A COVENANT OF HALFLINGS?
DEVELOPING A ROADMAP FOR THE EUROPEAN URBAN TRANSPORT GOAL

Henrik Gudmundsson, Technical University of Denmark
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Aims of the presentation

• To introduce the TRANSFORuM project and process

• To describe the main elements in the stakeholder driven Roadmap for the EU Transport White Paper’s goal for urban transport

• To discuss the notion of a “Covenant of Halflings” for European cities as part of a roadmap
Acknowledgement

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One more acknowledgement…

• ‘Halflings’ are also known as hobbits, a creature invented by author J.R.R Tolkien, in his 1937 novel of the same name

• Halflings are smaller variations of humans “…capable of great courage and amazing feats under the proper circumstances”
Objectives and focus of TRANSFORuM

- Contribute to the transformation process towards a competitive and resource-efficient European transport system by engaging key actors to participate in a stakeholder forum & to implement its recommendations.

- **Focus on four goals** of the White Paper:
  - Clean Urban Transport and CO2-free city logistics (1)
  - Shift of road freight to rail and waterborne transport (3)
  - Complete and maintain the European high-speed rail network (4)
  - European multimodal information, management & payment system (8)
Main features of TRANSFORuM

Methods:
- Literature reviews
- Stakeholder consultations (workshops, surveys, interviews, website etc.)

Process:
- 2 years, February 2013 to January 2015
- 4 Thematic groups, one for each goal
- Stakeholder database with 1,000 posts
- Four 2-day fora/workshops
- Final conference: Brussels, Dec 8. 2014
Main outputs of TRANSFORuM

- “Stakeholder driven” **Roadmaps** to 2030 for each goal
- Strategic outlook 2030-2050, for all goals
- Recommendations across goals
- Deliverables from each WP
- 5 Newsletters
- Website: [http://www.transforum-project.eu/](http://www.transforum-project.eu/)
This paper: The Urban Transport Goal

• "Halve the use of ‘conventionally-fuelled’ cars in urban transport by 2030; phase them out in cities by 2050;"

• Achieve essentially CO₂-free city logistics in major urban centres by 2030”
Purpose and scope of the urban goal

Reduce GHGs
Limit oil dependence
Reduce noise & poll.

…..without compromising the benefits that high mobility provides to urban areas.
Main **stakeholder** groups involved

- Representatives of city and regional administrations
- Producers and developers of vehicles and energy technologies
- Transport operators and mobility service providers
- Businesses and experts involved in freight and urban logistic services
- Representatives of citizen organisations, think tanks and other NGOs
- Members of national and European programmes and platforms supporting clean urban mobility.

- Regional balance; Gender balance;
Key elements in the Urban Roadmap

• The relevance and interpretation of the goal
• Trends and barriers affecting the achievement of the goal
• Building blocks and measures to achieve the goal
• Good practices to inspire courage
• Possible trajectories and strategies and towards the goal
• Roadmap: Who is to do what by when?
  – Action levels and actions (processes and measures)
  – Timetables and milestones
Relevance and interpretation of the goal

- Some general support: A bold ambition with a clear direction
- Underlying aims are more important (e.g. Mobility, Climate, Clean Air)
- The same goal would not be appropriate for all urban areas in Europe; it must be adopted and adapted to local circumstances
- To reduce use of conventional vehicles is important,
  - can be achieved in various ways
  - not call for a ‘technological fix’
  - part of a broader strategy
- Relevance and realism depends on further specifications
## Trends affecting the goal - examples

