback portals, as

already highlighted in the previous Criterion 9A, coupled with appropriate governance arrangements, would be a means to ensure transparency and legitimacy.

Principle 10 - Ensure *legitimacy* of EIA follow-up governance arrangements

Criterion 10A: Were the EIA follow-up governance arrangements (for the project) upheld or delivered appropriately by regulators in the views of stakeholders?

Unable to judge. As indicated in Section 5.2.4 and as highlighted in Criterion 9B, no EIA follow-up governance arrangements are in place to garner holistic views about its implementation from stakeholders. The research participants note that for those that are in place, such as those in relation to monitoring arrangements, there are still deficiencies in terms of implementation and stakeholders are not informed of any such follow-up activities. In this regard, with the limited to no information available, it is difficult to determine whether the existing arrangements were upheld or delivered appropriately by regulators, and ultimately, considered legitimate.

A general view between the research participants indicated EIA effectiveness can be ensured only if there is a fully-functional EIA follow-up system, clear in its scope and function. This step in the EIA process is seen to guarantee that the environmental impacts predicted in EIA are monitored, managed and appropriately addressed, as relevant, during project implementation. Despite the relative lack in existing arrangements, two respondents provided practical examples related to effective EIA follow-up governance, ensuring its legitimacy, particularly with all stakeholders:

- (i) A wastewater treatment plant received the green light from the permitting authority for construction, with discharge of the final effluent to the sea. The EIA predicted no significant impacts on the *Posidonia*³⁶ communities beyond 100m from the outfall. After some years of plant operation, the EIA follow-up consultants engaged by the project proponent informed the regulator that monitoring results were showing a gradual deterioration of *Posidonia* communities beyond 100m from the outfall and suggested a number of alternative remedial measures, including an additional treatment stage before effluent discharge. The regulator evaluated the alternatives suggested by the consultants and mandated an additional treatment stage before effluent discharge. Subsequent monitoring showed a gradual re-colonisation by *Posidonia* in the previously deteriorated areas around the outfall. In this case, timely action by the regulator and the project proponent reduced environmental impact to an acceptable level as predicted by the EIA. The improved effluent quality was a direct result of the follow-up's ability to identify and rectify issues.
- (ii) An EIA for a building scheme in a pristine area predicted no significant disturbance of a threatened species beyond a buffer zone. However, EIA follow-up showed considerable disturbance that can eventually lead to the complete extinction of the species from the area. The follow-up suggested the relocation of the threatened species further away from the disturbed zone. This remedial measure was approved by the regulator. As a result of EIA follow-up and relocation, the threatened species had a chance to proliferate in an area well away from the development.

³⁶ *Posidonia oceanica*, commonly known as Neptune grass or Mediterranean tapeweed, is a seagrass species that is endemic to the Mediterranean Sea.

- (iii) Air quality was monitored using standard methodology downstream of a waste incineration plant. No significant deterioration in air quality was detected beyond 500m from the stack, which was in line with the EIA predictions. Accordingly, the waste incinerator was declared compliant with respect to air quality and this was communicated to all stakeholders. As a result, opposition to the waste incinerator by NGOs and nearby communities decreased.
- (iv) The experience gathered from the relocation of mature trees from one area to another – seen as an easy solution/mitigation measure, without noting the high risks that the transplantation process may bring to the trees. Monitoring through EIA follow-up may inform such a process.

The results discussed above indicate that the lack of information regarding EIA follow-up and associated governance arrangements, leads to a situation where stakeholders are unable to determine whether any of the existing governance arrangements are functioning in a transparent, accessible and ultimately, legitimate manner. This, in turn, affects their perceptions of the effectiveness of EIA follow-up governance.

5.4 Conclusions

This chapter presents the results through: (i) a review of Maltese EIA follow-up procedures, thus looking at governance at the macro-level, (ii) the documentary analysis through five case studies (micro/project level), providing feedback regarding implementation and practice with the aim of further understanding the macro-level situation, and (iii) an analysis of stakeholder perspectives vis-à-vis EIA follow-up.

As discussed earlier in this chapter, the analysis of EIA follow-up governance in Malta, through a review of the associated processes, supported by an analysis of micro-level case studies, has highlighted a significant lack of governance arrangements related to EIA follow-up. Present governance arrangements focus primarily on monitoring provisions and compliance-related requirements.

This corroborates with the results arising from the analysis of the stakeholder perceptions, which again highlighted a significant lack of governance arrangements related to EIA follow-up in Malta, with present arrangements focusing solely on monitoring arrangements and compliance-related requirements. The limited information available on EIA follow-up governance influenced the responses of the research participants, mostly focusing on monitoring requirements (which they are most familiar with) rather than looking at EIA follow-up, with all of its elements.

This reflects on the evaluation of their effectiveness, where EIA follow-up governance arrangements may be seen as partially effective on the procedural and substantive aspects, however exhibiting significant deficiencies in terms of transactive effectiveness and legitimacy. With this overall evaluation, Chapter 6 now reflects on the previous chapter, applying and interpreting the results, within the theoretical context of EIA follow-up governance and effectiveness, as discussed in Chapters 2 and 3.

Chapter 6: Discussing EIA follow-up governance and EIA effectiveness

Chapter 6 – Discussing EIA follow-up governance and EIA effectiveness

6.1 Introduction

The preceding chapter has explored EIA follow-up governance by looking at Malta from a macro lens through a review of EIA follow-up processes, supported by a documentary analysis of micro/project level case studies, together with the stakeholder perceptions of the EIA follow-up governance arrangements for Malta. This has been carried out through the application of the best practice principles for EIA follow-up governance and their respective criteria, as identified in Chapter 3. This chapter mirrors the disappointing situation related to EIA follow-up discussed in the literature review, echoing works which highlighted either an outright absence of EIA follow-up and other related inadequacies in resourcing, practice and implementation (e.g., Arts et al., 2001; Fitzpatrick & Williams, 2020; Hulett & Diab, 2002; Jalava et al., 2010; Jones & Fischer, 2016; Morrison-Saunders & Arts, 2004a, 2024).

This discussion chapter delves deeper into this aspect, examining the relationship between EIA follow-up governance and EIA effectiveness, with the narrative discussion utilising the 10 best practice EIA follow-up governance principles defined in Chapter 3 as a guide. The results derived from the macro-level analysis of Malta are applied to the four effectiveness dimensions as follows:

- Section 6.2 - Establishing EIA follow-up governance arrangements (Procedural effectiveness)
- Section 6.3 - Understanding the contribution of EIA follow-up governance (Substantive effectiveness)
- Section 6.4 - Ensuring effective and efficient EIA follow-up governance (Transactive effectiveness)
- Section 6.5 - Guaranteeing legitimate EIA follow-up governance (Legitimacy)

The 10 best practice principles are addressed in sequence as each of these abovementioned four sections unfold.

This discussion leads into Chapter 7 and the conclusion of this thesis, by presenting the final version of the evaluation framework for effective EIA follow-up governance, through the best practice principles and criteria, together with a final overview of the research. This chapter also discusses how the research questions have been addressed, together with presenting suggestions and recommendations for EIA follow-up practice in Malta and worldwide, and providing future research directions.

6.2 Establishing EIA follow-up governance arrangements (Procedural effectiveness)

One of the key foundations to ensure that EIA follow-up is being implemented in practice is having in place *(1) legislative provisions which specify EIA follow-up requirements*. The governance arrangements for EIA follow-up, including relevant legislative provisions, need to be clear in order to provide the necessary direction and guidance (Morrison-Saunders et al., 2021, 2023; Pinto et al., 2019). The outcomes of the documentary analysis (see Chapter 5), together with the insight into the stakeholders' perspectives have indicated that EIA follow-up in Malta is only partially

being implemented, therefore highlighting the fact that either the existence of legislative provisions does not guarantee a holistic implementation of EIA follow-up requirements or that knowledge of EIA follow-up is limited or altogether missing.

Whilst one may argue that EIA follow-up is only partially being implemented in Malta, one needs to understand the reason behind this. As discussed in Chapter 5, the legislative provisions in the Maltese EIA regulations and subsequent processes focus almost exclusively on aspects of monitoring and, very limitedly, to evaluation in the form of auditing and post-permit verification.

Understandably, as presented in Chapter 5, stakeholders in Malta associate EIA follow-up to monitoring-related activities. However, regardless of the specific legislative provisions, EIA follow-up requirements and activities are regulated in practice through the implementation of development permission conditions (Morrison-Saunders & Arts, 2024; Morrison-Saunders et al., 2023; Olszynski, 2021). These conditions would ensure that EIA follow-up requirements are followed on a case-by-case basis, with their implementation often linked to compliance obligations, as in the case, for example, of Western Australia and the Netherlands. Morrison-Saunders and Arts (2024) highlight how for these two jurisdictions, standardised wording and case specific wording related to EIA follow-up provisions are included in the respective approval conditions.

With an evident emphasis being placed on the activities and actions leading towards the consent decision (Fitzpatrick & Williams, 2020), any non-mandatory follow-up requirements may prove difficult to implement, therefore placing further importance on the presence of legislative provisions geared towards EIA follow-up. The absence of EIA follow-up governance arrangements related to management, engagement and communication is evident for the Malta case study, with no evidence or information identified in any of the cases analysed nor in the stakeholders' responses. This also mirrors the absence of such provisions in the EIA Directive (EurLex, 2014), where only the bare minimum requirements are included, i.e., provisions relative to monitoring. As highlighted in Chapter 5, detailed legislative provisions related to EIA follow-up may be perceived at EU level as requiring additional allocation of resources and leading to additional administrative burden for each Member State. The current approach towards the implementation of EIA follow-up aspects, i.e., the inclusion of monitoring requirements, without additional references to evaluation, management, participation and governance, ensures that at least one of its crucial aspects is carried out.

The inclusion of additional legislative provisions pertaining to EIA follow-up elements (beyond monitoring and evaluation), may require a form socio-cultural paradigm shift in the understanding of the importance of management, engagement and communication. Challenging of the status-quo vis-à-vis EIA follow-up could include the publication of specific guidance documents. These would provide stakeholders, including the regulators themselves, increased understanding of EIA follow-up activities, which in turn could influence the current way of thinking in terms of its importance (Fitzpatrick & Williams, 2020). Noting the lack of published guidance documents on EIA follow-up (as highlighted in Chapter 5), the dissemination of

informative guidance notes such as the *International Best Practice Principles – Impact Assessment Follow-Up* (Arts & Morrison-Saunders, 2022a) and its accompanying guidance for implementation (Morrison-Saunders et al., 2024), both published by the IAIA, could be a means of bridging the existing gap in information pertaining to EIA follow-up.

In terms of Malta, one can conclude that in spite of having legislative provisions related to EIA follow-up, which almost exclusively focus on monitoring (both in terms of specific provisions in the relevant regulations and development permission conditions), it is difficult to verify due to the overall absence of information. Legislative expectations aimed towards follow-up, therefore, are not being fulfilled.

Governance arrangements also need to focus on (2) *establishing clear identification of responsibilities in follow-up in EIA procedures and regulations*. Identified as one of the problems of EIA follow-up by Arts (1998) and Morrison-Saunders and Arts (2004a), organisational limitations pose a significant hindrance with respect to its appropriate implementation. As discussed in Chapter 5, the results have indicated that there are no staff dedicated exclusively to EIA follow-up employed with the regulator in Malta and thus, any follow-up activities would need to compete for due prioritisation with pre-consent activities and processes, most of which are mandatory and often time-barred. An increase in staff complement with some officers focusing exclusively on EIA follow-up or the setting up of a team dedicated to EIA follow-up activities, may possibly address concerns in relation to non-implementation from the regulator's end. This, however, cannot be considered as a quick-fix in terms of governance arrangements.

Further to the regulator's staff complement, EIA follow-up governance arrangements are to ensure that the responsibilities of all stakeholders, i.e., regulators, project proponents, eNGOs and the public are clearly identified. Being a long-standing best practice principle in EIA follow-up (Arts & Morrison-Saunders, 2022a, 2022b; Marshall et al., 2005; Morrison-Saunders et al., 2007), a clear division of roles, tasks and responsibilities is important. Ideally, this should be set down as a sequence of clearly defined steps, outlining tasks and responsibilities within and among the different stakeholders, preferably as part of the legislative provisions for EIA follow-up.

As indicated by the results (Sections 5.2.3 and 5.3.3 refer), this information regarding responsibilities of stakeholders is limited, with only the responsibilities of the regulator in relation to monitoring (and very limitedly to evaluation through post-permit analysis) are identified, reflecting the provisions in the Maltese EIA regulations. Nonetheless, practice may be more complex in terms of responsibilities for EIA follow-up, which should be shared between the three main stakeholders: project proponents, regulators and the public (Morrison-Saunders & Arts, 2024). Changes in consultants (e.g., different consultants carrying out baseline monitoring and post-consent monitoring), changes in regulatory functions (through changes in administration following a general election or a cabinet reshuffle), changes in the officers processing cases (e.g., different officers processing cases for different parts of the EIA process or staff turnover), and changes in the communities and eNGOs should be considered when accounting for the complexities of these responsibilities.

Taking the regulator in Malta as an example, despite the institutional and administrative changes undergone by both the planning and the environmental regulators (see Appendix L and M), pre-consent EIA functions have always fallen under the responsibility of the EIA Team within the EIA regulator. EIA follow-up documentation (namely monitoring reports) are sporadically referred to this same team through consultation by the permitting authority, however these tasks are not given the same priority as for pre-consent consultations. At this stage, only internal consultation with the Compliance and Enforcement Unit is carried out, in relation to development permission conditions imposed by the ERA itself. In practice, and as highlighted by the results, EIA follow-up responsibilities in Malta are only limited to monitoring and, very rarely, to evaluation. Governance arrangements in this regard would need to ensure that the responsibilities for all EIA follow-up aspects are duly defined, preferably through a legally binding instrument (being provisions in dedicated legislation or specific development permission conditions) to ensure that all stakeholders who are involved in these processes are aware of what is expected of them.

One final consideration associated with procedural aspects relates to the specification of *(3) compliance and enforcement provisions related to EIA follow-up*. As indicated by the results, generic provisions in relation to compliance and enforcement, together with a penalty system, are included in the EIA regulations in Malta. These cover the implementation of all mandatory provisions, therefore ostensibly including EIA follow-up. The limited to no information provided by stakeholders with respect to compliance and enforcement provisions underlines the need for appropriate governance arrangements, once suitable legislative provisions for all aspects of EIA follow-up are in place. These would include ensuring the availability of more resources to compliance and enforcement activities, particularly on-site inspections, together with an administrative monetary penalty regime, targeted towards non-compliance to follow-up requirements (Olszynski, 2021).

In summary, with respect to procedural effectiveness of EIA follow-up governance, the results from the Malta case study indicate that whilst legislative provisions in relation to monitoring (and very limitedly to evaluation) and respective compliance and enforcement do exist, verifying whether these are carried out in practice for all cases is not possible.

6.3 Understanding the contribution of EIA follow-up governance (Substantive effectiveness)

In order to understand the contribution of follow-up to EIA, it is essential for stakeholders to be aware of the outcomes of such activities. This would, in turn, reinforce the need for EIA follow-up and ensure that all parties involved are aware of its scope and purpose. Thus, one (in this case, mostly the regulator) needs to *(4) ensure reporting of EIA follow-up outcomes, to facilitate adaptive management and promote continuous learning from experience to improve future practice*. The lack of reporting of EIA follow-up outcomes in Malta (including those related to compliance and enforcement) follows a lack of governance arrangements and good follow-up practice aimed towards openness, transparency and disclosure of information (Fitzpatrick & Williams, 2020; Morrison-Saunders et al., 2021, 2023). Supporting evidence to this was also the difficulty

encountered by the researcher herself to gain access to EIA follow-up documentation, as discussed in Chapter 4.

Stakeholders in Malta have also indicated that they are aware of the lack of reporting of follow-up outcomes, highlighted by the limited information provided with respect to this aspect of EIA follow-up governance. The suggestions for regular meetings, workshops or forums aimed towards the dissemination and disclosure of information related to EIA follow-up outcomes are clear testament for the need for such information to be made available. Mandatory reporting of EIA follow-up activity to all stakeholders and the public is crucial (Morrison-Saunders & Arts, 2024; Morrison-Saunders et al., 2023) and this could be tackled through good governance arrangements such as the inclusion of reporting of EIA follow-up outcomes (i.e., specialist reports, monitoring reports) as dedicated provisions in the EIA regulations or specific requirements in development permission conditions (Morrison-Saunders et al., 2023).

It is important, however, that any published content in terms of EIA follow-up outcomes is accessible. Simply uploading or publishing documents or reports in a central repository that is accessible to anyone is not enough to make it useable or useful (Noble, 2020; Olszynski, 2021). In Malta's case, the central repository, e-Apps, is accessible to any citizen with an eID (a personalised username and password are required) and therefore may be considered to be not as easily accessible. In addition, while the project proponents may upload documentation related EIA follow-up outcomes (namely monitoring reports) on this portal, not all information is made visible or available to stakeholders (i.e., full accessibility and visibility is only a privilege of the permitting authority). Ensuring that EIA follow-up outcomes are accessible and duly transmitted to stakeholders through the appropriate governance arrangements would ensure their substantive effectiveness.

The lack of reporting of EIA follow-up outcomes in Malta also reflects the lack of awareness of stakeholders as to whether significant impacts of a project identified through the EIA processes would have been addressed and whether all mitigation measures would have been implemented. The stakeholders' failure to determine whether such issues have been addressed, contrasts with the evidence provided by the Maltese case studies, in that the significant impacts of the projects would have been addressed through the inclusion of specific conditions in the development permission. This, in turn, reflects on the inability of Maltese stakeholders to determine whether all mitigation measures would have been implemented, thus flagging a significant failure in terms of transparency and accountability (Morrison-Saunders & Arts, 2024; Morrison-Saunders et al., 2023).

This deficiency in terms of reporting of outcomes also reflects the lack of opportunities for learning within the projects or for learning and sharing with other project proponents and/or stakeholders. Having limited to no documentation in relation to follow-up outcomes, hinders the possibilities for meaningful learning opportunities from past experiences that data availability and disclosure alone cannot contribute to (Dipper et al., 1998; Morrison-Saunders & Arts, 2024; Morrison-Saunders et al., 2023; UNECE, 1998; Wood, 1999).

In addition, with the lack of opportunities for learning through follow-up, it is equally difficult for opportunities for adaptive management to rise, particularly when this is neither planned nor systematic (Olszynski, 2021). Reporting of EIA follow-up outcomes is essential as it lays the foundations for stakeholder and community involvement, particularly with respect to adaptive management. Governance arrangements should facilitate opportunities for adaptive management through EIA follow-up, also noting that it is one of the longest standing EIA follow-up best practice principles (Arts et al., 2001; Fitzpatrick & Williams, 2020; Morrison-Saunders et al., 2021, 2023; Pinto et al., 2019), and through which opportunities for learning can emerge.

Good governance arrangements should also *(5) establish clear, pre-defined and well-justified performance criteria for EIA follow-up*. This is necessary to guarantee that follow-up activities produce useful data, information and outcomes which can be easily measured and appraised against clear and pre-defined performance criteria (Arts & Morrison-Saunders, 2022a, 2022b; Pinto et al., 2019). With respect to Malta, the results indicated that there is no evidence of pre-identified criteria, therefore assessing EIA follow-up performance is not possible. Governance arrangements in this regard need to be stepped up, with identified performance criteria being rigorous and a reflection of best practice (Arts & Morrison-Saunders, 2022a, 2022b). It is important for stakeholders to be aware of the importance of the identification of clear performance criteria, with this requirement preferably flagged as early as possible in the process. For example, this requirement may be included as standard wording in the terms of reference for all projects requiring an EIA, and communicated to the project proponent for the carrying out of the EIA studies.

The final observation with respect to substantive effectiveness of EIA follow-up governance, is that in order for the above to occur, all stakeholders, including the project proponents and the regulators, need to be well informed of the scope and purpose of follow-up activities. Having governance arrangements in place for the reporting of outcomes, together with the identification of performance criteria, without stakeholders *(6) having a clear understanding of the purpose and importance of EIA follow-up*, would lead to EIA follow-up activities being impact-less. Appropriate provisions need to be in place to ensure communication of the importance of EIA follow-up to all stakeholders, being project proponents, regulators and the public (Pinto et al., 2019). This could possibly be done through appropriate outreach exercises which could take various forms, e.g., from the publication of guidance documents, informative leaflets, to dedicated online portals and social media channels, webinars, to face-to-face discussions, workshops, meetings, aimed to further inform stakeholders regarding the importance of EIA follow-up.

A form of collaboration highlighting the importance of EIA follow-up, particularly at post-consent, can be observed through two-way collaboration between the regulatory authorities. The results in Chapter 5 indicated a degree of cooperation between the two Maltese regulatory authorities with respect to some EIA follow-up activities, particularly through the formal consultation processes in relation to the submission of monitoring reports. This engagement between regulators should be extended to the other stakeholders, including the project proponents and

the public. Genuine engagement and a two-way flow of communication, e.g., between the regulators and the project proponents, or the regulators and the public or the project proponents and the public, regarding all aspects of EIA follow-up would be fundamental to EIA follow-up governance (Morrison-Saunders & Arts, 2024; Morrison-Saunders et al., 2023).

In summary, as in the case of procedural effectiveness, the results from the Malta case study again indicate that with the very limited to no information related to EIA follow-up outcomes, pre-established performance criteria and the scope and function of EIA follow-up, the evaluation of substantive aspects of EIA follow-up governance is thus hindered.

6.4 Ensuring effective and efficient EIA follow-up governance (Transactive effectiveness)

Effective and efficient EIA follow-up governance cannot however be ensured without the (7) *allocation of adequate resources*. None of the governance arrangements discussed above would be implementable without adequate time, staff and capacity (Arts & Morrison-Saunders, 2022a, 2022b; Morrison-Saunders et al., 2003, 2007). EIA follow-up needs to be cost-effective, efficient, pragmatic and fit-for-purpose; however, this cannot be the case without adequate resourcing supporting governance arrangements (Pinto et al., 2019).

Appropriate human resources, time and budgetary resources need to be in place to guarantee the implementation of EIA follow-up, especially when noting that all these are clearly imbalanced towards EIA activities and processes that occur prior to the development consent decision (Morrison-Saunders et al., 2021), as is Malta's case, discussed in Chapter 5. Similar to Pinto et al.'s (2019) conclusions, which denoted how information regarding resources was unknown and that insufficient information was available to determine whether follow-up was pragmatic, fit-for-purpose and cost-effective, the results for Malta revealed a similar situation. The results indicated that information related to the allocation of resources from both the regulators and the project proponents is either very limited, or altogether not available or not possible to access. Whilst one can infer information with respect to human resources, staff complement and capacity being allocated by regulators and project proponents towards EIA follow-up, information with respect to time allocation and financial resources may prove to be trickier to gain access to, as per the research results.

