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Environmental Information in Malta

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Environmental Information in Malta

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The Information Dilemma - Tower of Babel or Valhalla?

Today we are facing a period unprecedented in history: information is available, it is easy to decipher and is accessible to all...

Or is it?

Are we going down the Babel way?

The most brilliant architects got together with the brightest inventions and plans..

But there were too many languages and they couldn't communicate. That killed the tower not the technology



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Current Situation

We have to move from a passive to active mode

Data – Information – Knowledge – Action

The Data Cycle is suffering from DRIPS

Data – Rich – Information - Poor Syndrome

Data are **expensive** and creators need to recoup costs. Cost effectiveness is creating cost-recovery measures through the use of copyright and access restrictions

Access is still restricted but has to change – various legislations have been enacted or are coming into force – Århus-INSPIRE-DP-FoIA

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Data Creation Issues

Conceptualisation:

Try to define what is a direct reflection of the original concept of need – a difficult task indeed

Entitation:

Process by which we define the entities about which we wish to collect data

Quantification:

How rich is a rich dataset? Relative or absolute? Proxy or surrogate?

Validity:

Is data collected a close representation of reality? Acid-test for datasets of dubious origins

Composition:

Process by which combine individual indicators into a composite model: this is what we disseminate...

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Which dimension is most important for Env Data?

Many say:

Relevance

Another popular choice:

Timeliness

The classical one:

Accuracy

A smart answer is:

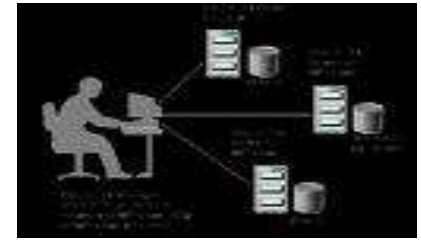
All

Our personal preference:

...



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Terminology of Error for Env. Data

– before we try to implement Århus: Terms for consideration:

- **Accuracy** – extent to which an estimated value approaches the true value
- **Precision** – level of recorded detail
- **Scale and resolution** – smallest size that can be displayed
- **Bias** – systematic deviation from a norm or from the truth
- **Completeness** – extent to which data is supplied for all component parts and time periods
- **Temporal consistency** – repeated elements of the data handling process
- **Logical consistency** – suitability of commands, operations and analysis
- **Semantic accuracy** - quality with which objects are described
- **Repeatability** – extent to which independent users can produce the same data or output



Initiatives and the Way Forward

- EEA – EIONET Structure
 - Dataflow process implemented since 2003
 - Established structure:
 - NFP - National Focal Point
 - PCP – Principal Contact Point
 - NRC – National Resource Centre
 - Data uploads – using one of two options:
 - EEA CDR (Common data Repository)
 - CIRCA (country-based server system)
 - Malta’s Environmental data is uploaded to the EEA and EU is available for public use and access
 - <http://cdr.eionet.europa.eu/mt>

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EEA EnviroWindows Login

EIONET Central Data Repository

SERVICES REPORTNET TOOLS TOPICS

You are here: Eionet» CDR» Malta

Navigation

- » Search
- » Global worklist
- » Notifications
- » Help

The login has been moved to the upper-right corner.