<table>
<thead>
<tr>
<th>Drivers and trends</th>
<th>Positive contributions to the goal</th>
<th>Negative contributions to the goal</th>
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<tbody>
<tr>
<td>Urbanisation</td>
<td>Better potential for public transport and active transport</td>
<td>Increased demand for transport; sprawl</td>
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<td>Energy prices</td>
<td>Increasing oil prices make alternatives competitive</td>
<td>Continued fluctuations make investments uncertain</td>
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<td>More efficient engines</td>
<td>Reduced emissions</td>
<td>Rebound effects: efficiency provides for cheaper and therefore more driving</td>
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<tr>
<td>Investments in alternative fuel systems</td>
<td>Economies of scale for alternatively-fuelled vehicles can accelerate transitions</td>
<td>Batteries remain expensive; FCVs uncertain; bio is problematic</td>
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<td>E-commerce</td>
<td>Decreasing passenger transport for retail purposes</td>
<td>Increasing freight transport to deliver products and services</td>
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Strategic areas and **building blocks**

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<thead>
<tr>
<th>Technology substitution</th>
<th>Passenger</th>
<th>Goods</th>
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<td>Alternately-fuelled cars</td>
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<td>Alternative fuel infrastructure</td>
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<td>Activity change</td>
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<td>Car-sharing</td>
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<td>Public transport systems</td>
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<td>Walking and cycling</td>
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<td>Mobility management</td>
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<td>Land use development</td>
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<td>Freight consolidation</td>
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Transformation is possible…

EVs registered in the city of Oslo, Norway
## ‘Fictive’ cities and pathways

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<tr>
<th></th>
<th>Waterberg</th>
<th>Viga</th>
<th>Valanov</th>
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<tbody>
<tr>
<td><strong>Key strategy</strong></td>
<td>Technical substitution: “technophilic” approach</td>
<td>Modal sharing:</td>
<td>‘Starter’ pathway: Developing enabling conditions to ‘catch-up’ with frontrunner cities</td>
</tr>
<tr>
<td><strong>Characteristics</strong></td>
<td>Approximately 500,000 inhabitants</td>
<td>Approximately 900,000 inhabitants</td>
<td>Approximately 250,000 inhabitants</td>
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<td></td>
<td>University, local car manufacturer, low urban density</td>
<td>University, local car manufacturers, fairly high urban density</td>
<td>No University, regional cultural centre, ageing population, no car industry, medium density</td>
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<td></td>
<td>Hilly, large lake</td>
<td>Flat; sprawling</td>
<td>Border city; very hilly</td>
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<tr>
<td><strong>Transport system</strong></td>
<td>Good public transport, tramway, cycling network, Electric Vehicle (EV) charging points</td>
<td>Good public transport, metro, cycling network</td>
<td>Poor bus system, no cycle lanes</td>
</tr>
<tr>
<td><strong>Modal split (passenger)</strong></td>
<td>65% drive/10% public transport/10% cycle/15% walk</td>
<td>45% drive/20% public transport/20% cycle/15% walk</td>
<td>53% drive/25% public transport/2% cycle/20% walk</td>
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## Barieres

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<tr>
<th>Area for policy making</th>
<th>Examples of barriers</th>
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</table>
| Electrification and provision of other alternative fuels | • Uncertainty about future oil prices  
• Consumer resistance to cars with limited range  
• Funding for Infrastructure investments |
| Shifting passenger travelers or avoiding need to travel | • Urban sprawl  
• Limited coordination among PT modes  
• Safety issues with cycling |
| Improving the logistical chains                      | • Low economic viability of alternative consolidation centers  
• Noise restrictions for late delivery  
• Lack of coordination among market actors |
Ways to **overcome barriers**

“The main difficulties within this field are not about technology but about politics, institutional conditions and public acceptance, and the uncertainty about how to engage with the public and stakeholders and get them on board in the more fundamental transformation that is necessary in order to reach the goal.”
Key messages from the stakeholders

- Transforming urban mobility requires a broad open approach
- European goals must be aligned with local visions and benefits
- Replacing vehicles and fuels is important but not sufficient
- Limiting conventionally-fuelled car use can come at low costs
- Political momentum needs to be fostered in many cities
- National and state frameworks essential to support local actions
- Dialogue and experimentation key to advance the learning curve
Roadmap – who is to do what by when?