With very limited arrangements being in place (as evidenced by the results), it is difficult to (8) *ensure that governance arrangements are appropriately efficient and effective*. With more information available with respect to follow-up outcomes, one may then be in a position to determine to what extent these are attributable to the implementation of EIA follow-up governance arrangements. This, in turn, would help determine whether the current arrangements are efficient and effective.

In Malta's case, the inclusion of legislative provisions related to monitoring, both as specific inclusions in EIA legislation and as development permission conditions, warrant its implementation in an efficient and effective manner (i.e., technically, monitoring should be carried

out in line with the conditions set in the development consent decision, in terms of the environmental aspects being monitored and the timing set to do so, and is not just simply carried out as per the legislative provisions indicating so). As presented in the results, any monitoring that is requested should be carried out by the project proponent and subsequently the reports emerging from such would need to be submitted to the regulators within the stipulated timeframes.

In a similar manner, it is difficult for stakeholders to identify ways in which the regulator could have ensured that EIA follow-up processes were carried out more efficiently and effectively, with the limited information available on the matter. Engagement between the regulator, the project proponent, relevant stakeholders and the public is considered essential even in relation to this aspect of governance. As identified by Morrison-Saunders et al. (2023), two-way communication between the regulator and the stakeholders, or the regulator and the public, for example (as already highlighted earlier in Section 6.3), can aid in pointing out matters related to redundancy or inefficiency in EIA follow-up processes in a prompt manner.

In summary, due to the limited information related to the allocation of resources (human, time, budgetary) and to EIA follow-up outcomes, it is not possible to establish whether EIA follow-up governance in Malta follows transactive effectiveness.

6.5 Guaranteeing legitimate EIA follow-up governance (Legitimacy)

Communication and engagement with stakeholders are key in ensuring *(9) transparency and accessibility of EIA follow-up to all stakeholders/parties involved*. Recalling the earlier discussion in relation to the stakeholders' understanding of the scope and purpose of EIA follow-up (see Section 5.3 above), the regulators and/or project proponents are required to take reasonable steps to make EIA follow-up accessible to all stakeholders and ensure that the importance of EIA follow-up is understood by all.

The simple act of providing non-technical summaries or printed documentation related to EIA follow-up or the creation of dedicated websites and social media accounts for stakeholders on its own is not sufficient to make follow-up accessible (Bisset, 1987; Pinto et al., 2019). Governance arrangements need to secure the physical availability and accessibility to the relevant documentation (be it physically, including easy access to documentation at the regulators' offices or digitally, through appropriate means such as user-friendly web portals to download the relevant documentation), but also to the processes themselves, i.e., encouraging more active participation in EIA follow-up (Au & Hui, 2004; Morrison-Saunders & Arts, 2024; Morrison-Saunders et al., 2024).

Whilst ease of access to documentation should be a given, any EIA follow-up documentation should be made understandable to ensure its full accessibility (e.g., through easily legible infographics rather than text), and if possible, translated into languages spoken by all the affected communities (Morrison-Saunders & Arts, 2024; Morrison-Saunders et al., 2007, 2023, 2024; Pinto

et al., 2019). In fact, Morrison-Saunders et al. (2024) define accessibility in terms of EIA follow-up as follows:

“Accessibility is about the manner in which IA follow-up material is disclosed or made available. There are several considerations beyond transparency. Information must be readily available, understandable, and relevant with enough time provided to stakeholders to read, absorb, and seek advice before feedback deadlines. The emphasis of accessibility is thus on the meaning, understanding and availability of sufficient, specific and detailed follow-up information - objectives, activities, performance criteria, and data. There should be free and open access to technical reports, availability of summary reports in plain language, culturally appropriate material when engaging with community stakeholders (e.g., in relation to Indigenous Peoples), and active responses to feedback as part of the follow-up program.” (p.13).

Data and information should not be merely dumped onto stakeholders (Noble, 2020). Whilst noting that no such steps have been taken in Malta to ensure accessibility and transparency of EIA follow-up actions, proposals made by the stakeholders as part of the policy Delphi responses indicate that initiatives towards the implementation of such steps would be supported.

As a sign of good governance (McHenry et al., 2015), accessibility and transparency to stakeholders should also take into account appropriate mechanisms where all stakeholders, including the public, can provide feedback in relation to EIA follow-up (Morrison-Saunders & Arts, 2024; Morrison-Saunders et al., 2024). With the appropriate governance arrangements in place, ranging from one-off events such as stakeholder engagements events including workshops, forums and public consultation sessions, to open and transparent communication channels involving regular ongoing progress updates, online platforms and feedback systems, stakeholders, beyond the regulators and the project proponents (Pinto et al., 2019), can feel actively involved in follow-up processes. This approach would garner a sense of legitimacy through the increased opportunities for engagement (Pope et al., 2018) and *(10) ensure legitimacy of EIA follow-up governance arrangements*.

This cannot be said to be the case for Malta, where neither the case studies nor the stakeholders' responses have identified any such feedback mechanisms to be in place, therefore it is not possible to pass judgement on their legitimacy or effectiveness. The limited implementation of governance arrangements related to EIA follow-up in Malta has created a situation where stakeholders are not in a position to determine whether these have been appropriately delivered by regulators (with respect to monitoring, for which some governance arrangements are in place, not all stakeholders are informed of these submissions, therefore making them unaware of any follow-up activities). This, in turn, creates a situation where it is not possible to determine whether EIA follow-up governance processes are legitimate or otherwise.

6.6 Conclusions

This discussion chapter has explored the findings following the application of the best practice principles and criteria for effective EIA follow-up governance at the macro-scale. The evaluation framework, utilising criteria which provide an introspective reflection of the principles themselves, provided a focused assessment of EIA follow-up governance in Malta. Its application

to both the case studies and the stakeholders' responses, proved to be relatively easy. This, in turn, provided clear feedback in relation to the performance of governance arrangements for EIA follow-up. It is evident, however, that the lack of information available both on EIA follow-up itself and on its governance arrangements may hinder a robust judgement of their performance.

The evaluation framework, through the application of the best practice principles and related criteria, has proven useful in analysing performance of governance arrangements at the macro level, highlighting their current state-of-play, but also identifying deficiencies that would warrant their improved effectiveness. Its structure is designed to enable any interested party to evaluate any jurisdiction implementing EIA, most particularly EIA follow-up, providing guidance vis-à-vis best practice rather than acting as a compliance check-box tool.

The overall conclusions related to effective governance of EIA follow-up at the macro scale, together with the evaluation of EIA follow-up governance effectiveness in Malta, are presented in the next final chapter, together with suggestions and recommendations for future practice and research opportunities.

Chapter 7: Conclusions

Chapter 7 – Conclusions

7.1 Introduction

This final chapter of the thesis aims to summarise the key findings of the research and present its conclusions. It recalls the two research questions identified in the first chapter, and evaluates how the subsequent chapters addressed them through the literature review, the methodological framework chosen and the presentation and analysis of the results.

The chapter then delves into an explanation of the significance of the research and its contribution to the existing body of knowledge in the field, with an insight into its potential impact on future research, together with providing suggestions and recommendations for future EIA practice in Malta and application of the findings of the research in other jurisdictions around the world. The chapter concludes the thesis by raising relevant future research opportunities, building upon the groundwork established by this research.

7.2 Addressing the research questions through the research outcomes

In its exploration of the contribution of EIA follow-up governance to EIA effectiveness, the research first defines EIA follow-up, EIA follow-up governance and EIA effectiveness.

As discussed in Chapters 1 and 2, EIA follow-up is a fundamental component of EIA and should be essential if outcomes of a project subject to EIA are to be known. This should be accompanied by proper commitment towards its implementation, together with appropriate resourcing (Arts & Morrison-Saunders, 2022a, 2022b). Its main key elements include monitoring, evaluation, management, participation and governance. With respect to the latter, governance arrangements are required to enable the implementation of EIA follow-up activities. Noting how, regrettably, EIA follow-up is overlooked in terms of implementation, including in Malta, the research addresses the following research questions: the first question analysing what would constitute effective governance of EIA follow-up at the macro scale, while the second narrowing down to focus on how effective EIA follow-up governance is in Malta.

The best practice principles and criteria for effective EIA follow-up governance were inspired by the essence of a number of pivotal works. These were:

- (i) Hanna and Noble (2015) who utilise a Delphi study to identify effectiveness criteria for environmental assessment,
- (ii) Pope et al. (2018) who propose an EIA effectiveness framework with four dimensions – procedural, substantive, transactive and legitimacy,
- (iii) Pinto et al. (2019) who distil the EIA follow-up best practice principles into 24 criteria aimed to aid qualitative assessment of EIA follow-up performance of a project,
- (iv) Arts and Morrison-Saunders (2022a) who define the five key elements of IA follow-up and subsequently the 15 IA best practice principles, and
- (v) Morrison-Saunders et al. (2023) who propose 12 best practice principles for public participation in IA follow-up;

notwithstanding the wider literature review undertaken for this research. The principles and the respective criteria are therefore a result of an iterative process, derived from the works on theory

and practice in EIA, the data collection methods including the policy Delphi, leading to the evolution of the principles throughout the research study.

Therefore, through a pragmatist lens, a multi-method qualitative approach was adopted for this research (see Chapter 4), which included a documentary analysis of selected project-level case studies in Malta, together with elite interviews and focus group discussion, and a policy Delphi. The data served as the basis of the presentation of the results in Chapter 5, where the utility of the best practice principles and criteria was tested against a traffic-light system evaluation checklist.

Following the discussion in Chapters 5 and 6, Table 7.1 below presents the final version of the evaluation framework for effective EIA follow-up governance through best practice principles and criteria. The derivation of the evaluation framework for effective EIA follow-up governance, through the formulation of the best practice principles and criteria, addresses both research questions as follows:

Research Question 1: What would constitute effective governance of EIA follow-up at the macro scale?

The first two columns in Table 7.1 address RQ 1, presenting the best practice principles and criteria for effective EIA follow-up governance. The principles provide a comprehensive overview of those governance arrangements that any jurisdiction would need to have in place and implement to ensure effective EIA follow-up at the macro scale. As discussed in Chapter 6, the principles are interlinked, e.g., (i) it is not sufficient to have legislative provisions for EIA follow-up in place, without having sufficient capacity in the form of staff allocation, appropriate training and compliance and enforcement provisions, or (ii) ensuring that EIA follow-up documentation, such as monitoring reports are made available to all stakeholders including the public, does not necessarily imply that they are accessible to all. The foundation of the principles reflects the four effectiveness dimensions discussed by Pope et al. (2018), enabling the assessment made through the respective criteria to be an evaluation towards determining the effectiveness of EIA follow-up governance of any jurisdiction.

Research Question 2: How effective is EIA follow-up governance in Malta?

The final column in the same table illustrates the performance of EIA follow-up governance in Malta (i.e., at the macro scale), addressing RQ 2. This evaluation is a synthesis of the results arising from all the data collected as part of this research through the documentary analysis, the elite interviewing, the focus group discussion and the policy Delphi (i.e., a composite of the results presented in Sections 5.2 and 5.3).

The principles and the criteria were tested at the macro level through an assessment of the processes for EIA follow-up in Malta, aided by micro level case studies, and through stakeholder perceptions, which together provided a detailed evaluation of the effectiveness of EIA follow-up governance in Malta. As discussed in Chapter 6, the assessment highlighted multiple deficiencies in terms of governance arrangements, given that the present ones are mainly focused on monitoring for strictly procedural purposes, i.e., ensuring compliance to legislative provisions or

to development permission conditions. The principles related to procedural aspects, save for monitoring requirements, are only partially fulfilled in practice. Assessment of the other principles has highlighted significant deficiencies in terms of implementation of governance arrangements for EIA follow-up, notably those related to management, engagement and communication. In addition, the lack of information regarding EIA follow-up activities leads to a situation where it is difficult to determine substantive and transactive effectiveness and legitimacy.

Table 7.1 also provides a visual summary of the research outcomes, including the evaluation of the performance of EIA follow-up governance in Malta, synthesising the in-depth discussion in Chapters 5 and 6.

Table 7.1: The evaluation framework for effective EIA follow-up governance, including Malta's macro scale performance evaluation

<i>EIA follow-up governance principles</i> <i>To ensure effective governance of EIA follow-up, a jurisdiction should:</i>	<i>Detailed criteria for effective EIA follow-up governance</i>	<i>Malta (Macro-scale evaluation)</i>
1. Have <i>legislative provisions</i> which specify EIA follow-up requirements.	A. Is follow-up a requirement for all EIAs?	Partial
	B. Are provisions in place for each component of EIA follow-up? (i) Are provisions in place for monitoring? (ii) Are provisions in place for evaluation? (iii) Are provisions in place for management? (iv) Are provisions in place for stakeholder communication and engagement?	Partial
	C. Are the above provisions implemented in practice?	Partial
	D. Have any guidance documents to aid the appropriate implementation of EIA follow-up provisions been published?	No
2. Establish clear identification of <i>responsibilities</i> in follow-up in EIA procedures/regulations.	A. Are there staff within the regulatory authority with specific responsibilities for EIA follow-up?	No
	B. Are the responsibilities of all stakeholders for follow-up, i.e., regulator/s, project proponent/s, eNGOs and the public clearly identified?	No
3. Specify <i>compliance and enforcement</i> provisions related to EIA follow-up.	A. Do the regulations include provisions for compliance and enforcement, in relation to EIA follow-up?	Partial
	B. If yes, is a penalty system related to compliance and enforcement in place?	Partial
4. Ensure <i>reporting</i> of EIA follow-up outcomes, to facilitate <i>adaptive management</i> and promote continuous <i>learning from experience</i> to improve future practice.	A. Are EIA follow-up outcomes reported to all stakeholders, including the public?	No
	B. Have all (significant) impacts of a project identified in the EIA been addressed through the identification of appropriate mitigation measures?	Yes
	C. Have all mitigation measures, included as development permission conditions, been implemented?	Unable to judge
	D. Is there opportunity/evidence of learning within project/s?	No
		No

<i>EIA follow-up governance principles</i> <i>To ensure effective governance of EIA follow-up, a jurisdiction should:</i>	<i>Detailed criteria for effective EIA follow-up governance</i>	<i>Malta (Macro-scale evaluation)</i>
	E. Is there opportunity/evidence for adaptive management? F. Is there opportunity/evidence for learning/sharing with other proponents and/or stakeholders?	No
5. Establish clear, pre-defined and well-justified <i>performance criteria</i> for EIA follow-up.	A. Are clear EIA follow-up performance criteria pre-identified in order to appraise information, results and outcomes emerging from follow-up actions? B. Are follow-up results and outcomes compared to these performance criteria?	No No
6. Have a clear <i>understanding</i> of the purpose and importance of EIA follow-up.	A. Are all stakeholders informed of the purpose of EIA follow-up? B. Are there provisions for communicating the importance of follow-up? C. Is there clear and ongoing collaboration between regulatory authorities who are responsible for EIA follow-up?	No No Yes
7. Allocate adequate <i>resources</i> to ensure EIA follow-up.	A. Are adequate human resources provided to carry out EIA follow-up (e.g., by regulators and project proponent/s alike?) B. Is appropriate time being allocated towards EIA follow-up (e.g., by regulators and project proponent/s alike?) C. Are enough financial resources being allocated towards EIA follow-up (e.g., by regulators and project proponent/s alike)?	Unable to judge Unable to judge Unable to judge
8. Ensure that <i>governance arrangements</i> are appropriately efficient and effective.	A. How did the environmental outcomes come about? (i.e., to what extent can the outcomes be attributed to EIA follow-up governance specifically?) B. Was there evidence of redundancy or inefficiency in EIA follow-up processes by the regulator? (e.g., did the stakeholders identify ways these processes could have been done more efficiently and effectively by regulators?)	Unable to judge Unable to judge
9. Ensure <i>transparency</i> and <i>accessibility</i> of EIA follow-up to all stakeholders/parties involved	A. Have reasonable steps been taken (by regulators and/or project proponents alike) to make EIA follow-up accessible to all stakeholders, including the public? (e.g., provisions of non-technical summaries, printed material, dedicated websites, social media accounts?) B. Are there appropriate mechanisms in place where all stakeholders and the public can provide feedback in relation to EIA follow-up, ensuring transparency and legitimacy?	No No
10. Ensure <i>legitimacy</i> of EIA follow-up governance arrangements.	A. Were the EIA follow-up governance arrangements (for the project) upheld or delivered appropriately by regulators in the views of stakeholders?	Unable to judge

Limitations

The research has also presented a number of external limitations, which can be summarised into two main issues:

1. Accessibility and availability of information – issues included fragmented archiving of information related to EIA and development permissions, withholding information or information being difficult to access, i.e., only accessible via visits to the respective authorities' offices. Interestingly, the issues regarding accessibility and availability corroborate with the problems highlighted by the research participants in relation to EIA follow-up documentation.
2. Low participation rates – the timing of the data collection processes coincided with two major events, a political crisis in Malta in 2019 and the COVID-19 pandemic throughout 2020 and 2021, both of which lead to participation rates being significantly low. The use of the policy Delphi in 2023 (once the COVID-related restrictions eased), together with the security of anonymity and lack of face-to-face interaction, partly overcame this inertia in participation, leading to higher and more significant participation rates.

Further to the above, the author also acknowledges researcher-related limitations for the methodological approaches adopted for this research. The initial approaches to data collection involving stakeholders were limited, i.e., low attendance in the interviews and focus groups. This was remedied later on by utilising the Delphi technique; in hindsight, it would have been more effective to have employed the Delphi approach throughout the stakeholder engagement and data collection phase. Confidentiality and anonymity, characteristic of the Delphi technique, would have ensured that the research participants felt engaged with the research at the earlier stages of data collection process. The identification of the research focus, i.e., EIA follow-up governance and EIA effectiveness earlier in the research process could have also possibly contributed to a stronger design of the methodological framework.

Presentation and publication of research

Part of the research, i.e., the best practice principles and criteria for EIA follow-up governance have also been presented at one of the sessions at IAIA24 (*'Making follow-up happen to transform IA practice'*), the 43rd Annual Conference of the IAIA in Dublin, Ireland in April 2024, through the presentation of the paper: *Effectiveness criteria for EIA follow-up governance at the macro-level* (Smith, 2024).

7.3 The contribution to knowledge

Despite the limitations faced by the research as discussed in the previous section, the best practice principles and criteria for effective EIA follow-up governance build upon the existing theoretical body of knowledge related to EIA effectiveness and EIA follow-up, leading to the formulation of the evaluation framework (discussed in detail in Chapter 3), with a new focus on EIA follow-up governance. This bridges the research gap in relation with EIA follow-up governance and EIA

effectiveness at the macro-scale, serving as the original contribution to knowledge at international level. The research also serves as a basis for the utility and application of this framework for other jurisdictions worldwide.

The application of the evaluation framework, including the best principles and criteria, to Malta provides a basis for further learning into EIA follow-up governance in the Maltese context.

With these considerations, the following sections provide suggestions and recommendations not just for future EIA practice in Malta, but also to EIA practice at an international level, ensuring that governance arrangements translate into more efficient and effective EIA follow-up.

7.4 Suggestions and recommendations for future EIA practice in Malta

Through the application of the best practice principles and criteria, the research has identified strengths and weaknesses of EIA follow-up governance in Malta. In this regard, the following suggestions and recommendations are being proposed:

- Legislative provisions vis-à-vis EIA follow-up need to be strengthened. Whilst acknowledging that legislative requirements are in place with respect to monitoring and, albeit limitedly, to post-permit evaluation; more rigorous provisions related to all aspects of EIA follow-up, making explicit reference to management, engagement and communication, need to be in place, building on the existing (albeit limited) governance-related provisions. This would also apply to development permission conditions in the eventuality that an update to the regulations is not possible to execute in practice.
- New or updated guidance documents or notes related to the implementation of EIA follow-up need to be published by the EIA regulator, either reflecting new legislative provisions or as a good practice guide for EIA follow-up. Noting how the research has indicated that stakeholders lack the necessary knowledge about EIA follow-up activities, guidance documents based on practice would provide appropriate insight into follow-up matters. International guidance notes or documents such as the *International Best Practice Principles – Impact Assessment Follow-up* (Arts & Morrison-Saunders, 2022a) and the accompanying guidance document (Morrison-Saunders et al., 2024) are to be utilised as a basis for such documentation. Dissemination of such information by the EIA regulator is also essential.
- The EIA regulator is to ensure that there are staff with very specific responsibilities regarding EIA follow-up. This could be improved through either: (i) appropriate training in EIA follow-up activities for existing staff members, or (ii) setting up a new team dedicated exclusively to EIA follow-up matters, working closely with the present EIA team, and the unit responsible for compliance and enforcement or, (iii) having staff with the existing team with sole EIA follow-up responsibilities.
- The provisions related to compliance and enforcement vis-à-vis EIA follow-up implementation need to be strengthened, through related legislative provisions,

supported by adequate resources, i.e., staff, time, budget. An appropriate and fair penalty system should also be in place, directly linked to EIA follow-up provisions.

- EIA follow-up outcomes should be openly published, preferably in a dedicated portal, managed by the EIA regulator. It is not enough for the project proponent to upload these on the permitting authority's online portal, but rather it should ensure that these are accessible to all stakeholders. In addition, this documentation should be accompanied by a brief explanatory note, or a non-technical summary, which is easily legible (i.e., the use of infographics may help). This would strengthen EIA follow-up governance through increased transparency, accountability, accessibility and legitimacy.
- The EIA regulator should ensure that environmental statements (through the terms of reference prepared at the scoping stage) include clear EIA follow-up performance criteria for verification of EIA follow-up outcomes (i.e., threshold or trigger indicators).
- The EIA regulator should encourage the formulation of an EIA follow-up implementation plan to be included as part of the requirements for the submission of an environmental statement, as part of the EIA process.
- The research results indicated that not all stakeholders were aware of the scope and purpose of EIA follow-up. In this regard, outreach activities such as information sessions and training workshops should be organised/led by the EIA regulator to disseminate further information about EIA follow-up activities. Project proponents should also be actively involved. This dissemination of information regarding the scope and importance of EIA follow-up should also be extended to decision-makers and government officials, aiming to address the issue of lacking political will towards implementation of EIA follow-up.
- The communication and collaboration between the EIA regulator and the permitting authority should be strengthened and enhanced.
- All stakeholders should have the opportunity to provide feedback with respect to EIA follow-up activities through accessible means, e.g., in-person opportunities, such as workshops, forums, meetings; online, through dedicated portals, easy-to-use feedback sections in relation to EIA follow-up activities or through social media channels.