Overview

Malta

Obligations

Envelopes and subcollections

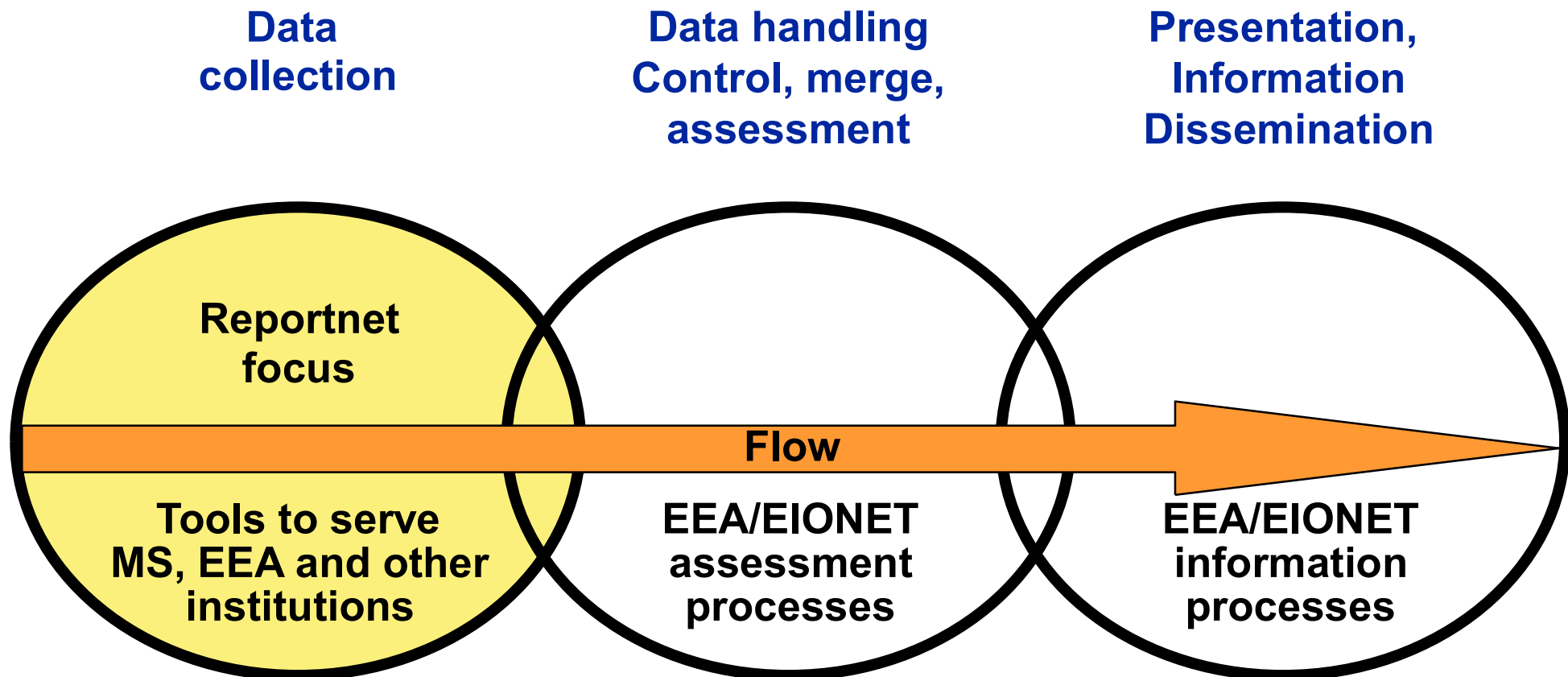
EEA, requests	07 Apr 2008
European Pollutant Emission Register (EPER)	08 Jun 2006
European Union (EU), obligations	05 Jun 2008
Eurostat/OECD joint questionnaire	05 Jul 2004
Helcom	05 Jul 2004
Ospar/Parcom	05 Jul 2004
Other conventions and agreements	05 Jul 2004
United Nations (UN)	16 Jun 2008

Last modified 2004/07/05. [Validate HTML]





The EEA Data & Information Case





Dataflow Activities

Focus:

- identifying and reporting data for priority data flows annually

Actions - Done

- - sourcing data and identifying gaps
- - identifying formats
- - updating & validating information
- - consolidating & submitting
- - respecting target dates and deadlines





Initiatives and the Way Forward The INSPIRE Case

- INSPIRE Directive
 - Implementation rules – standardisation
 - National Data Infrastructure
 - Metadata
 - Spatial structures
 - Data Services
 - Discovery Services



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The INSPIRE Case

Environmental Needs

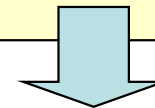
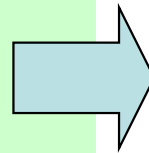
- Better information needed to support policies
- Improvement of existing information flows
- Revision of approach to reporting and monitoring, moving to concept of sharing of information

Situation

- Lack of co-ordination across borders and between levels of government
- Lack of standards incompatible information and information systems
- Existing data not re-usable fragmentation of information, redundancy, inability to integrate

Environmental data

90% is linked to geography



INSPIRE



The INSPIRE Case

DEFINITION

"infrastructure for spatial information" means

- **metadata**, spatial data sets and spatial data services;
- **network services** and technologies;
- **agreements on sharing, access** and use;
- coordination and **monitoring mechanisms**, processes and procedures.



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Two Categories of Data

The first category (annex I and II data):
data for **geo-referencing data** in the second category.
They have the status of "multi-purpose" spatial or basic data.
High demands on harmonisation

The second category (annex III data): the **environmental data**
They are needed in order to monitor and improve the state of the
environment, including air, water, soil and

Limited demands on harmonisation



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Annex I

Coordinate reference systems

Geographical grid systems

Geographical names

Administrative units

Transport networks

Hydrography

Protected sites

Annex I I

Elevation

Addresses of properties

Cadastral parcels

Land cover

Orthoimagery

Annex III

Statistical units census

Buildings

Soil

Geology

Landuse

Human health and safety

Governmental services and environmental monitoring facilities

Classified sites (industry and agriculture)