- **Three levels**: EU, National, Urban

- **Three periods**:
  - 2015-2020 (Early)
  - 2020-2025 (Middle)
  - 2025-2030 (Late)

- **Two types of actions**:
  - ‘Processes’ (framing and coordinative actions)
  - ‘Measures’ (direct policy, intervention or investment actions).
Roles of each action level

ACTIONS AT THE EUROPEAN LEVEL
• Set common technical standards for vehicles, fuels and refuelling systems,
• Define frameworks for common national and local actions,
• Support research in common urban transport problems and solutions

ACTION AT THE NATIONAL LEVEL
• Urban planning frameworks
• Taxation and charging rules
• Alternative fuel infrastructure roll-out plans
• Align country specific legislation, fiscal regulations, and planning frameworks with transformations needed to accomplish European and local goals for urban transport

ACTION AT THE CITY LEVEL
• Bring stakeholders together
• Jointly state city commitments
• Prepare, adopt, and extend Sustainable Urban Mobility Plans
• Establish freight partnerships
• Differentiated measures for all the building blocks.
Funding schemes adapted to support aspiring cities investing to reach urban mobility goals

100 cities have received European support; All funding efficiently spent on relevant projects

All Member States have reviewed legislation to allow cities necessary leverage over access

All Member States have reviewed taxation schemes
Actions and milestones

At least 25% major cities have introduced road and/or extensive parking charging favouring non-conventionally-fuelled vehicles

All major cities have introduced charging or access restrictions favouring non-conventionally-fuelled vehicles
A Covenant of ‘Halflings’? (cities halving the use…)

Recognizing,

- The need to foster political momentum
- The power of clear goals and commitments
- The potential of horizontal network governance
- Positive experience with similar arrangements
### Some existing city commitments

<table>
<thead>
<tr>
<th>Network</th>
<th>Goal</th>
<th>Started</th>
<th>Cities</th>
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</thead>
<tbody>
<tr>
<td>C40 Cities (Global)</td>
<td>Individual commitments to reduce CO(_2) emissions</td>
<td>2005</td>
<td>70</td>
</tr>
<tr>
<td>Covenant of Mayors (EU)</td>
<td>Meet and exceed the European Union 20% CO(_2) reduction objective by 2020</td>
<td>2008</td>
<td>6.289</td>
</tr>
<tr>
<td>Urban Electric Mobility Initiative (Global)</td>
<td>Boost the share of electric vehicles to 30 percent by 2030</td>
<td>2014</td>
<td>?</td>
</tr>
</tbody>
</table>
A Covenant of ‘Halflings’? (cities halving the use…)

Proposing,

• A platform for political commitment to ‘halving’ among set of goals

• Either based in existing networks of forming a new

• To be agreed in a process of consultation involving the European Commission and city representatives

• Involving lead committing cities and aspiring cities preparing to commit
Some conclusions…

• The goal is achievable (at least in principle; at least partly…)

• Action is needed immediately on all levels and several fields (technology, behaviour, governance…)

• A ‘top down’ master plan is not feasible; Diversity across countries and cities require differentiated response

• The main problem is to create political will and support for change; markets should provide technical solutions

• A network of committed cities would be helpful

• National level frameworks and measures are very important…

• The TF Roadmap is only a beginning, a broad dialogue process is needed to gain acceptance for a ‘real’ roadmap
THE CONVERSATION DOES NOT STOP ON 8 DECEMBER 2014!

The comments we receive at the conference on 8 December 2014 will still be considered in the condensed version of the TRANSFORuM Roadmaps and for the Strategic Outlook document. We will also compile the essence of the Brussels discussions on our project website.

The conversation about the revision of the White Paper and the best ways to implement its goals will also continue on the TRANSFORuM website, where we provide an online forum for all your thoughts, comments, criticisms and suggestions. Keep the discussion alive.

www.transforum-project.eu

EU Consultation