It should also be highlighted, however, that some of these suggestions and recommendations may have implications/limitations in terms of additional resources required, i.e., increased staff complement, increased allocation of time and budgetary requirements, shared by both the project proponent and the regulator. For example, additional legislative provisions, including compliance and enforcement requirements, explicitly targeted towards EIA follow-up may possibly lead to increased financial burden on both project proponents and regulators. Noting how this may limit implementation, counter recommendations and suggestions towards best practice such as the dissemination of information such as guidance documents and stakeholder outreach should be considered to ensure clear understanding of the importance of EIA follow-up. The implementation of these recommendations, particularly from Maltese regulators, will also strengthen key

governance elements such as transparency, accessibility, effectiveness, efficiency and ultimately, legitimacy of the EIA process.

Following the overview of how the research outcomes can be applied to future EIA practice in Malta, the following section looks into how these, namely the evaluation framework for effective EIA follow-up governance and the best practice principles and criteria, can be applied at the international level.

7.5 Application to EIA practice at an international level

Malta seems no different to other jurisdictions around the world in terms of implementation of EIA follow-up, therefore many of the suggestions and recommendations made for Maltese EIA follow-up governance may also apply to any other jurisdiction worldwide, particularly noting the long-standing criticism that EIA follow-up is the weakest aspect of EIA and often still not happening (e.g., Arts & Nooteboom, 1999; Arts et al., 2001; Bond et al., 2020; Fitzpatrick & Williams, 2020; Hulett & Diab, 2002; Hunsberger et al., 2005; Morrison-Saunders & Arts, 2024; Olszynski, 2021; Sadler & McCabe, 2002) (see Sections 1.1, 2.2, 7.2). The application of the best practice principles and criteria should serve as a guide for the strengthening, consolidation and improvement of the implementation of EIA follow-up governance arrangements at the macro scale. The evaluation framework including the best practice principles and criteria may also, however, act as guidance towards EIA follow-up governance at the micro scale, indicating what needs to be done on a project-by-project basis.

At international level, following the presentation of the results in Chapter 5 and the related discussion in Chapter 6, jurisdictions should therefore consider:

- *Strengthening* procedural effectiveness through the establishment of appropriate and tailored governance arrangements that ensure the strengthening of both legislative provisions related to EIA follow-up and administrative capacities. At the macro level, this would include, for example, the introduction of stronger legislative provisions which include all EIA follow-up activities, together with the clear identification of all responsibilities for EIA follow-up activities and mandatory compliance and enforcement provisions.

This may also be applied to the EU EIA Directive, which as discussed in this thesis, includes minimal requirements aimed towards EIA follow-up, focusing exclusively on monitoring. A strengthening of the legislative provisions related to follow-up in the EIA Directive, guided by the best practice principles and criteria for EIA follow-up governance emerging from this research, may improve implementation across all its Member States. Linked to better understanding of the scope and importance of EIA follow-up, Member States may consider enhancing this aspect further as good practice.

- *Highlighting* substantive effectiveness through a set of effective governance arrangements. At the macro level, these may include the introduction of specific legislative provisions aimed towards appropriate reporting of EIA follow-up outcomes promoting

adaptive management and facilitating learning from experience, as it lays the foundations for stakeholder and community involvement), establishing clear pre-defined EIA performance criteria, preferably flagged as early as possible in the process, together with ensuring that all stakeholders have a clear understanding of EIA follow-up purpose and importance, leading to EIA follow-up activities being impact-ful, and understanding the contribution of EIA follow-up governance. It is also important to note for these mechanisms to be substantively effective, particularly at the micro scale, appropriate procedures need to be in place.

- *Stressing* transactive effectiveness through specific governance arrangements that would ensure that there are appropriate resources (both from the EIA regulator and the project proponents' end) for implementing EIA follow-up activities, both at the macro and the micro level. This may be carried out by guaranteeing that there are appropriate resources (i.e., staff, time and budget) to implement governance arrangements, and consequently ensuring their efficiency and effectiveness. The submission of an EIA follow-up implementation plan can ensure that these resource allocation requirements are identified at the outset of the EIA process. Effectiveness and efficiency of EIA follow-up governance arrangements, again both at the macro and micro level, can also be ensured through the set-up of appropriate feedback channels between stakeholders and regulators, encouraging learning through practice and active engagement.
- *Ensuring* legitimacy through accessible, transparent and effective EIA follow-up governance arrangements, paralleling critical governance aspects such as transparency, accessibility and accountability. EIA follow-up governance at the micro and macro levels, may be effective and ultimately perceived as legitimate, should it encompass all elements of follow-up, i.e., monitoring, evaluation, management and participation, and ensure their implementation. This may also be seen to mirror Pope et al. (2018)'s definition of legitimacy, being a combination of procedural, substantive and transactive dimensions of effectiveness. In this regard, noting how legitimacy can be considered as the 'bigger picture' in terms of effectiveness, in a similar way, EIA follow-up governance can ensure that EIA follow-up, through its various elements, can be appropriately and efficiently implemented, thus guaranteeing its legitimacy.

7.6 Future research opportunities

As discussed throughout the thesis, the research utilised Malta as the case study for the application of the best practice principles and criteria for effective EIA follow-up governance at the macro level. Future research may apply the evaluation framework, i.e., the principles and respective criteria, to different jurisdictions, in the form of comparative studies of the performance and effectiveness of EIA follow-up governance. Such research may also utilise other methods to gather the information required for the application of the framework. This would also enable further validation and refinement of the best practice principles and their application.

The research highlighted the importance of communication and public participation, presenting future research opportunities in investigating how public participation can ensure effective EIA follow-up governance.

The implementation of EIA follow-up governance also requires different levels of decision-making – each of the principles identified by this research require decisions to be taken by different decision-makers or stakeholders. Future investigations may look into the link between decision-making and EIA follow-up governance, related to different stakeholders including project proponents, regulators, stakeholders and the public.

Finally, the research also identified significant deficiencies in the implementation of EIA follow-up governance arrangements. It may be opportune for future research to examine the reason behind such inertia, on noticing the essential importance of such processes in EIA.

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Appendices

Appendix A – Letters sent to the PA and the ERA requesting access to information

29th May 2018

REQUEST FOR ACCESS TO ENVIRONMENTAL IMPACT ASSESSMENTS AND RELATED CASE FILES FOR RESEARCH PURPOSES

Dear

My name is Charlene Smith and I am currently reading for a Ph.D. at the University of Malta. The research that I am carrying out is related to the implementation of Environmental Impact Assessment (EIA) system in Malta, with particular emphasis on the post-permit stage (i.e., EIA follow-up stage). The study in question will involve the analysis of a number of environmental impact assessments (EIAs) that were carried out between the years 1994 to 2014, in order to establish trends and suggest measures to increase the effectiveness of the system in Malta. The research study is being carried out under the supervision of Dr. Paul Gauci, Head of the Department of Spatial Planning and Infrastructure at the Faculty for the Built Environment at the University of Malta.

I am hereby seeking your kind consent to have access to a number of environmental impact assessment studies and their related case files (the specific list of cases will be provided in due course) for research purposes in the coming months.

Upon completion of the study, I undertake to provide the Environmental and Resources Authority with a copy of the full doctoral dissertation. If you require any further information, please do not hesitate to contact me on the following email address: _____ or phone number: _____ Your time and consideration on this matter is much appreciated.

Yours sincerely,

Charlene Smith, B.A. (Hons.), M.A. (Geography of Cities), PIEMA
University of Malta

cc. Dr. Paul Gauci, Head, Department of Spatial Planning and Infrastructure, Faculty for the Built Environment, University of Malta, Msida MSD 2080, Malta.

29th May 2018

REQUEST FOR ACCESS TO DEVELOPMENT PLANNING APPLICATION CASE FILES FOR RESEARCH PURPOSES

Dear

My name is Charlene Smith and I am currently reading for a Ph.D. at the University of Malta. The research that I am carrying out is related to the implementation of the Environmental Impact Assessment (EIA) system in Malta, with particular emphasis on the post-permit stage (i.e., EIA follow-up stage). The study in question will involve the analysis of a number of development planning applications that were subject to EIAs between the years 1994 to 2014, in order to establish trends and suggest measures to increase the effectiveness of the system in Malta. The research study is being carried out under the supervision of Dr. Paul Gauci, Head of the Department of Spatial Planning and Infrastructure at the Faculty for the Built Environment at the University of Malta.

I am hereby seeking your kind consent to have access to a number of development planning applications (the specific list of cases will be provided in due course) for research purposes in the coming months.

Upon completion of the study, I undertake to provide the Planning Authority with a copy of the full doctoral dissertation. If you require any further information, please do not hesitate to contact me on the following email address: _____ or phone number: _____. Your time and consideration on this matter is much appreciated.

Yours sincerely,

Charlene Smith, B.A. (Hons.), M.A. (Geography of Cities), PIEMA
University of Malta

cc. Dr. Paul Gauci, Head, Department of Spatial Planning and Infrastructure, Faculty for the Built Environment, University of Malta,
Msida MSD 2080, Malta.

Appendix B – Case file fact sheet template

1	Case No.	
2	Project Type	
3	Date of approval of permission	
4	Total No. of Conditions recommended by the former EPD	
5	Total No. of Conditions recommended by the former EPD which were included in the DPAR by the PD	
6	Percentage of EPD recommendations that were included in the permission	
7	Issues recommended as permission conditions and included by the PD	
8	Post-decision documentation available?	
9	If answer to (8) above is Yes, what details are available?	
10	General observations on the case:	

Appendix C – Interview guide

The Interview Guide

Generic questions for all interviewees

Aim: 1.5hr interviews

1. “Environmental impact assessment (EIA) is the evaluation of the effects likely to arise from a major project (or other action) significantly affecting the environment. It is a systematic process for considering possible impacts prior to a decision being taken on whether or not a proposal should be given approval to proceed.” (Jay et al., 2007). What is your opinion regarding the **Environmental Impact Assessment** process? What is its contribution to the planning process in Malta? Is EIA, in your opinion, a decision-making tool or an environmental management process?
2. An analysis of a number of development planning applications for which an EIA was carried out between 1994 (i.e., when the first set of policy and design guidelines pertaining to EIAs in Malta were issued) and 2014 that were granted a development permission, indicated that 38% of such cases did not include any **post-permission assessment**. What is your reaction to this?

It should be noted that most EIAs recommend some form of follow-up at post-development stage, including the submission of management plans e.g., Construction Management Plan; Environmental Management Plan; or monitoring plans; however, no follow-up upon submission is carried out, or no documentation is submitted at all.

3. Both the EIA Directive and the current Maltese EIA Regulations have increased the emphasis with respect to **mitigation** and **monitoring** in their latest amended texts. In your opinion, may the lack of **follow-up** post-development consent phase be the only contributing factor to the **effectiveness** or otherwise of the EIA process? What are the other factors that may influence the current EIA process?
4. The assessment of development planning applications referred to above has also revealed that there is an issue of **fragmented** information related to development planning applications. For example, if a proposal requires the submission of an EIA, there would be at least four case files associated with the same development: two at the Planning Authority (one at the Planning Directorate and one at the Enforcement Directorate) and two at the Environment and Resources Directorate (one at the Environmental Assessment Unit and one at the Environmental Permitting Unit, with the possibility of a third case file being opened at the Enforcement Directorate within the same Authority). Do you think the **demerger** of the MEPA into two separate authorities, operating under different legislative regimes, albeit related, further exacerbated to this issue? What **measures** can be adopted to improve the relationship between the two authorities, even on this front? Do you think the current regulatory set up sets for a confrontational rather than a collaborative environment between the two authorities?
5. As per previous questions, it would seem that effectiveness in Malta is only associated to the **procedural** (i.e., legalistic) aspect of the process, rather than its **substantial** role (i.e., its goal towards sustainable development) – do you agree with this statement? What measures can be adopted to improve this aspect of the EIA process? Could changes in the administrative set-ups of both the Environment and Resources Authority and the Planning Authority address these issues?

Appendix D – Sample of correspondence sent to interviewees

RE: RESEARCH INTERVIEW INVITATION

Dear Hon. XXXX

My name is Charlene Smith and I am currently reading for a Ph.D. at the University of Malta. The research that I am carrying out is related to the implementation of Environmental Impact Assessment (EIA) system in Malta, with particular emphasis on the post-permit stage (i.e., EIA follow-up stage). The study in question will involve the analysis of a number of environmental impact assessments (EIAs) that were carried out between the years 1994 to 2014, in order to establish trends and suggest measures to increase the effectiveness of the system in Malta. The research study is being carried out under the supervision of Dr. Paul Gauci and the Department of Spatial Planning and Infrastructure at the Faculty for the Built Environment at the University of Malta.

As part of the research, I would like to ask for your kind assistance and request a meeting in order to interview you on the matter. Your insight into the Environmental Impact Assessment system in Malta would prove to be of utmost importance to this study. The interview is not intended to be longer than 2 hours, and will be recorded for data analysis purposes. The recording will only be available to the undersigned and the direct supervisors and will in no way be used other than for the analysis of this research. Direct quotes may also be used as part of the discussion of the research questions.

If you require any further information, please do not hesitate to contact me on the following email address:
or phone number: Your time and consideration on this matter is much appreciated.

Yours sincerely,

Charlene Smith, B.A. (Hons.), M.A. (Geography of Cities), PIEMA

University of Malta

cc. Dr. Paul Gauci, Department of Spatial Planning and Infrastructure, Faculty for the Built Environment, University of Malta, Msida MSD 2080, Malta.

Appendix E – Focus group guide

The Focus Group Guide

Generic questions for all participants

Aim: 1.5hr discussion

1. “Environmental impact assessment (EIA) is the evaluation of the effects likely to arise from a major project (or other action) significantly affecting the environment. It is a systematic process for considering possible impacts prior to a decision being taken on whether or not a proposal should be given approval to proceed.” (Jay et al, 2007). What are your views regarding EIAs? What is and can be its contribution to the spatial planning process in Malta? Is EIA and should EIA be a decision-making tool or an environmental management process, or both?
2. An analysis of a number of development planning applications for which an EIA was carried out between 1994 (i.e., when the first set of policy and design guidelines pertaining to EIAs in Malta were issued) and 2014 that were approved, indicated that 38% of the project operations in question were not evaluated through **post-permission assessment**. What is your reaction to this?

It should be noted that most EIAs recommend some form of follow-up at post-approval stage, including the submission of management plans e.g., Construction Management Plan; Environmental Management Plans; or monitoring plans; however, no follow-up upon submission is carried out, or no documentation is submitted at all.

3. Both the EIA Directive and the current Maltese EIA Regulations have increased the emphasis with respect to **mitigation** and **monitoring** in their latest amended texts. In your opinion, may the lack of **follow-up** post-development consent phase be the only contributing factor to the **effectiveness** or otherwise of the EIA process? What are the other factors that may influence the current EIA process?
4. The assessment of the above-mentioned development applications has also revealed that there is an issue of **fragmented** information related to the applications. For example, if a proposal requires the submission of an EIA Report, there would be at least four case files associated with the same development: two at the Planning Authority (one at the Planning Directorate and one at the Enforcement Directorate) and two at the Environment and Resources Directorate (one at the Environmental Assessment Unit and one at the Environmental Permitting Unit, with the possibility of a third case file being opened at the Enforcement Directorate within the same Authority). Do you think the **demerger** of the MEPA into two separate authorities, operating under different legislative regimes, albeit related, further exacerbated to this issue? What **measures** can be adopted to improve the relationship between the two authorities, even on this front? Do you think the current regulatory set up sets for a confrontational rather than a collaborative environment between the two authorities?
5. As per previous questions, it would seem that effectiveness in Malta is only associated to the **procedural** (i.e., legalistic) aspect of the process, rather than its **substantial** role (i.e., its goal towards sustainable development) – do you agree with this statement? What measures can be adopted to improve this aspect of the EIA process? Could changes in the administrative set-ups of both the Environment and Resources Authority and the Planning Authority address these issues?

Appendix F – Sample of correspondence sent to focus group invitees

RE: INVITATION TO FOCUS GROUP DISCUSSION

Dear Sir/Madam,

My name is Charlene Smith and I am currently reading for a Ph.D. at the University of Malta. The research that I am carrying out is related to the implementation of the Environmental Impact Assessment (EIA) process in Malta, with particular emphasis on the post-permit stage (i.e., EIA follow-up stage). The study in question will involve the analysis of a number of environmental impact assessments (EIAs) that were carried out between the years 1994 to 2014, in order to establish trends and propose measures to increase the effectiveness of the system in Malta. The research study is being carried out under the supervision of Dr. Paul Gauci and the Department of Spatial Planning and Infrastructure at the Faculty for the Built Environment at the University of Malta.

As part of the research, I would like to ask for your kind assistance and invite you to participate in a focus group, discussing the matter. Your insight into the Environmental Impact Assessment system in Malta would prove to be of utmost importance to this study. The focus group is not intended to be longer than 1.5 hours, and will be recorded for data analysis purposes. The recording will only be available to the undersigned and the direct supervisors and will in no way be used other than for the analysis of this research. Direct quotes may also be used as part of the discussion of the research questions.

If you require any further information, please do not hesitate to contact me on the following email address:

Your time and consideration on this matter is much appreciated. In the current circumstances, the focus group discussion will be carried out online via Zoom – date and time will be communicated to you in due course.

Yours sincerely,

Charlene Smith, B.A. (Hons.), M.A. (Geography of Cities), PIEMA
University of Malta

cc. Dr. Paul Gauci, Department of Spatial Planning and Infrastructure, Faculty for the Built Environment, University of Malta, Msida MSD 2080, Malta.

Appendix G – Research Consent Forms

INTERVIEW PARTICIPANTS' CONSENT FORM

Investigating the effectiveness of the Maltese Environmental Impact Assessment system

Faculty for the Built Environment

Department of Spatial Planning and Infrastructure

I, the undersigned, give my consent to take part in the study conducted by Ms. Charlene Smith. The purpose of this document is to specify the terms of my participation in this research study.

1. I have been given written and verbal information about the purpose of the study and all questions have been answered.
2. I understand that I have been invited to participate in an interview, in which the researcher will ask questions to explore the implementation of Environmental Impact Assessment (EIA) system in Malta, with particular emphasis on the post-permit stage (i.e., EIA follow-up stage). The study aims to establish trends and suggest measures to increase the effectiveness of the system in Malta.
3. I am aware that the interview will take not more than 2 hours.
4. I am aware that this interview will be audio recorded and transcribed. The transcripts will be coded as part of the research analysis process.
5. I am aware that the researcher, the academic supervisor and the examiners are the only persons who have access to the full recordings for data verification and research purposes. The audio-recordings and transcripts will be stored on the researcher's personal computer.
6. Direct quotes may also be used as part of the discussion of the research questions.
7. I also understand that I am free to accept, refuse or stop participation at any time without giving any reason. This will have no negative repercussions on myself and that any data collected from me will be erased accordingly.
8. I have read and understood the points and statements of this form. I have had all the questions answered to my satisfaction, and I agree to participate in this study.

Participant: _____

Signature: _____

Date: _____

FOCUS GROUP PARTICIPANTS' CONSENT FORM

Investigating the effectiveness of the Maltese Environmental Impact Assessment system

Faculty for the Built Environment

Department of Spatial Planning and Infrastructure

I, the undersigned, give my consent to take part in the study conducted by Ms. Charlene Smith. The purpose of this document is to specify the terms of my participation in this research study.

1. I have been given written and verbal information about the purpose of the study and all questions have been answered.
2. I understand that I have been invited to participate in a focus group, in which the researcher will ask questions to explore the implementation of Environmental Impact Assessment (EIA) system in Malta, with particular emphasis on the post-permit stage (i.e., EIA follow-up stage). The study aims to establish trends and suggest measures to increase the effectiveness of the system in Malta.
3. I am aware that the focus group will take not more than 2 hours.
4. I am aware that this focus group will be recorded and transcribed. The transcripts will be coded as part of the research analysis process.
5. I am aware that the researcher, the academic supervisor and the examiners are the only persons who have access to the full recordings for data verification and research purposes. The recordings and transcripts will be stored on the researcher's personal computer. All material collected from interviews will be duly deleted after a period not longer than 2 years.
6. Direct quotes may also be used as part of the discussion of the research questions.
7. I also understand that I am free to accept, refuse or stop participation at any time without giving any reason. This will have no negative repercussions on myself and that any data collected from me will be erased accordingly.
8. I have read and understood the points and statements of this form. I have had all the questions answered to my satisfaction, and I agree to participate in this study.

Participant: _____

Signature: _____

Date: _____

POLICY DELPHI PARTICIPANTS' CONSENT FORM

Investigating the effectiveness of the Maltese Environmental Impact Assessment system

Faculty for the Built Environment, Department of Spatial Planning and Infrastructure

I, the undersigned, give my consent to take part in the policy Delphi conducted by Ms. Charlene Smith. The purpose of this document is to specify the terms of my participation in this research study.

1. I have been given written information about the purpose of the study and all questions have been answered.

2. I understand that I have been invited to participate in this study, in which the researcher will ask questions to explore the implementation of Environmental Impact Assessment (EIA) system in Malta, with particular emphasis on the EIA follow-up stage. The study aims to provide more insight into how EIA follow-up governance can ensure the effectiveness of EIA following the granting of development permission.

3. I am aware that my participation shall involve:

- Responding to the first questionnaire and submitting the responses to the researcher within 2 weeks,
- Reading the summary of responses provided by other experts, responding to the second Delphi questionnaire and submitting the responses to the researcher.

Total estimated time to participate in this study is approximately 1 hour per round.

4. I understand that the confidentiality of this study will be maintained and my identity will in no way be linked to the specific data provided, unless permission is asked for. Responses will be strictly confidential and data from this research will be anonymous. Information will be coded and will remain confidential. In addition, data will not be placed in any permanent record, and will be destroyed when no longer needed by the researcher.

5. I am aware that all publications will exclude any information that will make it possible to identify me as a subject. Throughout the study, the researchers will notify me of new information that may become available and that might affect my decision to remain in the study.