Population distribution – demography

Area management and zones

Natural risk zones

Atmospheric conditions

Meteorological geographical features

Oceanographic geographical features

Sea regions

Bio-geographical regions



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DATA-SHARING AND RE-USE

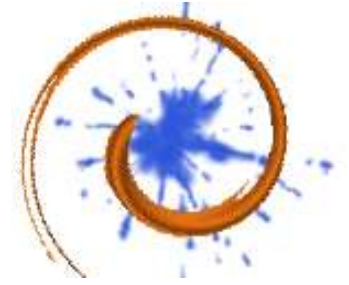
Discovery services	free of charge
View services	free of charge
Download services	charging is possible
Transformation services	free of charge
E-commerce services	to be available
Additional services	charging is possible

Community portal	The Commission
National portals	The countries (not mandatory)

based on a service oriented architecture



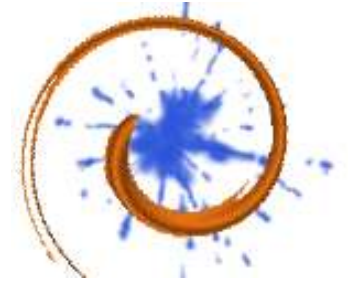
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Structural Funds Monitoring Project

- Targeted EUR multi-million project – 2 phases
 - New Information Systems
 - Data modules
 - Information structures
 - Cross-Discipline information management
 - Full Data Cycle
- Århus-related – major dissemination processes

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Structural Funds Monitoring Project

- Air, Water and Soil – Noise, Chemicals, Radiation
- Concentrates on Environmental functions with ICT services
- Emphasised information gap identification in monitoring processes
- Enhanced data cycle: sourcing, gathering, analysis, access and dissemination: GIS focus
- 2 phases composed of Supply and Service components with a number of acquisition sub-contracts

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Initiatives and the Way Forward

- **SEIS – Group of 4 (EEA, JRC, DG-Env, EUROSTAT)**
 - Shared Environmental Information Systems
 - Need for Certified Standards
 - Need for data-exchange
 - Need for expertise audit of data
 - **Århus-related – EU-wide Access standards**
- **Malta** Harmonised and innovative approaches
 - E-Applications system
 - TL-SC for Env permitting and monitoring
 - Environment Information Online Portal

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Implementing the process at the National Level

- **Setup Stakeholders group**
 - National Contact Point – already in place
 - Setting up of a network
 - Stakeholders own the process
 - Data and Information made accessible on-line
- **Functional MoUs, governed by Data Protection Act**

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MEPA Initiatives and the Way Forward

- **E-Applications system**
 - Planning Application details
 - Environmental Application and Registration details
 - Monitoring Information
 - Online operator self-monitoring reporting
- **MEPA website and web services**
 - Legislation and Policies
 - State of Environment Report (SOER)
 - Air Monitoring data and Ozone Web
 - MapServer with GIS information
 - Requests for environmental information
 - National Waste Register
- **Near real-time information gathering**

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Malta Environment & Planning Authority
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Search

Case Ref: /

Case File: PA 09999/89

Case Number	Status	Location	Description of Works	Applicant	Architect
PA 09999/89	Withdrawn	680 Triq il-Kbira, Hamrun, birkirkara	To construct 3 flats and 2 penthouses.		

Overview
Site Location
Minutes
Documents
Billing & Payments

Current Application Status

Case Status: This application for development permission has been withdrawn at the request of the applicant.

Case Information

Case Number: PA 09999/89
 Location of Development: 680 Triq il-Kbira, Hamrun, birkirkara
 Description of Works: To construct 3 flats and 2 penthouses.
 Architect:
 Reception Date: Saturday, 27 December, 2003



[click to view](#)

Initial Processing

Validation Date: Sunday, 01 January, 1989
 Application Type: Full development permission
 Case Category: Urban
 Date Published In Newspapers: Saturday, 03 May, 2008
 Representation Expiry Date: Sunday, 18 May, 2008
 Case Officer:
 Correspondence Received:

Common Tasks

- Submit New Application
- Pay Bill
- Manage Profile
- Manage Delegates

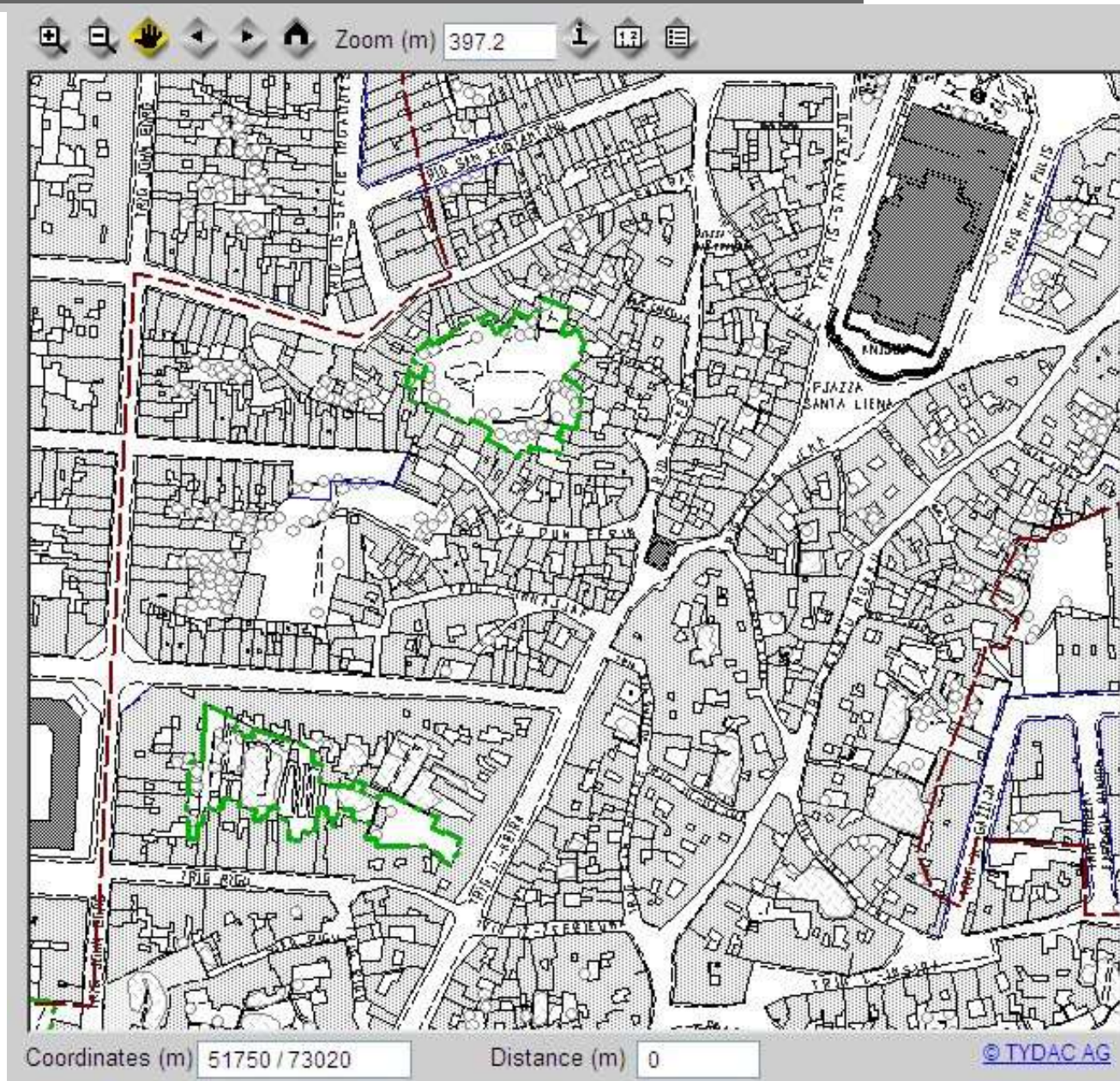
PA 09999/89

- Add to My Desktop
- Manage Document Permissions
- Add to My Watchlist
- Send Correspondence
- Send Correspondence
- Add New Minute
- Manual Correspondence
- Print Case File

My Desktop



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Air Quality - Real-Time Data System

0 5 10km
Kilometres

Gharb Msida & Zejtun

Station - Zejtun

Pollutant - NOX

Time Base - Hourly

Date From -

Date To -

Submit Reset

breathe it
AIR QUALITY
REAL TIME DATA

The MEPA Case Study

- Data needs to be identified and integrated in a dynamic structure
- Introduction of Quality systems: ISO for Admin and Standards for themes: ISOs/TCs, theme-specific QA/QC protocols
- An open structure rendering read-rights to all parties but only write-rights to the 'owner' stakeholder
- Introduce Metadata processes: use INSPIRE Directive and IR lineage systems based on Århus guidelines
- Data queries and requests (internal-external) require a one-stop structure
- Ensure security processes - storage on HDs/media policy



Getting There

- Invitation to Participate in the pilot project
 - Circa 5 participants from the agencies dealing with environmental information
 - Contact the Århus Project Team
 - Targeting the main environmental themes





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