6. Direct quotes from the responses may be used as part of the discussion of the research questions.

7. I also understand that I am free to accept, refuse or stop participation at any time without giving any reason. This will have no negative repercussions on myself and that any data collected from me will be erased accordingly.

8. I have read and understood the points and statements of this form. I have had all the questions answered to my satisfaction, and I agree to participate in this study.

Participant: _____

Signature: _____

Date: _____

Appendix H – Invite to policy Delphi sent to potential participants

Dear Expert,

Subject: Invitation to Participate in Delphi technique

As a stakeholder to the Environmental Impact Assessment (EIA) process in Malta and an expert in the field, we are kindly inviting you to participate in a Delphi process on environmental assessment. The aim of this study is to recognise experts' opinions on Environmental Impact Assessment, its implementation and effectiveness, particularly in relation to EIA follow-up. Stakeholders in the EIA process in Malta are being invited to participate in this study to share their views regarding EIA follow-up, its implementation and effectiveness.

We are aware that the professionals we are approaching are extremely busy in their respective fields, but because of the important input you can bring to the research, we hope that you will agree to participate in it. In practical terms, we would require no more than two hours of your time, spread out over a maximum of two occasions.

The Delphi will consist of 2 rounds. Participants will send their answers via email, with a first round of brief open-ended questions. A summary of the replies will be circulated to all participants and a second round of questions, reflecting on the replies provided by the participants will be circulated again via email, for additional input from your end.

All responses will be anonymous and only the undersigned as the facilitator will have access to such. We will, of course, provide you with feedback from the results when the research is completed.

We look forward to your participation and kindly request that you indicate your willingness to participate, by referring back the consent form attached to this invite.

Best regards,

Charlene Smith, B.A. (Hons.), M.A. (Geography of Cities), PIEMA.

Ph.D. Candidate, Faculty for the Built Environment

University of Malta

Appendix I – Delphi 1st round correspondence sent to participants

Delphi 1st round correspondence sent to participants

Dear Participant,

Thank you for confirming your willingness to participate in this Delphi study related to the Environmental Impact Assessment (EIA) process, with Malta as a case study. Your views regarding EIA follow-up, its implementation and effectiveness will be sought through a number of open-ended questions.

This first round of the Delphi will be two weeks long (starting today and ending on Friday 17th November 2023). Once this timeframe expires, a summary of the replies will be circulated to all participants for their consideration prior to the commencement of the Delphi second round.

On the basis of the results achieved previously through documentary analysis, interviews and a focus group discussion, this Delphi study aims to further understand how EIA follow-up governance ensures that an EIA is effective following the decision-making phase through the following questions:

1. What is EIA effectiveness, in your understanding?
2. What are, in your opinion, the factors contributing to EIA effectiveness?
3. What is EIA follow-up, in your understanding?
4. What are, in your opinion, the factors contributing to effective EIA follow-up, in terms of its scope and purpose?
5. Which processes and structures (i.e., governance mechanisms) should be in place to ensure that there is commitment towards the implementation of EIA follow-up?
6. In your opinion, does effective EIA follow-up governance ensure EIA effectiveness? Please explain by providing examples.

Kindly send your responses as a reply to this email.

Should you have any queries or require any clarifications, please do not hesitate to contact the undersigned.

Best regards,

Charlene Smith, B.A. (Hons.), M.A. (Geography of Cities), PIEMA.

Ph.D. Candidate, Faculty for the Built Environment

University of Malta

Appendix J – Delphi 2nd round correspondence sent to participants

Delphi 2nd round correspondence sent to participants

Dear Participants,

In light of your responses during the first round of this Delphi (a summary is being attached to this email correspondence for your perusal), the second round of the Delphi will now focus on how EIA follow-up governance is implemented in Malta and how changes and/or improvements to it can lead to better implementation of EIA follow-up, while ensuring EIA effectiveness.

Governance in EIA follow-up relates to those processes, arrangements and structures necessary for its implementation. As highlighted during the first round of the Delphi, governance arrangements are generally related to: (i) drawing up of legislative instruments related to follow-up, (ii) administrative and institutional arrangements, and (iii) allocation of resources.

The next and final round of questions refers to the responses provided in the first round, with added focus on the actual implementation of EIA follow-up in Malta and how this can ensure EIA effectiveness at post-consent stage, taking into account your expertise in the field. The questions are as follows:

1. What changes in the Maltese legal EIA framework are needed to ensure EIA follow-up governance?
2. How can the current administrative/institutional arrangements in Malta be improved to ensure better implementation of EIA follow-up?
3. What initiatives can be taken by the regulatory authority to encourage participation of all stakeholders at the post-consent stage?
4. What initiatives can be taken by the project proponents to encourage participation of all stakeholders at the post-consent stage?
5. What can the regulatory authority do to ensure appropriate allocation of resources for effective EIA follow-up in Malta? Please provide examples.
6. What can the project proponents do to ensure appropriate allocation of resources for effective EIA follow-up in Malta? Please provide examples.

Please provide your responses by Friday 19th January 2024.

Should you have any queries or require any clarifications, please do not hesitate to contact the undersigned.

Best regards,

Charlene Smith, B.A. (Hons.), M.A. (Geography of Cities), PIEMA.

Ph.D. Candidate, Faculty for the Built Environment

University of Malta

Appendix K – Summary tables of cases analysed through documentary analysis³⁷

³⁷ References to PA case numbers and specific case references were redacted to avoid direct association to specific cases.

1	Case No.	1* ³⁸
2 ³⁹	Project type	Transport infrastructure
3	Date of approval of permit	July 2019
4	Total No. of Conditions recommended by the ERA	26 (Doc. 1587c)
5	Total No. of Conditions recommended by the ERA which were included in the DPAR by the PA	26 (included as an approved document in the DPAR)
6	Percentage of ERA recommendations that were included in the permit	100%
7	Issues recommended as permit conditions and included by the PA	1. General conditions related to the submission of a Nature Permit application and restriction of works within the approved site boundary. 2. Noise and vibration abatement. 3. Construction works (including the submission of a Works Method Statement, details regarding infrastructure and traffic control). 4. Protection of existing trees, rubble walls and watercourses. 5. Removal of alien species or structures. 6. Soil and waste management. 7. Site reinstatement. 8. Runoff and effluent management. 9. Lighting and light pollution.
8	Post-decision documentation available?	Yes
9	If answer to (8) above is Yes, what details are available?	Post-consent consultations were carried out with ERA, in September and October 2019, in relation to the CMP and the WMS. The Nature Permit was approved in September 2019. Further consultations were carried out throughout 2020 and 2021 with respect to the trees and minor amendments being proposed in the plans. Correspondence from the competent authority also confirmed that there would be no additional impacts from the minor amendments other than those identified through the EIA.
10	General observations on the case:	Despite the inclusion of mitigation and monitoring measures (as prescribed by the existing legal requirements), followed-up with correspondence between the PA and the ERA for post-decision requirements, EIA follow-up can still be considered as missing in the process. The response to submission of post-decision documentation is done in a reactive manner, based on the submission of the documentation by the project proponent to the PA, which in turn refers this to the ERA.

³⁸ Asterisk (*) indicates that case was one of the 5 utilised for the detailed analysis in Chapter 4.

³⁹ 'Project type' categorization in Row 2 follows the project categorization type as per Schedule II of the EIA Regulations, 2017 (Government of Malta, 2017).

		Neither of the authorities initiates EIA follow-up action, resulting in a situation where there is a vacuum at post-decision stage, on noting the lack of administrative capacity for any EIA follow-up action of this stage. This is reflected in all the most recent EIA up to the time of writing of this thesis. This recent example includes clear communication between the PA and the ERA with respect to the documentation submitted to address the conditions put forward by the Competent Authority as part of the EIA process. In this case, the conditions also follow and add on the mitigation measures proposed in the Environmental Statement, i.e., construction management, including a CMP, and noise monitoring during construction. Both were included accordingly. Whilst noting that this consultation between the PA and ERA was present, the framework for EIA follow-up seems to be missing. There is no evidence in case file with respect to the submission of the monitoring reports therefore there is no evidence of further follow-up action in this regard.
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1	Case No.	2
2	Project type	Urban development projects
3	Date of approval of permit	August 2016 & August 2018
4	Total No. of Conditions recommended by the ERA	3
5	Total No. of Conditions recommended by the ERA which were included in the DPAR by the PA	3 N.B. Same conditions were retained for amendment application.
6	Percentage of ERA recommendations that were included in the permit	100%
7	Issues recommended as permit conditions and included by the PA	1. Construction works-related conditions, including the submission of a comprehensive Construction Management Plan (CMP), a Works Monitoring Programme which addresses dust monitoring and noise monitoring during the construction phase and details regarding disposal sites. 2. Landscaping. 3. Waste management related conditions.
8	Post-decision documentation available?	Yes
9	If answer to (8) above is Yes, what details are available?	Post-decision documentation available includes: - Construction Management Plan (submitted in September 2016) - Programme of Works (submitted in September 2016). ERA followed up this submission through a consultation reply in October 2016, acknowledging receipt and providing review comments on the document. It should be noted that the review of the post-consent documentation was carried out by the same officer who had reviewed the Environmental Statement. Further follow-up was carried out in relation to the submitted documentation (Works Monitoring Programme) in October 2016, with comments in relation to the following: - Monitoring consultants - Works Monitoring Programme - Additional comments on the CMP. Further consultation with ERA was carried out in November 2016 (x2) and April 2017, in relation to the CMP. Waste management considerations were included in this document.

		Landscaping details were submitted in May 2021, however no further follow-up from ERA's end could be traced in the case file.
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1	Case No.	3
2	Project type	Installations for the storage of fuel
3	Date of approval of permit	May 2017
4	Total No. of Conditions recommended by the ERA	10
5	Total No. of Conditions recommended by the ERA which were included in the DPAR by the PA	10
6	Percentage of ERA recommendations that were included in the permit	100% (included as approved document)
7	Issues recommended as permit conditions and included by the PA	1. Environmental permitting requirements. 2. Construction Management Plan. 3. Construction-phase parameters. 4. Construction-phase monitoring. 5. Operational conditions. 6. Uprooting and transplanting of trees. 7. Runoff and effluent management. 8. External lighting.
8	Post-decision documentation available?	No (None are available in case file)
9	If answer to (8) above is Yes, what details are available?	/
10	General observations on the case:	For a relatively recent case, the information available for viewing on the eApps online repository for post-consent processes is next to inexistent. The case included correspondence related to minor amendments to the proposal, which were further assessed by the ERA through further consultation in 2020. The officer from the EIA competent authority reviewed the revised drawings and requested: - The submission of a revised statement from the EIA Coordinator who carried out the EIA, that confirm whether the proposed changes were such that they might have had significant impacts on the environment and therefore would lead to material changes to the outcomes of the EIA undertaken for the same application, - Additional information related to the environmental permit application. No correspondence related to the conditions set by the ERA or the additional post-consent correspondence is available in the case file.

1	Case No.	4
2	Project type	Urban development projects
3	Date of approval of permit	December 2017
4	Total No. of Conditions recommended by the ERA	1
5	Total No. of Conditions recommended by the ERA which were included in the DPAR by the PA	1 (There is a significant procedural difference with respect to cases that were processed pre-demerger and those following the demerger of the MEPA in 2016. Documents prepared by the Environment & Resources Authority (namely the Report on the Environmental Planning Statement).
6	Percentage of ERA recommendations that were included in the permit	100% (Included as an approved document in the DPAR).
7	Issues recommended as permit conditions and included by the PA	The ERA required that within 3 months of issue of the development permission, the applicant would need to submit an updated EP application and request for renewal of the already existing environmental permit to the Environment Protection Directorate, compiled to their satisfaction. This would cover the operational aspects of the applicant's site including related operations not necessarily covered by this development application.
8	Post-decision documentation available?	In case file; however, this emerges from the requirements in the DPAR (PA) and not from the EIA recommendations/ERA requirements.
9	If answer to (7) above is Yes, what details are available?	/
10	General observations on the case:	As indicated earlier there is a very evident change in the procedural approach being adopted following the demerger. The ERA, following the finalisation of the EIA process for which it is the competent authority, refers the Report on the EIA to the Planning Authority, and includes an annex with the recommended permit conditions arising from the process. The ERA in its submission as a stakeholder to the decision-making process, indicates that the annex is to be included in the development permit as an approved document, therefore all included permit conditions, are to be followed-up. Failure to do so may result in final compliance not being issued. Of note is that the conclusions of the environmental statement actually include recommended mitigation measures (despite impacts identified being of minor to moderate significance, however these are not explicitly included in either the ERA report or the DPAR – which is of particular note for this research. In such instance, no formal EIA follow-up is carried out, and there is no administrative framework that can ensure that this is carried out. The DPAR (permit) includes conditions that may be of relevance from an environmental point of view, such as landscaping, however none are included in the permit.

1	Case No.	5*
2	Project type	Electric power stations and related installations
3	Date of approval of permission	August 2013; however post-permit processing was also carried out following the demerger of the Malta Environment and Planning Authority.
4	Total No. of Conditions recommended by the former EPD	5
5	Total No. of Conditions recommended by the former EPD which were included in the DPAR by the PD	5
6	Percentage of EPD recommendations that were included in the permission	100%
7	Issues recommended as permission conditions and included by the PD	1. Construction Management Plan. 2. Works Monitoring Programme. 3. Requirement for the submission of an IPPC permit. 4. Impacts on subterranean features. 5. Visual impact mitigation. 6. External lighting. 7. Management of waste. 8. Bank guarantees.
8	Post-decision documentation available?	Yes.
9	If answer to (8) above is Yes, what details are available?	Approval was granted in March 2014. 1. Environmental Monitor was approved by EPD in December 2014 to carry out post-permit monitoring. 2. Draft Works Monitoring Programme and Draft Construction Management Plan submitted for review in December 2014, with comments from EPD sent during the same. 3. EPD approved both documents in January 2015, including a note with respect to disposal of material at sea. 4. Further discussions between the Planning Directorate and the EPD were held in May 2015, with respect to the Works Method Statement for Excavation Works and the Works Method Statement for Foundation Construction. EPD had no particular concerns at the time, subject that the original safeguards were followed. These documents were approved in May 2015. 5. A Proposed Method Statement for Excavation Works For Cooling Water Pipes was submitted in June 2015, and referred to EPD for comments subsequently. Feedback was provided by the EPD in July 2015 in relation to waste management and trenching works, with additional safeguards included. Additional consultations between the PD and the EPD were carried out in August 2015 due to additional submissions.

		6. Survey reports pertaining to (i) noise, (ii) air monitoring report, and (iii) operational monitoring were submitted to the Enforcement Directorate in June 2015. No further action was taken regarding such by any of the Directorates. 7. A Proposed Method Statement For Bored Cast in-situ Piles Construction for the Regasification Plant Area was submitted in August 2015, with feedback from the EPD provided in association with (i) EIA requirements, (ii) environmental permitting (iii) waste permitting, and (iv) other minor general comments. Additional consultations on an addendum to the same document were made in September 2015, with conditions proposed by the EPD, in relation with waste characterisation. 8. Additional monitoring reports regarding (i) noise, (ii) operational monitoring, and (iii) rock face stability were submitted to the Enforcement Directorate in September 2015. No further action was taken regarding such by any of the Directorates. 9. Air monitoring report covering June and July 2015 were submitted. No further action was taken regarding such by any of the Directorates. Same applies for (i) noise, (ii) operational monitoring and (iii) rock face stability reports that were submitted in October 2015. 10. In October 2015, additional monitoring reports related to (i) noise, (ii) operational monitoring, (iii) rock face stability, (iv) water quality and (v) <i>Posidonia</i> reports were submitted to the Authority. No further action was taken regarding such by any of the Directorates. 11. In November 2015, (i) rock face stability, (ii) operational monitoring, and (iii) air quality monitoring were submitted. No further action was taken regarding such by any of the Directorates. 12. In December 2015, air quality monitoring and operational monitoring reports were submitted. No further action was taken regarding such by any of the Directorates. 13. In January 2016, water quality reports, including priority substances monitoring were submitted. No further action was taken regarding such by any of the Directorates. 14. In February 2016, operational monitoring and water quality reports were submitted. No further action was taken regarding such by any of the Directorates. 15. In March 2016, operational monitoring report was submitted. No further action was taken regarding such by any of the Directorates. 16. In March 2017, details on the proposed lighting plan were submitted to the Planning Authority. Clearance on this, in line with the requirements of Condition 10 of the permit, was issued by ERA in April 2017. 17. Clearance regarding IPPC conditions was issued by ERA in March 2017. 18. The Visual Impact Mitigation Plan was submitted in August 2017, with clearance from ERA submitted in September 2017.
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1	Case No.	6
2	Project type	Transport infrastructure
3	Date of approval of permission	August 2013; however post-permit processing was also carried out following the demerger of the Malta Environment and Planning Authority.
4	Total No. of Conditions recommended by the former EPD	8
5	Total No. of Conditions recommended by the former EPD which were included in the DPAR by the PD	8
6	Percentage of EPD recommendations that were included in the permission	100%
7	Issues recommended as permission conditions and included by the PD	1. Submission of a Construction Management Plan. 2. Submission of a Works Monitoring Programme. 3. Submission of a Cultural Heritage Monitoring Plan. 4. Submission of an Ecological Restoration Plan. 5. Submission of a Landscaping Plan. 6. Submission of a Lighting Plan. 7. Submission of a Storm Water Management Plan. 8. Further studies of the effective implementation of Noise Barriers. 9. Bank guarantees. 10. Ancillary infrastructural services and access. 11. Removal and reuse of soil and management of waste. 12. Subterranean features. 13. Trees and landscaping. 14. Boundary walls.
8	Post-decision documentation available?	Yes.
9	If answer to (8) above is Yes, what details are available?	1. Post-permit requirements were being submitted to MEPA in June 2014 with the following documents: - Lighting Plan - Stormwater Management Plan - Noise Barriers details - NFRP endorsement (No feedback from EPD could be traced on the planning application file, however it is being assumed that consultation between the Planning Directorate and the Environmental Protection Directorate would have been carried out in light of the development permit conditions. However, no records are readily available).

		2. On the 6th and 8th April 2016, the following documents were submitted: - Method statement and landscaping plan; - Palm tree method statement; - Method statement for the pruning, uprooting and relocation of trees; and, - Works monitoring programme. Consultation with ERA was subsequently carried out on the 11th April, which included consultation on a CMP submitted earlier in the process. 3. In a reply named 'ERA Post permit processing reply 6', indicating that there had been previous correspondence between MEPA/Planning Directorate/PA and EPD/ERA regarding post-permit requirements, which unfortunately aren't available for viewing. ERA made comments on the following: - The composition of the monitoring team; - Comments on the WMP; - Comments on the CMP; - Comments directly to PA. 4. A revision of the CMP was submitted in April 2016, with ERA being consulted accordingly. 5. ERA issued its 7th post permit consultation reply, making comments regarding the following: - Additional comments on the monitoring team were made; - Final comments on the content of the WMP were made, pertaining to dust monitoring; - Additional comments on the CMP were made, focusing on the possible presence of any contaminated soils or hazardous materials on site. It also confirmed that the review and processing of the CMP and WMP is confirmed at this stage. 6. Noise monitoring report and baseline ecology report were submitted to PA in May 2016. ERA replied (31st May 2016, Doc. 463a). Comments were made regarding the consultants carrying out the studies for the first; whilst for the latter no particular comments were added, save for requested for the individual ecology monitoring reports. 7. Update to the CMP was submitted in October 2016. ERA replied in November 2016 regarding the CMP Annex 4 and 7 requesting clarifications on a number of details.
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		8. ERA was consulted in November/December 2016 regarding a minor amendment consultation, to which it replied in December, indicating a no objection to the changes subject to restoration of the site back to its pristine nature. 9. ERA was consulted in April 2017 regarding the storm water management arrangements, which were considered as being acceptable with no additional comments. 10. In June 2017, ERA provided further replies in relation to amendments to the CMP. It indicated its concerns with respect to encroachment onto the valley, which was indicated in the CMP. 11. It was noted that 3 air quality reports were submitted in June 2017, however no follow-up to these documents could be traced in the records available. 12. The Wied Ghollieqa Restoration plan was submitted in November 2017, however no follow-up to these documents could be traced in the records available. 13. No further submissions or consultations with ERA were noted after November 2017. No comments by Enforcement were noted either.
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1	Case No.	7
2	Project type	Development on the coast or at sea (including ports)
3	Date of approval of permission	September 2015; however post-permit processing was also carried out following the demerger of the Malta Environment and Planning Authority.
4	Total No. of Conditions recommended by the former EPD	7
5	Total No. of Conditions recommended by the former EPD which were included in the DPAR by the PD	7
6	Percentage of EPD recommendations that were included in the permission	100%
7	Issues recommended as permission conditions and included by the PD	1. Environmental conditions during construction phase. 2. Lighting scheme. 3. Ancillary infrastructure and services. 4. Use of the coast.
8	Post-decision documentation available?	Yes.
9	If answer to (8) above is Yes, what details are available?	(N.B. Following the decision to grant the development permission on the 24th September 2015, a number of development permit conditions were modified, following decision/review by the decision-taking board i.e., the MEPA Board – conditions 2A and 3C. In addition, EPD in December 2015, indicated that hard copy of environmental permit had been vetted and validated and thus processing of the executable permit could continue by the Planning Directorate.) In addition, further post-permit processing included the following: 1. Submission of Construction Management Plan (Doc. 188b) – ERA was consulted in June 2016, with a reply issued in September 2016. Issues raised included: (i) uprooting of trees, (ii) waste management, (iii) reminder regarding the submission of the monitoring programme and a clarification that works cannot commence prior to the submission of such to ERA for approval. 2. Environmental Monitoring Plan was submitted in October 2016 and consultation with ERA by the PA was carried out during the same month. A revised CMP was also submitted to PA in November 2016. 3. Following submission of revised plans and submission of documents being referred to in Point 2 above, ERA provided feedback in December 2016 (Doc. 208a), regarding the following: (1) revised EIA-related assessment due to the submission of the

		revised plans and request for a clarification regarding material changes in the original EIA from an EIA consultant; (2) revised CMP and the EMP were being noted and reviewed; (3) clarifications regarding uprooting of trees; (4) details regarding monitoring programme, including monitoring consultants, dredged material, environmental impacts, noise and vibration, waste management, contingency planning, marine ecology monitoring. It was noted that in this correspondence, all the remaining requirements requested by various conditions were highlighted. 4. A revised CMP and EMP were submitted in February 2017. ERA provided feedback on such in March 2017, focused on the following: (1) the lack of consultation between PA and ERA in relation to revised plans submitted upon which no consultation was carried out, (2) comments were only being made in relation to the revised Monitoring Plan. It was also noted that the requirement for the submission of a clarification from a consultant in relation to EIA requirements was also dropped. Issues regarding the latter, the uprooting of trees, the monitoring consultants' team being proposed, noise and vibration issues, marine ecology monitoring and waste management were still raised. 5. In addition to the consultation reply referred to in Point (4) above, an additional consultation reply was issued by ERA in May 2017, in agreement with most points raised above, except for additional requirements associated with the uprooting of trees and the marine ecological survey. 6. Interesting to note is a correspondence sent by the ERA to the PA (Doc. 274a), dated July 2017, indicating that: <i>"The letter refers to ERA's reply dated 30th May 2017 Doc.263a Point 5 where it was clearly stated that 'the initial survey has to be undertaken before works commence. The location of the transects needs to be shown on a site plan. Protected species are to be reported including their location along the transect and other relevant details. The establishment of operational management measures to enhance environmental performance in relation to hydromorphology does not fall outside the remit of an EMP and hence ERA still requires the submission of these measures'.</i> <i>Condition 2B of the permit clearly states that no works shall commence on site prior to the submission and approval of the following by MEPA in a detailed Environmental Management Plan (EMP) for both construction and operation.</i>
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		<i>Given that the works have commenced on site, ERA is not in a position to retroactively approve the Environmental Monitoring Plan for the fait accompli."</i> 7. Further consultation between the PA and the ERA was carried out in May 2018 in relation to revised plans for the design structure of the quay – ERA had no additional comments to make in its reply at Doc. 335a. 8. Following the submission for a proposal for a minor amendment of the original development application to include a change in the revetment profile and adjacent walkway, consultation between the PA and the ERA was carried out and ERA replied (Doc. 38a) indicating that it required the EIA Coordinator/Consultant to confirm that such changes bore no material considerations on the original findings of the EIA carried out for the whole development. This was further reiterated by an additional consultation reply in October 2018. 9. No further consultation with ERA was carried out at this stage. N.B. No correspondence from the Enforcement Directorate was noted in this planning application at post-permitting stage.
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1	Case No.	8
2	Project type	Urban development projects
3	Date of approval of permission	February 2013
4	Total No. of Conditions recommended by the former EPD	12
5	Total No. of Conditions recommended by the former EPD which were included in the DPAR by the PD	10
6	Percentage of EPD recommendations that were included in the permission	83%
7	Issues recommended as permission conditions and included by the PD	1. Construction Management Plan, including Phasing Plan. 2. Landscaping Plan and tree permitting. 3. Storm Water Management Plan. 4. Submission of Green Transport Plan. 5. Implementation of Bank Guarantee. 6. Submission of Works Monitoring Programme. 7. Submission of information regarding waste management and soil movement. 8. Protection of subterranean features.
8	Post-decision documentation available?	Yes.
9	If answer to (8) above is Yes, what details are available?	1. No follow-up measures could be traced in PA 1179/10 given that the development permission is outline in nature. 2. The same conditions prepared following the carrying out of the EPS in 2010 were applied to PA 3947/10, which was the development planning application (FDP) for Phase 1 of the development. Doc. 29, from the EPD, lists the conditions identified in PA 1179/10 to be included as part of PA 3947/10. Correspondence regarding the uprooting of trees was included in May 2011 (Doc. 31). 3. Following approval of PA 3947/10, post-permit requirements were being submitted through this development application. In September 2011, a Works Monitoring Programme was submitted and application was referred to EPD for comments. 4. In October 2011, EPD commented on the WMP in relation to the following: (i) noise monitoring and (ii) air quality, with additional comments.

	5. A revised WMP was submitted to PA in November 2011 and was referred to EPD for comments. 6. EPD commented that it had no additional comments in November 2011 (Minute 74). 7. Works Monitoring Programme was approved by MEPA in January 2012 (Minute 85). 8. A CMP was submitted in March 2012, to which EPD responded that it had no additional comments to make on the document (vide Minute 92). 9. Further consultation was carried out in April 2012, in relation to the waste management section of the CMP, whereby EPD commented in Doc. 96, with technical details regarding waste, with further correspondence in May 2012. 10. In June 2012, the records in the PA file indicate that the 'Government Bank Guarantee' was returned to the applicant, given its replacement with a letter of undertaking issued by the Government. The communication in question (Doc. 109) interestingly includes this note, indicating that there is no full compliance at this stage of the processing. <i>"Nonetheless your obligation for compliance with the conditions of the said permits within the stipulated time in the permit conditions is still in force and will so remain until the Malta Environment and Planning Authority releases you from such obligation. To this effect please ensure that the Malta Environment and Planning Authority is duly notified of your compliance with the permit conditions."</i> 11. MEPA approved the Construction Management Plan (Doc. 114a) and communicated this to the applicant. It was also noted that four air quality monitoring reports were submitted to MEPA (Docs. 117a, 117b, 118, 118a) and an operations monitoring report referred to the Enforcement Directorate, however from the available records on eApps, it seems that no further action was taken following this.
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1	Case No.	9
2	Project type	Development on the coast or at sea (including ports)
3	Date of approval of permission	February 2013
4	Total No. of Conditions recommended by the former EPD	5
5	Total No. of Conditions recommended by the former EPD which were included in the DPAR by the PD	5
6	Percentage of EPD recommendations that were included in the permission	100%
7	Issues recommended as permission conditions and included by the PD	1. Works methodology regarding scuttling of vessel. 2. Undersea subterranean features. 3. Monitoring plan. 4. General conditions.
8	Post-decision documentation available?	Yes.
9	If answer to (8) above is Yes, what details are available?	Development permission was approved on the 7th February 2013. 1. The Environmental Monitoring Plan was submitted to MEPA in April 2013 (NB. Drafted by the same consultants that carried out the EPS for the same proposal). 2. In May 2013, the applicant submitted a declaration from the environmental consultants regarding the cleanliness of the vessel prior to the scuttling process. 3. In May 2013, a notice to mariners was issued by Transport Malta, indicating that following the scuttling of the vessel, no sport diving could take place with a berth of 100m from such. In addition, the Fisheries Board also confirmed that a conservation area would need to be set within 50m from the centre of the wreck. 4. In October 2015, a number of documents were submitted to MEPA for its consideration: (i) report of diver risk assessment, (ii) report on changes to physical environment and (iii) report on marine ecological monitoring. 5. The abovementioned documentation, including a DVD with a video survey of the wreck site, were referred to EPD for review in October 2015. EPD submitted its comments in March 2016, indicating the following: (i) the inadequacy of the visual inspection to determine any chemical pollution of the site, (ii) confirmation that no new environmental impacts have arisen following the shifting of the vessel by 15m from its original position, (iii) called for further monitoring. No further submissions or consultations were carried out following this submission.

1	Case No.	10
2	Project type	Urban development projects
3	Date of approval of permission	March 2011
4	Total No. of Conditions recommended by the former EPD	16
5	Total No. of Conditions recommended by the former EPD which were included in the DPAR by the PD	12
6	Percentage of EPD recommendations that were included in the permission	75%
7	Issues recommended as permission conditions and included by the PD	1. Request for the submission of a Construction Management Plan. 2. Request for the submission of a Works Monitoring Programme. 3. Detailed design and finishing. 4. Operational permitting requirements. 5. Waste management issues. 6. Subterranean features. 7. Removal and reuse of soil. 8. Ancillary infrastructural services, and disruption to existing infrastructure. 9. Cultural heritage. 10. Coastal and marine environment.
8	Post-decision documentation available?	Yes.
9	If answer to (8) above is Yes, what details are available?	Development was approved on the 4th March 2011, with a number of conditions revised following the MEPA Board sitting. 1. The Construction Management Plan was submitted to MEPA in June 2012, and approved in the same month (Doc. 139) – it is being understood that the ‘draft approval’ was sent to the applicant with no consultation with the EPD. No records of such consultation are available for viewing. 2. An addendum to the CMP was submitted in January 2013, and EPD commented on the working hours for specific shafts. Further feedback regarding the works associated with the shafts was provided in May 2013. No further consultation with EPD was carried out post consultation. Records on post-permit processing on the digital records are very limited.

1	Case No.	11
2	Project type	Transport infrastructure
3	Date of approval of permission	August 2012
4	Total No. of Conditions recommended by the former EPD	11
5	Total No. of Conditions recommended by the former EPD which were included in the DPAR by the PD	11
6	Percentage of EPD recommendations that were included in the permission	100%
7	Issues recommended as permission conditions and included by the PD	1. Request for a Works Monitoring Programme. 2. Request for alternative designs for certain parts of the road. 3. Ancillary infrastructure, services and access. 4. Waste Management. 5. Subterranean features. 6. Trees and landscaping. 7. Boundary walls. 8. Site reinstatement.
8	Post-decision documentation available?	Yes.
9	If answer to (8) above is Yes, what details are available?	1. The Construction Management Plan was submitted to MEPA in December 2012. EPD was notified of the submission of the revised plans in January 2013. 2. In October 2013 (Doc. 193), it transpires that a meeting was held between the applicant and EPD, and a new set of comments was provided pertaining to the following: - Qalet Marku – Reserved matter: Moving the road closer to the coast to remove the roundabout from the entry to Magħtab is considered to give rise to a large impact when compared to the proposal of using a roundabout. It was agreed that TM would revise the submitted drawings by keeping that part of the road as a two lane (rather than 4) and make only slight changes to render it safe. - It was also agreed that TM would check which accesses are official so as to keep only those, and close all unofficial accesses – two of these were pointed out during the meeting. - The redundant parts of the road following works need to be restored. In this regard, it was agreed that a method statement indicating how the redundant parts shall be restored will be submitted. Restoration is to include the removal of asphalt and the planting of species in accordance with the substratum present, which according to the EIA appears to be alluvium. The EPD has already submitted the parameters within which the method statement has to fit (main application). The case officer is to forward these parameters to Transport Malta. - With reference to the road made redundant near Salini, it must be ensured that the boundary walls remain stable that that there are no overspills into the water.

		- In terms of boundary walls, those walls forming part of agricultural land need to be restored into rubble walls. In this regard, rubble stones typical of the area need to be used and landscaping is to be included to minimise the visual impact. Suggest species are <i>Darniella melitensis</i>, <i>Inula crithmoides</i> and <i>Capparis orientalis</i>. - With regards to embankment walls, these can be made of stronger materials than rubble however cladding with concrete is of concern, and is to be avoided. TM indicated that they intend to clad proposed and existing embankment walls. The EPD indicated the need to use good cladding using stone, not concrete. - Any redundant walls are to be removed. 3. Additional comments by EPD were made in January 2014, in relation with to the following: (i) pending requests in Doc. 193), (ii) landscaping plan, (iii) tree uprooting and management plan, and (iv) the draft CMP. 4. In February 2014, EPD confirmed that it had no issues with the location of the site office as proposed. 5. In March and April 2014, EPD provided additional comments in relation to the landscaping and the CMP. 6. The Environmental Monitoring Programme was submitted to MEPA in May 2014, which was referred for comments by the EPD and the Enforcement Directorate – with feedback made by both. EPD noted no specific issues and agreed with the content of the documentation. 7. Submissions regarding a minor amendment proposal were also noted, however no feedback from the EPD was sought at this point in time. 8. Monitoring Report E1 (related to Archaeology and Environmental monitoring) was submitted to MEPA in June 2014 to the Enforcement Directorate. 9. Further comments by EPD in relation to the specifications for the retaining walls were made in July 2014. 10. Monitoring Reports 1 – 9 were submitted by the architect to MEPA in July 2014. Reports 10 and 11 in July 2014, and 12 – 16 in August 2014. Reports 17 – 20 were submitted in September 2014. Reports 20 – 25 were submitted in October 2014.
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		Reports 26 – 42 were submitted in February 2015. Reports 43 – 52 were submitted in April 2015. 11. It was noted that EPD was contacted twice due to issues pertaining to the uprooting of trees (Docs. 377 and 391), however no consultation was carried out with respect to the monitoring reports that were being submitted regularly by the architect. It is not clear as to whether the monitoring reports were being followed-up or reviewed. 12. Monitoring reports 53 – 56 were submitted in May 2015. 13. Additional consultation was carried out with EPD in May 2015, in relation to changes to the development that were being proposed by the applicant. EPD requested a works method statement to be submitted, and also a note from the EIA Coordinator that carried out the EIA with respect to the changes being proposed. This was concluded in August 2015. 14. Monitoring reports 57 – 65 were submitted in July 2015. 66 – 68 were submitted in August 2015. 69 – 73 were submitted in September 2015. 74 – 77 were submitted in October 2015. 78 was submitted in November 2015. The final monitoring report was submitted in December 2015. 15. In October 2016, ERA was consulted in relation to a works method statement concerning the reinstatement of a site used as a storage area. It had no additional comments on the matter. In February 2018 it provided comments regarding the Nature Permit on site. 16. The last reply from ERA dates back to March 2018, whereby compensatory planting was considered to be acceptable. No additional consultations were carried out beyond this reply.
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1	Case No.	12
2	Project type	Urban development projects
3	Date of approval of permission	October 2008
4	Total No. of Conditions recommended by the former EPD	4
5	Total No. of Conditions recommended by the former EPD which were included in the DPAR by the PD	4
6	Percentage of EPD recommendations that were included in the permission	100%
7	Issues recommended as permission conditions and included by the PD	1. Construction Management Plan. 2. Energy Management Plan. 3. Utility Management Plan. 4. Lighting Plan. 5. Landscaping Plan. 6. Monitoring – details regarding specific aspects, recommended by the EPD were removed by the PD. N.B. This development application is also the first of the cases analysed to include the following general condition by EPD: <i>“Except where otherwise indicated in this document, all mitigation measures outlined in the EIS shall be fully complied with to the Authority’s satisfaction.”</i> This condition however, through personal communication, proved to be difficult to implement, given that it would not be possible to implement some of the recommendations made by the actual EIS, e.g., keeping doors/windows of adjacent residential areas shut during the excavation and construction phase. N.B. All conditions were included in the ODP.
8	Post-decision documentation available?	No.
9	If answer to (8) above is Yes, what details are available?	N/A – No follow-up could be traced on record.

1	Case No.	13
2	Project type	General land use & urban development projects
3	Date of approval of permission	March 2010
4	Total No. of Conditions recommended by the former EPD	8
5	Total No. of Conditions recommended by the former EPD which were included in the DPAR by the PD	5
6	Percentage of EPD recommendations that were included in the permission	63%
7	Issues recommended as permission conditions and included by the PD	1. Bank guarantees. 2. Construction phase requirements (included as reserved matters). 3. Monitoring, including construction and operational phase, plus noise, air quality, cultural heritage, landscaping and effectiveness of the Green Travel Plan. These were all included as a separate condition AS IS including all details. 4. Landscaping (included as reserved matter). 5. Ancillary infrastructure services and access (included in Utility Management Plan).
8	Post-decision documentation available?	No
9	If answer to (8) above is Yes, what details are available?	N/A (N.B. Mitigation measures/monitoring is missing from case file, therefore it is not clear as to whether any follow-up has been carried out. There is the possibility that this was carried out in subsequent development applications, however there is no link to the original Outline Development Permit.)

1	Case No.	14
2	Project type	Water resources, sewerage and pipelines
3	Date of approval of permission	September 2008
4	Total No. of Conditions recommended by the former EPD	12
5	Total No. of Conditions recommended by the former EPD which were included in the DPAR by the PD	10
6	Percentage of EPD recommendations that were included in the permission	83%
7	Issues recommended as permission conditions and included by the PD	1. General conditions including all recommendations of EIS (N.B. Impossible to monitor.) 2. Monitoring requirements. 3. Construction-phase management. 4. Construction Management Plan. 5. Monitoring excluding operational issues, including further details on OMC agreement with MEPA: issues to be monitored include: noise and vibration, air quality, sensitive ecological receptors, archaeology/cultural heritage, geological during construction. 6. Landscaping. 7. Ancillary infrastructural services and access. 8. Geology. 9. Noise and air quality. 10. Agricultural and rubble walls. 11. Archaeology and cultural heritage. 12. Ecology.
8	Post-decision documentation available?	Yes.
9	If answer to (8) above is Yes, what details are available?	1. Correspondence regarding CMP and updated versions of such, dated December 2008 were also inserted. 2. A memorandum from Enforcement was also prepared with respect to the then current state of play regarding development of site and associated works. It is not clear as to whether action was prompted following such. 3. A copy of a memorandum between the Enforcement Directorate and EPD regarding compliance was also filed in the monitoring file, pertaining to PA 6974/06 and PA 1437/09. It was noted that there was non-compliance with permit conditions in relation with: (1) the pending issuance of an Environmental Permit, (2) the pending implementation of a full Landscaping Scheme, (3) the lack of submission of a lighting

		plan, (4) the restoration of the coastal area to its original state and (5) the relevant submission of monitoring programmes and plans. N.B. It is not clear whether all monitoring requirements were submitted in time and as stipulated by the development permit.
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1	Case No.	15
2	Project type	Quarries, mineral extraction and related interventions
3	Date of approval of permission	August 2008 *Most information regarding this case file is missing.
4	Total No. of Conditions recommended by the former EPD	N/A
5	Total No. of Conditions recommended by the former EPD which were included in the DPAR by the PD	N/A
6	Percentage of EPD recommendations that were included in the permission	N/A
7	Issues recommended as permission conditions and included by the PD	N/A
8	Post-decision documentation available?	No.
9	If answer to (8) above is Yes, what details are available?	N/A

1	Case No.	16
2	Project type	Industrial development projects
3	Date of approval of permission	October 2008
4	Total No. of Conditions recommended by the former EPD	/
		EPD recommended the submission of a CMP as a clear requirement as part of the reserved matters being requested with this development permission.
5	Total No. of Conditions recommended by the former EPD which were included in the DPAR by the PD	/
6	Percentage of EPD recommendations that were included in the permission	N/A
7	Issues recommended as permission conditions and included by the PD	CMP
8	Post-decision documentation available?	No.
9	If answer to (8) above is Yes, what details are available?	N/A

1	Case No.	17
2	Project type	Urban development projects
3	Date of approval of permission	February 2010
4	Total No. of Conditions recommended by the former EPD	10
5	Total No. of Conditions recommended by the former EPD which were included in the DPAR by the PD	10
6	Percentage of EPD recommendations that were included in the permission	100%
7	Issues recommended as permission conditions and included by the PD	1. Bank guarantee. 2. Construction Management Plan. 3. Monitoring requirements (excluding operations and including: noise and vibration, archaeology, hydrology). 4. Landscaping. 5. Ancillary infrastructural services and access. 6. Agriculture, soil and rubble walls. 7. Archaeology and cultural heritage. 8. Exterior lighting. 9. Storm water runoff. 10. Site access and consequential development.
8	Post-decision documentation available?	Yes.
9	If answer to (8) above is Yes, what details are available?	1. Monitoring file includes a copy of DPAR, Fire Ventilation and Safety Report. No real minuting of case. 2. Copy of approved CMP, approved as Doc. 96A on 7th January 2011. The CMP also includes a geological subsurface investigation report. 3. An Operations Monitoring Programme (No. 30) dated March 2012 was also noted. It is being assumed that other 29 reports were also submitted to the then MEPA, however it is not clear whether these were all received and all reviewed. There is no indication of such in the records given their scanty nature. 4. A number of Vibration and Noise Monitoring Reports were also noted, carried out by Solid Base Laboratory Ltd, for Mr. Adrian Mallia (EIA Coordinator for the Seabank EIS). A total of 171 was noted. 5. Two Water Quality Monitoring laboratory reports at Il-Hofra Wetland at Mellieha Bay were also noted (21/11 and 24/11). It is assumed that no action was taken with respect to the content of this documentation.

		N.B. Assessment of this monitoring file suggests that the only link between the EIA carried out ex-ante to the decision being taken, that is during the processing of the development application and ex-post, i.e., during the EIA follow-up stage, is the EIA Coordinator, which in this case was also responsible for the monitoring stage of the development (it should be noted that the EIA and the monitoring were carried out by two different companies, but by the same individuals supervising it). The records available in the monitoring case file suggest that there is no link between the reviewers i.e., the EPD and the Enforcement Directorate, therefore there is no follow-up to the findings and conclusions of the EIA.
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1	Case No.	18
2	Project type	Waste management and disposal
3	Date of approval of permission	February 2006
4	Total No. of Conditions recommended by the former EPD	22
5	Total No. of Conditions recommended by the former EPD which were included in the DPAR by the PD	22
6	Percentage of EPD recommendations that were included in the permission	100%
7	Issues recommended as permission conditions and included by the PD	1. General/standard conditions. 2. Operational permit. 3. Reserved matters. 4. Bank guarantee/OMT. 5. Site infrastructure. 6. Construction Management Plan. 7. Hours of operation. 8. Traffic management. 9. Excavation works. 10. Offsite mineral resources. 11. Geology/archaeology. 12. Aquifer protection. 13. Noise control. 14. Blasting and vibrations and associated monitoring. 15. Dust control. 16. Protected rubble walls. 17. Protected trees and other plants. 18. Ecology. 19. Landscaping/restoration.
8	Post-decision documentation available?	No.
9	If answer to (8) above is Yes, what details are available?	No record in case file for this application, which is of concern. However, it is being assumed that action was taken, given the nature of the development, but was not recorded in either the PA file nor the monitoring/enforcement case file.

1	Case No.	19
2	Project type	Urban development projects
3	Date of approval of permission	August 2005
4	Total No. of Conditions recommended by the former EPD	7
5	Total No. of Conditions recommended by the former EPD which were included in the DPAR by the PD	7
6	Percentage of EPD recommendations that were included in the permission	100%
7	Issues recommended as permission conditions and included by the PD	1. IPPC permit – required for this development permission, therefore certain conditions are left to the IPPC permit, e.g., noise control. 2. Lighting. 3. Landscaping. 4. Monitoring plan (in IPPC permit requirements). 5. Risk register. 6. Drainage. N.B. The author noted that in spite of the lack of detail that can be noticed in the permit conditions drafted by the PD, it is being assumed that detailed considerations, particularly at operational level would be considered in the IPPC.
8	Post-decision documentation available?	Yes.
9	If answer to (8) above is Yes, what details are available?	- A copy of the DPAR and a set of approved plans was inserted in the case file. - There are no records of any follow-up in this case file. However, it should be noted that the proposal was subject to an IPPC Permit as per IPP002/05, in relation to the operation of the Medichem Pharmaceutical Industrial, in view of the fact that it fell under the scope of the Industrial Emissions Directive, being an installation using a chemical or biological process for the production of basic pharmaceutical products. It was noted that a general condition for the IPPC permit stipulated that within three months of the granting of the permit, the applicant is to submit a plan for the implementation of an Environmental Management System and have it certified to EMAS or ISO 14000 or other internationally recognized equivalent at the earliest opportunity. Other conditions in the IPPC permit also included: - Emissions to air (excluding odour, noise or vibrations) from specified points; - Discharges to water (other than groundwater and to sewer) - Discharges to sewer

		- Emissions to groundwater - Fugitive emissions of substances to air - Fugitive emissions of substances to water and sewer - Odour - Emissions to Land - Management of the site - Efficient use of raw materials - Waste storage and handling - Waste recovery or disposal - Energy efficiency - Accident prevention and control - Noise and vibration - On-site monitoring - Closure and de-commissioning - Transfer to effluent treatment plant NB: No link between the EIA process and the IPPC process was noted, despite the link between the two, particularly in terms of the monitoring phase. The system being proposed through the IPPC permit, i.e., the implementation of an EMS, is a step in the right direction however there still is an evident lacuna in terms of communication between the EIA, the post-permit follow up and the IPPC at the operational stage.
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1	Case No.	20
2	Project type	Water resources, sewerage and pipelines
3	Date of approval of permission	March 2006
4	Total No. of Conditions recommended by the former EPD	12
5	Total No. of Conditions recommended by the former EPD which were included in the DPAR by the PD	12
6	Percentage of EPD recommendations that were included in the permission	100%
7	Issues recommended as permission conditions and included by the PD	1. General conditions regarding Full Development Permit. 2. Environmental permitting requirements 3. Design requirements regarding contamination of bedrock. 4. Monitoring programme. 5. Operational permitting requirements. 6. Construction phase management 7. Removal and restoration of rubbish dump at Ic-Cumnija. 8. Separate application for sewage outfall. 9. Noise control. 10. Geology/archaeology. 11. Landscaping and lighting 12. General conditions
8	Post-decision documentation available?	Yes.
9	If answer to (8) above is Yes, what details are available?	(1) A copy of the DPAR and a set of approved plans was inserted in the case file. (2) Email correspondence dated October 2008, between the EPD and the Enforcement Directorate in relation to contamination of boreholes was noted. There was no additional follow-up to this correspondence inserted in the case file. (3) This is another case where there is no indication with respect to what happened at post-permit stage in terms of assessment and follow-up, if any.

1	Case No.	21
2	Project type	Urban development projects
3	Date of approval of permit	June 2003
4	Total No. of Conditions recommended by the former EPD	10
5	Total No. of Conditions recommended by the former EPD which were included in the DPAR by the PD	10
6	Percentage of EPD recommendations that were included in the permission	100%
7	Issues recommended as permission conditions and included by the PD	1. Outlining what the Outline Development Permit would be approving of, including the capacity of the hotel itself. 2. Design and planning considerations. 3. Planning contributions. 4. Appointment of the monitoring officials during each stage of the development. 5. Submission of Construction Management Plan. 6. Submission of Waste Management Plan. 7. Landscaping.
8	Post-decision documentation available?	No.
9	If answer to (8) above is Yes, what details are available?	N/A

1	Case No.	22
2	Project type	Waste management and disposal
3	Date of approval of permission	January 2006
4	Total No. of Conditions recommended by the former EPD	19
5	Total No. of Conditions recommended by the former EPD which were included in the DPAR by the PD	16
6	Percentage of EPD recommendations that were included in the permission	84%
7	Issues recommended as permission conditions and included by the PD	1. Stack emissions – taken into consideration at IPPC stage. 2. Dust. 3. Odour (part of operations). 4. Noise mitigation. 5. Landscape and visual. 6. Monitoring (included in IPPC).
8	Post-decision documentation available?	Yes.
9	If answer to (8) above is Yes, what details are available?	1. A copy of the DPAR and a set of approved plans was inserted in the case file. 2. A note dated March 2006, sent to applicant in relation with the compliance to development permit conditions was observed. N.B. Compliance with the permit conditions as the only evidence of compliance with the permit conditions. However, there is no indication as to what type of processing and what extent of follow-up was carried out at IPPC stage, and whether any recommendations/requirements made in the EIA were followed-up.

1	Case No.	23
2	Project type	Installations for the storage of fuel
3	Date of approval of permission	March 2006
4	Total No. of Conditions recommended by the former EPD	23
5	Total No. of Conditions recommended by the former EPD which were included in the DPAR by the PD	23
6	Percentage of EPD recommendations that were included in the permission	100% (All conditions proposed by EPD were included as permit conditions)
7	Issues recommended as permit conditions and included by the PD	1. Decommissioning agreements. 2. Road improvement works. 3. Soft landscaping. 4. Uprooting of pine tree. 5. Bank guarantee. 6. Soft landscaping. 7. Boundary walls. 8. Construction Management Plan (CMP). 9. Site draining plan. 10. Clearance from WSC. 11. Discharge to public sewer. 12. Surface run-off and waste water. 13. CPD requirements. 14. Compliance requirements. 15. Street lighting. 16. Design based mitigation measures identified by the EPS. 17. Maintenance by engineers. 18. Services. 19. Concealing of services. 20. Trading licence. 21. Disposal of waste. 22. Operational permit. 23. Standard conditions.
8	Post-decision documentation available?	No.
9	If answer to (8) above is Yes, what details are available?	N/A

1	Case No.	24
2	Project type	Development on the coast or at sea (including ports)
3	Date of approval of permission	October 2002
4	Total No. of Conditions recommended by the former EPD	11
5	Total No. of Conditions recommended by the former EPD which were included in the DPAR by the PD	11
6	Percentage of EPD recommendations that were included in the permission	100%
7	Issues recommended as permission conditions and included by the PD	1. Standard conditions. 2. Solid and liquid waste disposal. 3. Submission of CMP. 4. Technical details of the floating pontoons. 5. Marina management plan. 6. Fuelling operations. 7. Quay edge interventions. 8. Appointment of monitoring team. 9. Landing berths locations. 10. Bank guarantee. 11. CPD conditions.
8	Post-decision documentation available?	Yes.
9	If answer to (8) above is Yes, what details are available?	1. A copy of the DPAR and a set of approved plans was inserted in the case file. 2. A memorandum between the Enforcement Directorate and the Major Projects Team in the PD regarding a site inspection in the approved site due to complains received during works. Correspondence between the Heritage Planning Unit at MEPA, the Superintendence of Cultural Heritage and the applicant was also noted. 3. No other information is available on the post-permit assessment that may have been carried out for this development.

1	Case No.	25
2	Project type	Urban development projects
3	Date of approval of permission	August 2000
4	Total No. of Conditions recommended by the former EPD	21
5	Total No. of Conditions recommended by the former EPD which were included in the DPAR by the PD	21
6	Percentage of EPD recommendations that were included in the permission	100%
7	Issues recommended as permission conditions and included by the PD	1. Landcover. 2. Geology. 3. Hydrology. 4. Pedology. 5. Ecology. 6. Cultural heritage. 7. Microclimate. 8. Landscaping and monitoring. Issues related to agriculture and socio-economic aspects were not included in the PD permit conditions.
8	Post-decision documentation available?	Yes.
9	If answer to (8) above is Yes, what details are available?	4. Correspondence regarding the appointment of the monitoring team was included (dating June 2001) and the preparation of the tripartite agreement for the OMT. 5. A copy of the Terms of Reference for Operations and Monitoring Management Services in relation to the New Hospital Development at Tal-Qroqq, dated July 2001 was also noted. 6. Correspondence regarding the appointment of the monitoring team was also included. 7. 24 Operational Monitoring Reports were submitted to MEPA however there is no evidence of any follow-up of such reports in the monitoring case-file. N.B. Whilst noting that there is evidence that monitoring is actually carried out, in line with the requirements established in the development permission; it is not clear as to whether these were actually reviewed, any issue identified or whether any remedial action was taken in line with the EIA findings. There is no way that this can be ascertained. This further provides evidence to the fact that EIA follow-up has always been a lacuna in the Maltese EIA and development permit process.

1	Case No.	26
2	Project type	Agriculture projects
3	Date of approval of permission	September 2000
4	Total No. of Conditions recommended by the former EPD	10
5	Total No. of Conditions recommended by the former EPD which were included in the DPAR by the PD	5
6	Percentage of EPD recommendations that were included in the permission	50%
7	Issues recommended as permission conditions and included by the PD	1. Waste management. 2. Preservation of trees. 3. Boundary walls. 4. Landscaping. 5. Rubble walls. It should also be noted that conditions on archaeology were included in conditions 10 – 14 in the DPAR. Bank guarantees were also included.
8	Post-decision documentation available?	No
9	If answer to (8) above is Yes, what details are available?	N/A

1	Case No.	27
2	Project type	Installations for the storage of fuel
3	Date of approval of permission	February 2001
4	Total No. of Conditions recommended by the former EPD	14
5	Total No. of Conditions recommended by the former EPD which were included in the DPAR by the PD	14
6	Percentage of EPD recommendations that were included in the permission	100%
7	Issues recommended as permission conditions and included by the PD	1. Planning issues. 2. Deposition of excavated material. 3. Height of buildings. 4. Hoarding. 5. Lighting scheme. 6. Issue pertaining to Drainage Department requirements. 7. Sewer discharge permission. 8. Spillage design. 9. Safety features. 10. Fire safety. 11. Air quality monitoring. 12. Landscaping scheme. 13. Vernacular features. 14. WSC permission.
8	Post-decision documentation available?	No
9	If answer to (8) above is Yes, what details are available?	N/A

1	Case No.	28*
2	Project type	Agriculture projects
3	Date of approval of permission	February 2003
4	Total No. of Conditions recommended by the former EPD	14
5	Total No. of Conditions recommended by the former EPD which were included in the DPAR by the PD	14
6	Percentage of EPD recommendations that were included in the permission	100%
7	Issues recommended as permission conditions and included by the PD	1. Bank guarantee (amounts in the actual PA permit were reduced from those proposed by the EPD). 2. Visual impact. 3. Air quality. 4. Concrete floorings. 5. Requirement for double-bottomed cesspits. 6. Manure shed. 7. Permissions from drainage department. 8. Run-off requirements. 9. Accumulation of manure. 10. Detergents. 11. Insects. 12. Lighting. 13. Soil removal. 14. Waste log. All the conditions proposed by the EPD were included verbatim – conditions are actually tailor-made for this particular development permit, as already stated for cases 25 and 26, this is evident in earlier development applications.
8	Post-decision documentation available?	No; however, the EIA/PA development application follow-up is mainly related to waste management operations and pollution-prevention related bank guarantees. There is no additional evidence of follow-up being carried out.
9	If answer to (8) above is Yes, what details are available?	No case file on the post-permit processing/follow-up is available.

1	Case No.	29*
2	Project type	Development on the coast or at sea (including ports)
3	Date of approval of permission	June 2002
4	Total No. of Conditions recommended by the former EPD	6
5	Total No. of Conditions recommended by the former EPD which were included in the DPAR by the PD	6
6	Percentage of EPD recommendations that were included in the permission	100%
7	Issues recommended as permission conditions and included by the PD	1. Design issues. 2. Type of material to be used for the beach replenishment process. 3. Trucking/transportation options. 4. Blue Flag criteria. 5. Removing use of mechanical plant. 6. Silt curtains. All requirements raised by the EPD were included in the development permit conditions, however the PD also included additional requirements as follows: 1. Construction Management Plan. 2. Ecological Monitoring Programme. 3. Beach Management Plan. In actual fact, the latter requirements reflect the detailed recommendations made by the EIA, which again reflect the more tailored approach towards the drafting of development permit conditions.
8	Post-decision documentation available?	No
9	If answer to (8) above is Yes, what details are available?	N/A

1	Case No.	30*
2	Project type	Development on the coast or at sea (including ports)
3	Date of approval of permission	September 1999
4	Total No. of Conditions recommended by the former EPD	9
5	Total No. of Conditions recommended by the former EPD which were included in the DPAR by the PD	9
6	Percentage of EPD recommendations that were included in the permission	100%
7	Issues ended as permission conditions and included by the PD	(1) Submission of a Full Development Permit Application. (2) Quay design. (3) Systems for the management of liquid waste. (4) Management of construction works. (5) Submission of a Construction Management Plan. (6) Monitoring of construction works. (7) Monitoring of the marine environment. (8) Halting of works during monitoring should any issue arising during works. (9) Archaeological survey requirements.
8	Post-decision documentation available?	No
9	If answer to (8) above is Yes, what details are available?	N/A

Appendix L – A brief outline of the development of Maltese spatial planning

A brief outline of the development of Maltese spatial planning

This appendix provides a brief outline of the development of Maltese spatial planning, from post-WWII planning to the current regulatory regime.

Introduction

With a population of just over half a million people – 519,562 in 2021 (National Statistics Office, 2022), the Maltese Islands (that is, Malta, Gozo and Comino) have been experiencing population and urban growth since the first recorded census of population and housing in 1842. The Maltese population in the mid-19th century stood at approximately 120,000, with the latest census in 2021 indicating a total of 519,562 (National Statistics Office, 2022). This represents a rapid increase in population from the 2011 total of 416,055 (National Statistics Office, 2012). The only observed dips in the population occurred in 1921, with a decline following the aftermath of the First World War, and that arising from organised emigration rates in the 1950s and 1960s, following the Second World War.

This, together with having the highest population density in the European Union (1,320 persons per square kilometre) within a geographical area of 316 square kilometres and pressures from environmental lobbies to adopt some form of planning system due to haphazard urban growth, unprofessional approaches to land use planning, and corruption allegations, led to the setting up of the current planning system in the early 1990s. This pressure, coupled with the relative lack of professionally managed land-use planning till the late 1980s, led to the expansion of the built-up areas in the Maltese Islands, from 4.5% in 1957 to around 20% by the late 1980s (Environment and Resources Authority, 2022; National Statistics Office, 2018).

Table 1 below and the subsequent sections provide an overview of the history of the spatial planning system in Malta, providing a framework to how EIA was introduced and its development in the Maltese planning process, from the post-WWII years to the most recent changes.

Table 1: Overview of the chronological development of the Maltese spatial planning process

<i>Timeframe</i>	<i>Description</i>
/	Post-WWII planning
1945	The Building (Control) Regulations and the Building Control Board (BCB)
1956	The Special Development Areas (SDA) Act
1959	Further guidance towards a tailor-made planning system
1962	The establishment of the Maltese territory as a <i>planning area</i> and the setting up of the Planning Area Permits Board (PAPB).
1969	The Town and Country Planning Act
1980s	Political unrest and the lack of further development in the Maltese planning system
1983	The Building Development Areas Act
1988	The Building Permits (Temporary Provisions) Act
1992	The Structure Plan, the Development Planning Act and the Planning Authority
1997	Amendments to the DPA
2001	Further amendments to the DPA
2002	The Malta Environment and Planning Authority (MEPA)

<i>Timeframe</i>	<i>Description</i>
2010	The Environment and Development Planning Act (EDPA)
2016	The new DPA, the new EPA and the MEPA demerger

Post-war planning and the struggle to establish a planning system for Malta

Faced with the damage sustained from enemy action during the Second World War as a British colony⁴⁰, Malta had to face the challenge of reconstructing what had been heavily destroyed during these attacks. Before the end of the conflict, the British consultants Harrison and Hubbard were commissioned to “... prepare an Outline Plan for the region of Valletta and the Three Cities, based upon a survey of existing conditions” (Harrison & Hubbard, 1945, p. xi). Their report was concluded in January 1945, and included three principal themes: (i) proposals for transport and communications, (ii) civic design proposals for Valletta and the Three Cities, and (iii) institutional proposals for the implementation of the plans. Issues that were highlighted by the two consultants included the inadequacy of the land-use planning regime in Malta, the low quality of architectural design produced by Maltese architects and the need for setting up a planning commission (Harrison & Hubbard, 1945).

The Building (Control) Regulations and the Building Control Board (BCB)

In 1945, a Building Control Board (BCB) was established through the Building (Control) Regulations (1945) to provide a framework for the issuing of construction licences, provision of associated services and interventions related to residential buildings (Government of Malta, 1945). The board was known to have extensive discretionary powers and was not bound to provide a justification for its decisions in relation to applications for development permission (Gauci, 2002).

The Special Development Areas (SDA) Act

The Special Development Areas Act (Government of Malta, 1956) was enacted in 1956. It mostly focused on development occurring on the fringes of existing urban areas and the designation of SDAs (Gauci, 2002). The Special Development Areas (SDAs) were zones meant to be set aside for “... public acquisition with a view to its development for a public purpose other than merely of town planning” (Government of Malta, 1956, p. 1).

1959 - Further guidance towards a tailor-made planning system

In 1959, advice from Windyer Morris, Director of Planning and Housing in Cyprus, was requested to advise about the setting up of a comprehensive planning system which was to be applied in order to provide a framework for the orderly industrialisation of Malta (Gauci, 2002). Morris proposed a set of measures including: the creation of Urban Development Areas (UDAs) around existing towns and villages, aiming for controlled development within designated areas, taxation initiatives for undeveloped land located within UDAs, the formulation of a scheme intended to address the fragmentation of ownership of urban lands, and the setting up of a Land Use Planning Advisory Team, located in the office of the Finance Secretary (Gauci, 2002).

⁴⁰ Malta was a British Crown colony or royal colony, administered by the Crown within the British Empire, between 1813 and 1964, when it gained independence as the State of Malta (Frendo, 1989).

The realisation of the proposals made by Morris, was then entrusted to Jeffrey Switzer, a land economist from the University of Cambridge. Switzer had proposed amendments to Chapter 13 of the Code of Police Laws as an interim measure until the enactment of a Town and Country Plan.

The establishment of the Maltese territory as a planning area and the setting up of the Planning Area Permits Board (PAPB)

The enactment of Ordinance XV of 1962 (Government of Malta, 1962a), empowered the Government to declare the whole of the Maltese territory as a planning area. The declaration that Malta was to be a Planning Area was made through a Legal Notice issued under Part 13 of the Code of Police Laws (which was later repealed). This declaration implied the nationalisation of development rights, without impinging on the right of property owners to enjoy the fruits of their properties (Gauci, 2002). It also led to the setting up of a Planning Area Permits Board (known as the PAPB) which was to replace the BCB. This board was tasked with the determination of applications for building permits⁴¹.

1969 - The Town and Country Planning Act

A Town and Country Planning Act was passed in the House of Representatives in 1969. The new law authorised the establishment of two major planning institutions, namely a Town Planning Commission and a Town Planning Appeals Tribunal. The Commission was to be responsible for (i) advising the minister for planning regarding the preparation or revision of development plans, and (ii) the implementation of development control. Concurrently (between 1967 and 1970), Gauci (2002) notes that a United Nations appointed planner, Sieczkowski, was commissioned to prepare a national physical plan, while the deliberations regarding the act were still ongoing. However, neither the act nor the physical plan, were actually put into force.

1980s – Political unrest and lack of further development in the Maltese planning system

The 1980s in Malta were characterised by a period of political unrest (Fenech, 1988; Frendo, 1989, 2000; Pirotta, 2017). This political instability hindered any further development of the Maltese planning system, particularly when noting the relatively ad hoc decisions that were being taken in respect to land-use allocation, for example, the identification of areas for housing accommodation under the Labour administration. This political instability hindered any further development of the Maltese planning system, particularly when noting the relatively ad hoc decisions that were being taken in terms of land-use allocation, for example, the identification of areas for housing accommodation under the Labour administration.

1983 - The Building Development Areas Act

The Building Development Areas Act was then published in 1983 (Act I of 1983), with its main aims being the provision for the establishment of building development areas, for the acquisition and disposal of land contained therein and for the further regulation of building development (Government of Malta, 1983). The main issue related to the Building Development Areas Act was that it led to restriction of development in already committed areas while encouraging the

⁴¹ Legal Notice 10 of 1962 (Government of Malta, 1962b) set up the Planning Areas Permits Board (PAPB) while Legal Notice 11 of 1962 (Government of Malta, 1962c) declared the whole of the Maltese territory as a planning area.

opening up of new development zones in the countryside, beyond already designated sites for development (Gauci, 2002). The part of this Act concerned with the creation of haphazardly planned and designed residential neighbourhoods in the countryside, led to the emergence or consolidation of eNGOs in Malta.

1988 – The Building Permits (Temporary Provisions) Act

The Building Permits (Temporary Provisions) Act (Government of Malta, 1988), published in 1988, provided a framework for a transition towards a new planning system, aiming to ostensibly to regulate development control (i.e., theoretically halting urban sprawl) and reducing the possibility of corrupt practices (which were associated with the implementation of the 1983 Building Development Areas Act). The publication of the interim act also laid the groundwork for: (i) establishing a new planning authority, (ii) a dedicated committee within the House of Representatives that would debate land-use and environmental matters, (iii) the formulation of a structure plan for the Maltese Islands and (iv) the preparation of local plans (Gauci, 2002; Government of Malta, 1988). The Temporary Provision Schemes (TPSS) were also issued in the same year, ostensibly serving to arrest urban sprawl.

1992 – The Structure Plan, the Development Planning Act and the Planning Authority

The first draft of the Structure Plan was completed in 1990 and presented to the Cabinet the same year (Planning Authority, 1990). During the following year, the government issued a bill for the law which would be enacted as the Development Planning Act, 1992 (Cap. 356), partly repealing the Building Development Areas Act (1983), the Aesthetics (Buildings) Ordinance, the Building Permits (Temporary Provisions) Act (1988) as well as parts of the Code of Police Laws (mainly Part 13, which was previously referred to as Chapter 13 of the Code).

The establishment of the Planning Authority (PA) in 1992 was one of the major milestones in the history of Maltese spatial planning. Its main objectives included the promotion of planning and sustainable development of land and sea, both public and private and the control of development in accordance with the relevant development plans and planning policies (Government of Malta, 1992).

The creation of the PA led to the movement away from a system which was relatively centralised and government-led, to one where a dedicated, ostensibly autonomous agency/regulator was to be responsible for spatial planning and for the assessment and processing of development permission (Gauci, 2002).

The new act, published as Act I of 1992, sought to “... make provisions for the planning and management of development, for the establishment of an authority with powers to that effect and for matters connected therewith and ancillary thereto.” (Government of Malta, 1992, p. A 47). It was also meant to shift decision-making powers away from the ‘Minister’ to a seemingly autonomous Authority, focusing on three main elements: Administration (i.e., the establishment of the Planning Authority, a Planning Consultative Committee, the Development Control Commissions, and the Planning Appeals Board), Development Planning and Development Control.

1997 – Amendments to the DPA

The DPA was subsequently amended in 1997 (Government of Malta, 1997), following a change in government in 1996⁴². The main changes focused on (i) the involvement of government in land-use policy making at subsidiary plan level, i.e., for any time or for any location a structure plan is not in force or does not exist, the Authority may prepare a subsidiary plan or plans, (ii) the accountability of officials involved in the planning system and, (iii) the efficiency of the development control system (Gauci, 2002). Until 1997, it was assumed that an approval by the PA was a guarantee that the subsidiary plan was in accordance with the Structure Plan. The 1997 amendments gave the power to the Minister in endorsing the draft of the plan, with the government given full control over subsidiary plans and policies.

2001 – Further amendments to the DPA

The 2001 amendments also included (i) the introduction of a Standing Committee on Development Planning, (ii) the appointment of an Audit Officer, (iii) changes in the role of the Inter-Departmental Planning Committee, which could then encourage interaction between departments in the making of land-use policy, (iv) the appointment of planning mediators, (v) amendments which changed the procedures regarding the making of subsidiary plans, leading to Government having absolute control over the making of plans, (vi) additional amendments in relation to the decision-making process, whereby the authority in its determination of a development permission had to apply development plans and planning policies. It also had to have regard to any other material considerations and representations made in response to the planning proposal, (vii) procedures related to the revocation and modification of development permission, and (viii) procedures related to enforcement.

2002 – The Malta Environment and Planning Authority

The publication of the Cultural Heritage Act (Cap. 445) in 2002 marked the establishment of the Malta Environment and Planning Authority (MEPA). The Act, through its miscellaneous provisions in Article 57, amended the 1992 DPA, by changing the definition of ‘Authority’ from ‘the Planning Authority’ to ‘the Malta Environment and Planning Authority’ (Government of Malta, 2002). The amendment set up the merging of the then PA and the Environment Protection Department (EPD) to form a new authority (Government of Malta, 2001a).

The merging of the land-use planning and environmental protection functions into one authority meant that the MEPA was also responsible for the implementation of the Environment Protection Act (Government of Malta, 2001b).

The MEPA was also responsible for the implementation of directives, decisions, and regulations under the EU Environmental light of Malta’s application for accession to the European Union

⁴² In the 1996 general election, although the MLP received the most votes, the PN won the most seats. The 1987 constitutional amendments had to be utilised for the second time, and the MLP was awarded additional seats to ensure they had a majority in Parliament (Fenech, 1997).

(which Malta joined in 2004). The approval of development planning applications was granted or otherwise either by the MEPA *acquis* in or through Development Control Commissions (DCCs), depending on the type and nature of the proposed development. In respect to EIA, both the 1992 DPA (Articles 15A and 36) and the 1991 EPA (Part VII – Environmental Impact Assessment) included specific references to environmental impact assessment to be carried out in relation with development proposals.

2010 – The Environment and Development Planning Act

In 2010, the DPA and the EPA were repealed by the coming into force of the Environment and Development Planning Act (Government of Malta, 2010a). Following a two-year consultation period with all stakeholders, the corresponding Bill was presented to Parliament in early 2010, and following intense debate, was approved as the new Act in July 2010 (Malta Environment and Planning Authority, 2010a). The aim of the Act was to harmonise the legislative framework regulating the protection of the environment and development planning. It also sought to “secure and enhance the principles of consistency, efficiency, accountability and enforcement, ensuring sustainable development” (Government of Malta, 2010b, p. A659). The merging of the two legislative acts meant that the scope of the EDPA was to “protect the environment, to make provision for the planning and management of development and for the establishment of an authority with powers to that effect and for matters connected therewith or ancillary thereto” (Government of Malta, 2010a, p. 2).

While the MEPA retained its role as the authority responsible for planning and environment protection, the EDPA introduced the following: (i) the appointment of Chief Executive Officer, (ii) the establishment of the Environment and Planning Commissions (EPC), to replace the Development Control Commissions (DCCs), (iii) the setting up of the Standing Committee on Environment and Development Planning, (iv) the setting up of the Environment and Planning Review Tribunal (EPRT), (v) the setting up of the Registration Board and, (vi) the preparation of the Strategic Plan for the Environment and Development (SPED), in lieu of the Structure Plan (Government of Malta, 2010a).

Approved in 2015 (and still in effect at the time of writing of this thesis), the Strategic Plan for the Environment and Development (SPED) was supposed to regulate the sustainable management of land and sea resources, replacing the 1992 Structure Plan (Government of Malta, 2015), with its objectives originally planned to be utilised in the assessment of development permission applications.

2016 - The new DPA, the EPA and the MEPA demerger

Following the installation of the PL government in 2013, discussions in relation to the MEPA demerger process followed suit, with two documents issued in 2014 for public consultation:

- ‘For an Efficient Planning System’ focusing on the setting up of a planning one-stop-shop, to be known as the ‘Development Planning Authority’, which would be responsible for the issuing of planning permits related to land-use (Parliamentary Secretary for Planning and Simplification of Administrative Processes, 2014).

- ‘Towards High Standards for Environment Protection and Resource Management’, focusing on the establishment of the Environment and Resources Authority (ERA), with the aim of granting the authority with more autonomy in respect to decision-making and creating an identity of its own (Ministry for Sustainable Development, the Environment and Climate Change, 2014).

Three draft Bills were eventually presented in 2015, namely: (i) the Environment Protection Act, (ii) the Development Planning Act, and (iii) Environment and Planning Review Tribunal Act. Both the consultation documents and the bills had been subject to intense scrutiny and lengthy stakeholder discussions, at times harshly criticised (Aquilina, 2015; Archdiocese of Malta, 2015; Din l-Art Helwa, 2015; Front Harsien ODZ, 2015; Leone-Ganado, 2016; The Malta Independent, 2015; Times of Malta, 2016). The three Bills were eventually passed through the House of Representatives in December 2015, and published in 2016 (Government of Malta, 2016a, 2016c, 2016d).

Officially, the 2016 DPA aimed to be a more ‘sustainability-oriented’ legislation. Whilst not being a legally binding provision, Article 3 of the Act notes that “it shall be the duty of the Government to enhance the quality of life for the benefit of the present and future generations, without compromising the ability of future generations to meet their own needs, through a comprehensive sustainable land-use planning system” (Government of Malta, 2016a, p. A 362), setting the spirit of the legislation and its planned intent. The Act also establishes the role of the Executive Council⁴³, as the overseer of all the executive functions of the PA including providing advice to the government on development plans and policies, with the appointment of an Executive Chairperson. The responsibility for the issuing of planning permissions is still vested under the Planning Board and the Planning Commission⁴⁴.

From 2016 to date, the DPA falls under the responsibility of the Planning Authority, while the EPA falls under the responsibility of the Environment and Resources Authority. The competent authority, i.e., the regulator for EIA, is the ERA while the PA is responsible for the issuing of development permissions.

⁴³ Part V of the 2016 DPA, Cap. 552.

⁴⁴ Part VII of the 2016 DPA, Cap. 552.

Appendix M – The development of EIA in Malta

The development of EIA in Malta

This appendix provides a detailed overview of the development of EIA in Malta, from the earliest developments being the introduction of the first legal requirements in 1991 through the Environment Protection Act to the publication of the first set of regulations dedicated to EIA in 2001, to the consolidation in implementation and subsequent amendments to these regulations in 2007, 2017 and 2020.

Early developments

Environmental impact assessment (EIA) procedures were introduced in Malta in 1993/4 after approximately four years of attempts and ad hoc arrangements for studies to be carried out for large developments (which in respect to content cannot be compared to contemporary EIAs) (Axiak et al., 1999). The first legal requirement for the carrying out of environmental assessment was introduced in the 1991 Environment Protection Act (Cap. 348), which included a section, namely Part Eight, dedicated to environmental impact assessments (Government of Malta, 1991).

Articles 39 – 43 of this Act (Government of Malta, 1991) set out the requirements for the carrying out of EIAs, providing:

- The instances where an EIA is required (i.e., when a project is likely to have an impact on the environment),
- The contents of the assessment reports,
- The instances where a project may be exempt from an EIA,
- The information derived through EIAs to be submitted to the minister responsible for environmental protection, and
- The procedure related to a notice of objection from anyone who deems that an EIA has influenced unduly or has been the cause of the refusal of the permit to implement a project, or who deems that a permit has been given under the influence of an unjustified Environmental Impact Assessment favourable to the project.

It should be noted that the first development proposal that was subject to a form of environmental assessment (that is, not a formal EIA) was the proposal for the new thermal power station in the south-east of Malta in 1989 (Axiak et al., 2002). The corresponding application for building permission in the area was considered controversial in view of the fact that it was located in a greenfield site, close to a fishing village. Gauci (2002) notes, however, that attempts towards a more formal type of environmental assessment, to be evaluated within the framework established by the 1991 EPA, were related to a 90-bed tourist development, a luxury health farm and a new yacht marina development.

Following the coming into force of the 1991 Environment Protection Act, the 1992 Development Planning Act and the Structure Plan; the Planning Authority drafted a detailed planning policy and design guidance on EIA procedures in Malta, which was issued in May 1994. This was considered a key guidance document. Based on the report ‘Environmental Impact Assessment Procedures in Malta’, published by the Planning Authority in March 1993, it included details regarding the requirements for preparing and submitting environmental statements (Planning Authority, 1994). The guidance document also provided the procedures that would need to be followed in

relation to the implementation of EIA in Malta and outlined the roles and responsibilities of its various stakeholders (Axiak et al., 2002; Planning Authority, 1994).

In the same year, the Planning Authority had also started working on the publication of the first set of EIA regulations, the aim of which was to provide a legal standing to EIA-related procedures. The drafting of these regulations was finalised in 1997 and the corresponding legal notice was issued in 2001 (Government of Malta, 2001c). It should be noted that the 1997 Development Planning (Amendment) Act (Government of Malta, 1997) also included references to the EIA as an amendment to one of its articles (Article 36), as follows:

... (3) Notwithstanding the foregoing provisions of this section, where the Authority, within the said period of twelve weeks or of twenty-six weeks, as the case may be, has informed the applicant that the applicant requires or calls for a full environmental impact assessment or an environmental planning statement, whether under the Environment Protection Act, 1991, or because of any other consideration, or where a traffic impact statement is required, or where the Authority requires consultation with government departments or agencies, as the case may be, shall not be taken into consideration for the purpose of the twelve-weeks or twenty-six weeks mentioned in subsection (1) or (2) of this section. (p. A 584).

It should also be noted that spatial planning and environmental assessment processes originally fell under the auspices of two separate authorities (namely the PA and the EPD), with the responsibilities for the administration of both eventually falling under the remit of the MEPA upon its establishment in 2002.

The 2001 EIA Regulations

The 2001 EIA regulations were prepared over a six-year period and took into account the limited experience of Maltese stakeholders in the 1980s, together with EIA best practice documents used in countries with established EIA systems such as the UK, the US, the Netherlands, and New Zealand (Axiak et al., 2002). The regulations were issued under the 1992 DPA as Legal Notice 204 of 2001 (Government of Malta, 2001c). Consultation with relevant stakeholders at different points of their preparation was also held. Axiak et al. (2002) state that the 2001 regulations were also intended to comply with the EIA Directive⁴⁵ in the light of the ongoing EU accession process. They were also meant to provide the foundations for the implementation of processes related to the requirements of EU directives such as the Birds Directive⁴⁶, the Habitats Directive⁴⁷, and the IPPC⁴⁸ Directive and the Seveso II Directive⁴⁹. The Government also sought compliance with best international practice, including the provisions of both the Aarhus Convention and the Espoo Convention (United Nations Economic Commission for Europe, 1991, 1998).

It should be noted that at the time, Maltese EIA legislation went beyond the requirements of the EU EIA Directive and included more project categories and rigorous thresholds, given the small size of the Maltese Islands and its population size. Public participation requirements were also

⁴⁵ Directive 85/337/EEC as amended by Directive 97/11/EC, at the time of publication of the 2001 Maltese EIA regulations.

⁴⁶ Directive 79/409/EC, at the time of publication of the 2001 Maltese EIA regulations.

⁴⁷ Directive 92/43/EEC, at the time of publication of the 2001 Maltese EIA regulations.

⁴⁸ Directive 96/61/EC, at the time of publication of the 2001 Maltese EIA regulations.

⁴⁹ Directive 96/82/EEC, at the time of publication of the 2001 Maltese EIA regulations.

more onerous, with the public being given the opportunity to participate throughout the process, rather than just at the decision-making stage.

The major changes from the 1994 EIA guidelines (which at the time provided a generic framework to the carrying out of EIA in Malta), as highlighted by Axiak et al. (2002) and the Planning Authority (2001) included:

- A clarification of the roles and responsibilities of various stakeholders involved in the EIA process,
- The establishment of competent authorities responsible for EIA; particularly providing clearer definitions of the roles of the former (the 1992 – 2002) Planning Authority (PA) and the Environment Protection Directorate (EPD), within the Ministry responsible for environmental protection,
- The establishment of the roles of Local Councils,
- A clarification regarding the roles of the applicants and consultants,
- More emphasis on public participation rather than simply including consultation,
- Public participation also included at the scoping stage rather than just after the review stage,
- The establishment of a registration process and register of EIA consultants,
- Greater accountability and transparency,
- The introduction of legal flexibility,
- Greater accessibility of the public to the entire process,
- The establishment of clear timeframes for the various steps of the process,
- Emphasis on monitoring and follow-up,
- The requirement for justification for decisions taken including the publication of reasons for approvals or refusals,
- Access to information to the public of the various stages of the EIA process;
- Transboundary impacts,
- Improvement of current practices, in the light of good practice examples in the EU, and
- The submission of a Project Description Statement (PDS) and a distinction between the two different types of environmental statements (that is, Environmental Impact Statements and Environmental Planning Statements, which in the 2001 Regulations are referred to 'Full' EIA as opposed to 'Limited' EIA).

The implementation of the 2001 EIA Regulations was the initial step towards a more open and transparent EIA system, with new initiatives proposed by the legislation being taken on board by the then PA (as the competent authority for EIA at the time). These included the creation of a new web portal dedicated to EIA and the organisation of specialised training for EIA reviewers and EIA consultants (Axiak et al., 2002).

The 2002 State of the Environment Report (Axiak et al., 2002) notes that between 1989 – 2002, a total of 121 applications requiring EIA had been submitted to the PA. The number of EIAs carried out in Malta increased gradually between 1988 and 2004, with a slight dip between 2000 and 2004 which is attributed to a moratorium on development applications for quarrying and a drive towards the extension of existing farms rather than the development of new farming establishments (Malta Environment and Planning Authority, 2006). Figure 1 below, extracted from the subsequent 2005 State of the Environment Report, provides an indication of the EIAs carried out till 2004; whilst Figure 2 below provides an indication of the EIAs carried out between 1998 and 2008, taken from the 2008 State of the Environment Report. Figure 3 below provides an illustration of the EIA process in accordance with the 2001 Regulations.

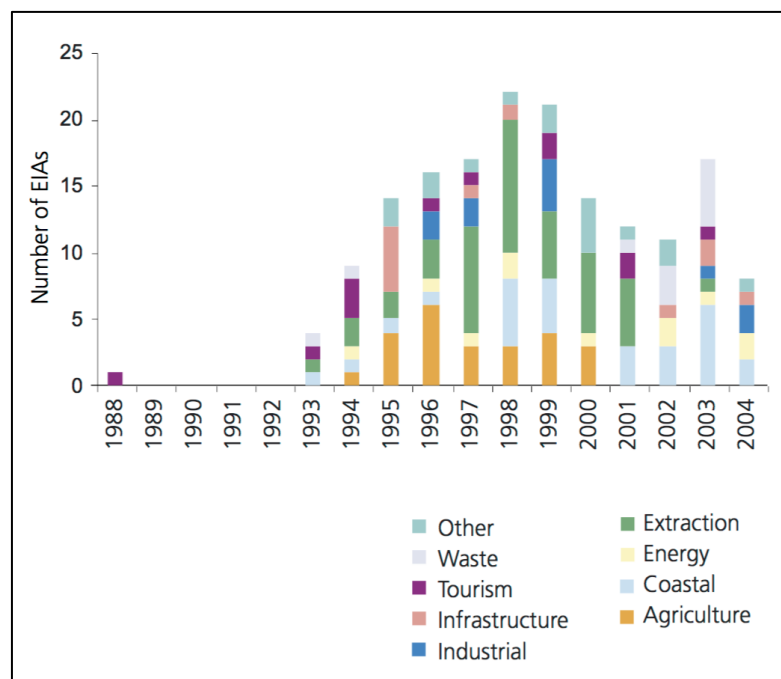


Figure 1: Types of development applications that required an EIA between 1988 and 2004
(Source: Malta Environment and Planning Authority, 2006)

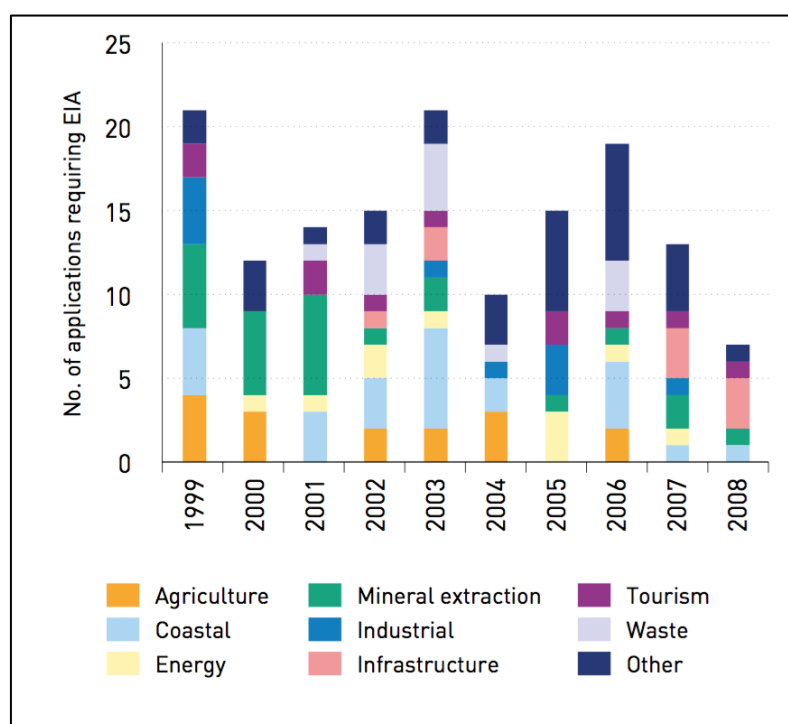


Figure 2: Types of development applications that required an EIA between 1999 and 2008
(Source: Malta Environment and Planning Authority, 2010b)

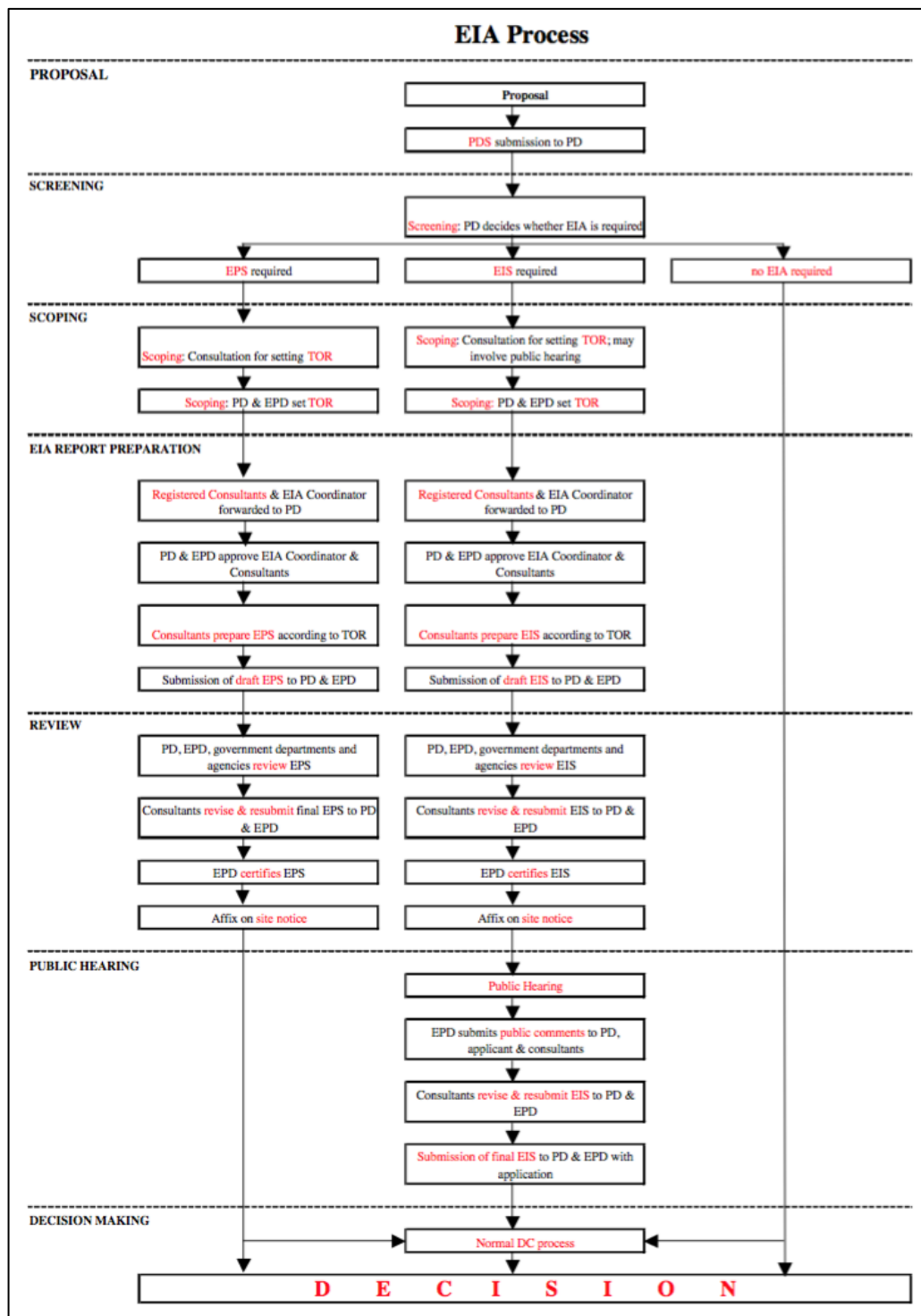


Figure 3: The EIA process as per the EIA Regulations, 2001

(Source: Axiak et al., 2002)

The 2007 EIA Regulations

Following the experience gained from the implementation of the 2001 legislation, the revised EIA Regulations were put into force in April 2007, (Government of Malta, 2007)⁵⁰. Unlike the 2001 regulations, the 2007 rules were issued under both the DPA and the EPA as Legal Notice 114 of 2007, in what seemed to be a step towards the harmonisation of the two processes, in recognition

⁵⁰ Legal Notice 114 of 2007 was issued under both the Development Planning Act (Cap. 356) and the Environment Protection Act (Cap. 435).

that the implementation of the two laws required closer coordination. The main changes from the 2001 Regulations were as follows (Malta Environment and Planning Authority, 2007, 2008):

- A clarification to a number of definitions contained in the regulations and inclusion of new definitions such as 'baseline studies', 'identified stakeholders', 'the public concerned', 'public hearing' and 'screening',
- The inclusion of the definition of the role of the Competent Authority for EIA (i.e., the MEPA) and the former Director of Environment, given that the 2001 Regulations included references to the Director of Planning and the PA,
- The reorganisation of the project category list (Schedule IA) and the introduction of Schedule IB of the Regulations, with its main purpose being to aid EIA screening,
- The strengthening of the provisions aimed towards the refusal of development applications for proposals that should be subjected to EIAs and where no such EIA is carried out,
- The inclusion of details related to the content of the Project Description Statement (PDS) and streamlining of such; the Environmental Impact Statement (EIS) and the Environmental Planning Statement (EPS) and the respective procedures related to these⁵¹,
- The compilation of the Terms of Reference for any requested studies, aimed towards an increase in the quality of environmental statements that are submitted to the Authority. These Regulations also include the option of carrying out a 'scoping meeting', with an aim to further engage stakeholders at this stage of the process,
- Further clarifications regarding the role of the EIA Coordinator and the other consultants,
- Further clarifications regarding the organisation of public hearings,
- Strengthening of the provisions related to transboundary impacts, in accordance with the provisions set out by the UNECE Espoo Convention in relation to transboundary impacts. These requirements were already included in the 2001 Regulations, however further clarifications in respect to procedural aspects were required, and
- The reiteration of the provisions for the register of consultants, with the inclusion of the reference to 'The Registration and Review Board', which at a point in time was instituted but was never fully functional⁵².

The 2007 Regulations also amended the procedure related to exemptions (from the carrying out of an EIA) of development proposals falling under the scope of Category II of Schedule IA of the same Regulations, requiring detailed screening (vide Regulation 3(8) of the EIA Regulations, 2007). The revised regulations also sought to introduce the voluntary submission of a scoping statement by EIA consultants, the aim of which was to assist the competent Authority with the compilation of Terms of Reference for the proposal being assessed (Malta Environment and Planning Authority, 2007).

⁵¹ The difference between an Environmental Impact Statement (EIS) and an Environmental Planning Statement (EPS) is a procedural one. When a proposed development would fall under Category I of Schedule IA, an EIS would be required, including the submission of a full environmental impact assessment and the carrying out of a public hearing. When a proposed development fell under Category II of Schedule IA, detailed EIA screening would be carried out to determine whether the proposal would result in having significant adverse effects on the environment. If in the affirmative, the submission of an EPS would be required (a public hearing would not be necessary in this case).

⁵² This provision had included the appointment of the Board (including its Chair) and a dedicated web portal, under the auspices of the Office of the Prime Minister (OPM); but was discontinued and the website was removed.

Table 1 below provides an overview of the main stages of the EIA process, as established by the EIA Regulations, 2007, while Figure 4 below illustrates the flow process of the same Regulations. These continued to be administered by the MEPA until 2016.

Table 1: The main stages of the EIA process in Malta as per the 2007 EIA Regulations

(adapted from Malta Environment and Planning Authority, 2008)

Stage	Description	Who does what
<i>Submission of the Project Description Statement (PDS)</i>	The PDS provides a description of the proposed development, which includes a description of the site and the development, including its likely effects on the environment, together with the identification of any mitigation measures. The Regulations also include provisions for the voluntary submission of an Environmental Scoping Statement, that may accompany a PDS.	Project proponent (may also be submitted by a consultant, including an environmental consultant.)
<i>Screening</i>	Process whereby the MEPA (i.e., Competent Authority) determines whether a proposal qualifies for an EIA and decides on the type of EIA that is required. The Authority has the following options following screening at this stage: (1) requesting an EIS for Category I projects; (2) requesting an EPS, following detailed EIA screening that highlights the possible significant environmental impacts (as per Schedule IB of the Regulations); (3) requesting an exemption from an EPS as per Regulation 3(8) of the Regulations, following a detailed justification from the applicant indicating that the proposed development would not lead to significant effects on the environment; and, (4) proposal not falling within the scope of the EIA Regulations (i.e., falling below the thresholds stipulated by the same Regulations therefore not requiring the submission of any studies).	MEPA ⁵³
<i>Scoping</i>	The identification of the environmental issues relevant to the project proposal to be assessed. This also includes the preparation of Terms of Reference for the environmental statement to be carried out by EIA consultants.	MEPA, in consultation with the relevant stakeholders, the EIA consultants and applicant and architects.
<i>Approval of the EIA Consultants, proposed by the project proponent to prepare</i>	EIA Consultants who are proposed to take part in the EIA are approved on a case-by-case basis, based on competence, independence, qualifications and experience	MEPA

⁵³ Reference in this section is being made to the Malta Environment and Planning Authority; however, the EIA Regulations, 2007 (L.N. 114 of 2007) and 2017 (S.L. 549.46) were subsequently being implemented by the Environment and Resources Authority (ERA), as from April 2016 onwards.

Stage	Description	Who does what
<i>the environmental statement</i>	by the MEPA (in the absence of the Register of Consultants).	
<i>Preparation of the environmental statement</i>	The environmental statement (EIS or EPS) is prepared by the approved EIA consultants, in line with the Terms of Reference, issued by the Competent Authority. The EIA statement is to include these three main documents: (1) a Non-Technical Summary (NTS); (2) a Coordinated Assessment Report which is to include a description of the proposed development, a description of the extent of the existing environment likely to be affected by the proposed development, an assessment of the significance of the effects of the proposed development; and, the formulation of mitigation measures and monitoring requirements; and, (3) the Technical Appendices including the original baseline studies.	EIA Consultants
<i>Review of the environmental statement</i>	The MEPA ensures that the environmental statement has been carried out in accordance with all the relevant legal requirements and the Terms of Reference (TORs) issued for the same proposal. This review is also carried out by relevant stakeholders in parallel with the Authority.	MEPA, in consultation with the relevant stakeholders.
<i>Certification of the environmental statement</i>	The MEPA certifies that the environmental statement is carried out in accordance with the legal requirements and in line with the Terms of Reference – this stage of the Maltese EIA process does not imply that the MEPA agrees with the content and conclusions by the EIA Coordinator.	MEPA
<i>Organisation of the public hearing</i>	In the case of Environmental Impact Statements (Category I projects), public hearings are carried out for effective public participation and an opportunity for all stakeholders to air their views on the proposal and comment on the EIA.	MEPA, in coordination with the project proponent and EIA Consultants.
<i>Preparation of the final EIA Report to the case officer</i>	A report prepared by the EPD, providing an overview of the EIA carried out in relation with a development proposal, together with a summary of the findings of the EIA and the overall position of the Directorate are referred to the Planning Directorate's case officer in order to finalise the Development Permission Application Report (DPAR) prior to the provision of development consent or otherwise. It is at this stage that the conditions to be part of the development permission are formulated, to be included should permission be granted.	MEPA

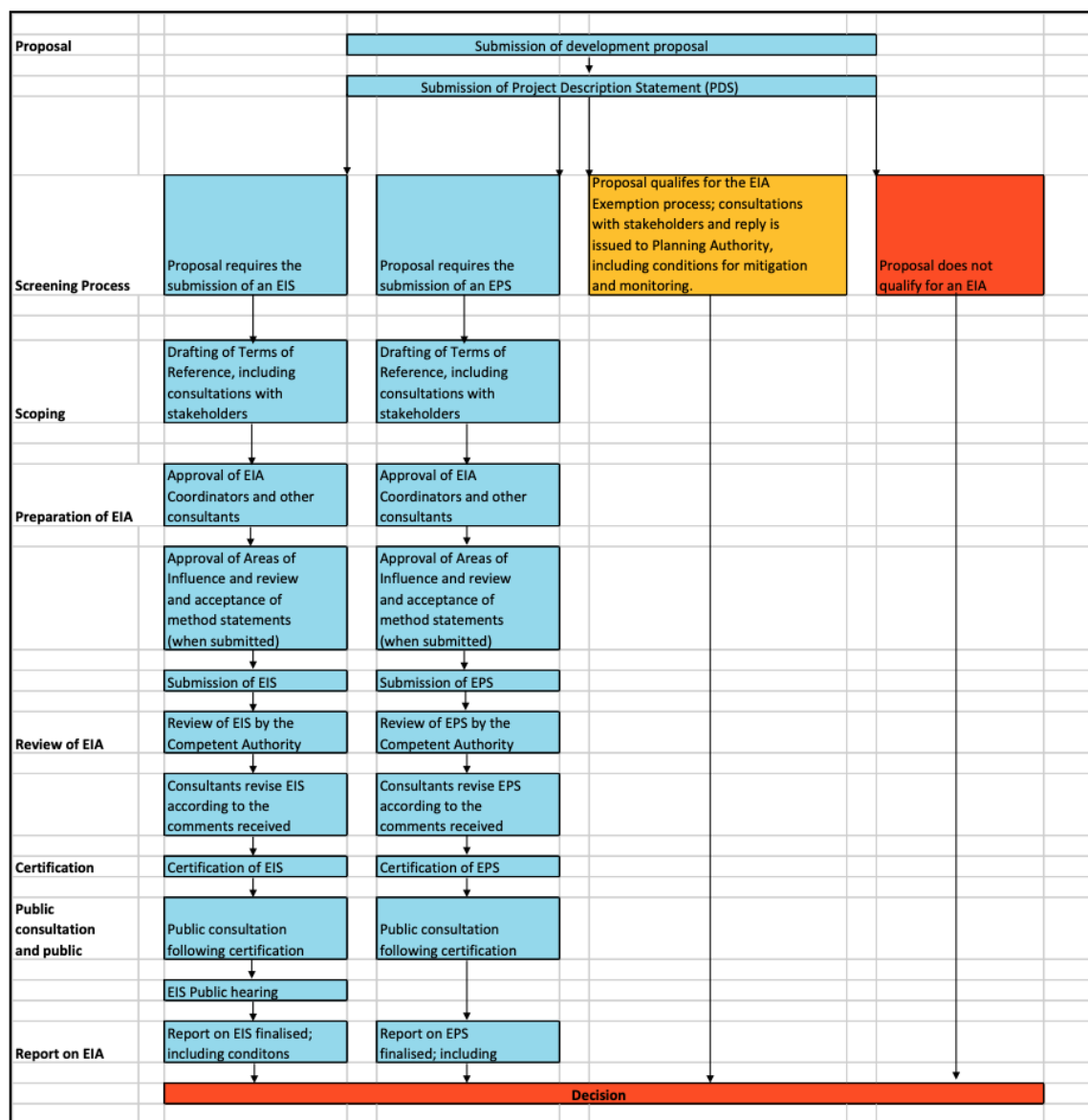


Figure 4: Simplified overview of the Maltese EIA process as per EIA Regulations, 2007

The 2017 EIA Regulations⁵⁴

The EIA Regulations were subsequently revised, and a new set was published in December 2017 (Government of Malta, 2017). The new Regulations sought to cater for the appropriate and correct transposition of the international legal instruments, including the revised EU EIA Directive (EurLex, 2014), the UNECE Espoo Convention in relation to transboundary aspects of EIA (United Nations Economic Commission for Europe, 1991) and the EU Regulation on Trans-European Energy Infrastructure (EurLex, 2013b). These regulations also sought to reflect the new national institutional arrangements, following the demerger of the MEPA, which used to be the sole competent authority for EIA in Malta; into two separate authorities: the PA and the ERA. The ERA is still, at the time of writing, the designated competent authority for EIAs in Malta. The 2017 regulations also aimed to streamline the environmental and development consent procedures in

⁵⁴ The EIA Regulations, 2017 (S.L. 549.46) and its subsequent amendments are the current regulations in place at the time of writing of this thesis.

Malta, with the goal of reducing administrative burdens.

The 2007 and 2017 regulations do not vary significantly in respect to changes to the legal provisions; however, some administrative processes were revised to enable streamlining of procedures. At the time of publication of the 2017 EIA regulations, the ERA via its online portal, published two documents: 'the Explanatory Notes EIA Regulations' (Environment and Resources Authority, 2017a) and the 'User Guidelines EIA Regulations' (Environment and Resources Authority, 2017b).

In summary, the 2017 regulations are divided into 12 parts, as follows:

- Parts I, II and III relate to issues associated with the interpretation of the regulations, including revisions to the definitions of specific terms in the regulations, and to administrative requirements. A clarification with respect to specific exemptions from the regulations is also included. These new regulations also clarify the role of the ERA as the competent authority for EIA,
- Parts IV and V relate to criteria for screening and assessment, and the associated procedures. Screening is defined as 'the decision on whether a proposal should be subject to an environmental impact assessment or to any other provisions of these regulations', in line with the thresholds established under Schedule I of the regulations. Part V also details the procedure for undertaking an EIA and the preparation of the EIA Report. This section of the regulations, includes a few departures from the previous version of the regulations, including the removal of the so-called 'EIA Exemption procedure' associated with the detailed EIA screening process; the removal of the terms 'Environmental Impact Statement or Full EIA' and 'Environmental Planning Statement or Limited EIA' – the term used in the 2017 regulations is EIA Report; and the removal of the so-called 'EIA Certification' process, that is, in the 2017 regulations, once the EIA Report is completed by the EIA consultants, this is submitted to the ERA and consultation is carried out accordingly,
- Part VI tackles the suspension, reactivation, updating and discontinuation of EIAs: that is, if a project or the situation on site has materially changed after the completion of an EIA, ERA may require a new or updated assessment. Provisions regarding such were seen as missing in the previous version of the regulations, therefore it was seen as useful to include these in the revised regulations for improved implementation,
- Part VII on transboundary impacts refers to those situations in which a project may have significant effects on the environment in another state,
- Part VIII relates to decision-making and monitoring, namely, the relationship between ERA and the permitting authority. The link between the two authorities, the ERA and the PA, is strengthened through these provisions, particularly following the demerger process, while still both strongly involved in the overall EIA process,
- Part IX on enforcement lays down penalties which may be imposed by the courts upon conviction for non-compliance with the regulations. In contrast with the 2007 regulations, and in line with the requirements of the revised EIA Directive, the new regulations also introduce the possibility for ERA to impose administrative fines in lieu of court prosecution,
- Part X relates to access to justice and provides the opportunity for all persons aggrieved by any decision taken during the EIA process, to challenge such by filing an appeal before the Environment and Planning Review Tribunal, and

- Parts XI and XII include miscellaneous and transitory provisions.

The new regulations also include four schedules (I-IV) which form a substantive part of the legislation. Schedule I lists the development projects which require carrying out an EIA, Schedule II lists the information to be provided in the PDS, Schedule III relates to the criteria to be applied in the screening process and Schedule IV lists the information that would need to be included by the consultants in the EIA Report.

Table 2, provides an indication of the main steps of the 2017 regulations:

Table 2: The main stages of the EIA process in Malta as per the 2017 EIA Regulations
(adapted from Government of Malta, 2017)

Stage	Description	Who does what
<i>Submission of the Project Description Statement (PDS)</i>	The PDS provides a description of the proposed development, which includes a description of the site and the development, including its likely effects on the environment, together with the identification of any mitigation measures, in line with Schedule II of the same regulations.	Project proponent (may also be submitted by a consultant)
<i>Screening</i>	The process whereby the ERA determines whether a proposal qualifies for an EIA or otherwise. The Authority has the following options following screening: (1) Requesting the submission of an EIA, given that the project is a Category I project, (2) Requesting the submission of an EIA following detailed screening and identification of likely significant impacts on the environment, given that the project is a Category II project, (3) Screening a project out, and thus not requesting an EIA given that no likely significant impacts are identified during the screening process, and (4) Proposal not falling within the scope of the EIA regulations (i.e., falling below the thresholds stipulated by the same regulations therefore not requiring the submission of any studies).	ERA
<i>Scoping</i>	Identification of the environmental issues relevant to the project proposal to be assessed. This also includes the preparation of Terms of Reference for the environmental statement to be carried out by EIA consultants.	ERA, in consultation with the relevant stakeholders, the EIA consultants and applicant and architects.
<i>Approval of the EIA Consultants, proposed by the project proponent to prepare the EIA Report</i>	EIA Consultants are approved on a case-by-case basis, based on competence, independence, qualifications and experience	ERA

Stage	Description	Who does what
	by the ERA (in the absence of the Register of Consultants). ⁵⁵	
<i>Preparation of the EIA Report</i>	The EIA Report is prepared by the approved EIA consultants, in line with the Terms of Reference, issued by the Competent Authority. The EIA statement is to include these three main documents: (1) a Non-Technical Summary, (2) a Coordinated Assessment Report, and (3) the Technical Appendices including the original baseline studies. The content of the EIA is to be in line with the requirements of Schedule IV of the same regulations.	EIA Consultants
<i>Review of the EIA Report</i>	Following submission to the Authority, the EIA Report would be reviewed by the ERA and made available to all the required stakeholders and the public.	ERA and the public
<i>Organisation of the public hearing</i>	In the case of Category I projects or as the authority deems appropriate, public hearings are carried out for effective public participation and an opportunity for all stakeholders to air their views on the proposal and comment on the EIA.	Project proponent (in consultation with the ERA)
<i>Preparation of the final assessment by the ERA</i>	A report by the ERA, providing an overview of the EIA process carried out in relation with a development proposal, together with a summary of the findings of the EIA, the overall position of the Authority and any conditions or measures, are referred to the Planning Authority, should the proposal be recommended for approval; to be considered in its compilation of the Development Permission Application Report (DPAR) prior to the approval of development consent or otherwise. It is at this stage that the conditions to be part of the development permission are formulated, to be included should permission be granted.	ERA and PA

Two of the main procedural differences between the 2007 and 2017 regulations were:

- (i) The removal of the consultation stage prior to the submission of the final draft of the environmental statement by the EIA consultants (Regulation 21 – 23 of Legal Notice 114 of 2007). Following the preparation of the draft environmental statement, consultation with MEPA (the Director of Environment Protection) and relevant stakeholders (including government entities) would be carried out. The review process would determine whether the studies are in line with the Terms of Reference provided upon conclusion of the scoping stage of the EIA process, whilst ensuring the quality of the data and overall objectivity. The comments from the review process would then be referred to the consultants to address prior to submitting the final draft of the environmental statement to the MEPA.
- (ii) The removal of the certification of the Environmental Statement (Regulations 24 and 33 of Legal Notice 114 of 2007). Upon the submission of the final draft to the

⁵⁵ At the time of writing, the ERA is not approving EIA consultants, but is taking note of the consultants' team that would be working on the drafting of the EIA Report.

authority, the MEPA (the Director of Environment Protection) would then consider whether the statement would have been satisfactorily compiled, prepared in a professional manner, be without bias and is in line with the Terms of Reference (Government of Malta, 2007). This step in the process was considered the 'certification' of the Environmental Statement and consultation with the general public would be carried out. In the case of Category I projects, a public hearing would be organised.

The 2017 regulations also sought to streamline the review process. On submission of the EIA Report⁵⁶ by the consultants, the ERA (i.e., the EIA regulator) would invite authorities and entities (including Local Councils), together with the public, to submit comments on the report (within a stipulated timeframe of 30 days). Internal review of the documentation would also be carried out in parallel to the public consultation, in order to further streamline the process and reduce loads on the administrative front.

The 2020 amendments to the EIA Regulations⁵⁷

The EIA regulations were further amended through the publication of revisions in December 2020 (Government of Malta, 2020b). The scope of these amendments was mainly related to the consolidation of aspects of the transposition of the EIA Directive into the Maltese regulations, with the main focus being:

- the sharing of information related to EIA,
- the importance of taking into account the information gathered through stakeholder engagement and public consultation throughout the process, and
- the post-decision and monitoring procedures.

The main amendments to the principal regulations, which aligned the Maltese regulations with the provisions of the 2014 EIA Directive, supposedly addressed the following (Government of Malta, 2021):

- Ensuring that the EIA is integrated into the development consent procedure,
- Ensuring that the competent authority (in Malta's case, the ERA) as well as the permitting authority (in Malta's case, the PA) clearly indicate and clarify to the public, which authorities are responsible for the EIA and the development consent decisions, and the nature of the actual decisions being taken,
- Establishing a time limit within which the competent authority (i.e., the ERA) must publish certain information in relation to the EIA report,
- Ensuring that the EIA report is made available to those public authorities and entities likely to be concerned by the project by reason of their specific environmental responsibilities,
- Clarifying the competent authority's responsibility to prepare its final assessment on the concluded EIA report; and establishing that the authority shall take its decision in public, giving the opportunity to the applicant and the public to make comments and representations and thus ensuring transparency in the decision-making process,

⁵⁶ The 2017 EIA Regulations remove the previous references to Environmental Statement, Environmental Impact Statement and Environmental Planning Statement, and streamline the definitions in line with the wording of the EIA Directive.

⁵⁷ The EIA Regulations were amended two times in 2020: (i) via Legal Notice 448 of 2020 (<https://legislation.mt/eli/ln/2020/448/eng/pdf>) which included a new proviso in relation to a case of a *force majeure*, e.g., a pandemic, where public hearings could alternatively be held electronically to meet the provisions of the same Regulations (Government of Malta, 2020a); and (ii) via Legal Notice 455 of 2020 (<https://legislation.mt/eli/ln/2020/455/eng/pdf>), which aimed to consolidate particular aspects of the transposition of the EIA Directive into the local regulations (Government of Malta, 2020b).

- Ensuring that, in arriving at its final assessment and when making recommendations, the competent authority takes into due consideration the feedback received from the public,
 - Consolidating the provisions related to monitoring requirements, and
 - Including an obligation on the permitting authority to duly consider the position taken by ERA and its recommendations, and incorporate them into its decision-making process, as may be relevant.
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