

SUSTAINABLE URBAN MOBILITY PLANS

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Planning is an **instrument**

- Objective : **Access** not mobility
- Access = **F** (land use ; transport)
- Transport = **F** (Physical; Logical; Financing; Organizational, Regulatory)

Social Exclusion: Downside of Accessibility

- From the literature we can identify a number of access-related barriers that generate social exclusion:
 - the availability and **physical** accessibility of transport;
 - the **cost** of transport;
 - services **located** in inaccessible places;
 - **safety and security**—fear of crime;
 - travel **horizons**—people on low incomes were found to be less willing to travel to access work than those on higher incomes.

Social Inclusion: Upside of Accessibility

- Social inclusion is better achieved through **equity of access**, which in turn depends on the combination of land-use, transport, environmental aspects and income distribution.
- From the review on policy documents it is clear there are three reasons why there needs to be a focus on social exclusion:
 - the need to increase **equity in society**,
 - to raise the **productive potential of society** and to
 - reduce **risk of friction** between groups in society.
- But a **socially inclusive urban transport system is more costly than the traditional approach** focused on the value for the users willing to pay. Additional sources of revenue and income are needed

Two sides of the same coin (I)

- We need to **balance the discussion** and stress that for full participation in society,
 - other conditions need to be met rather than merely access to transport which provides the physical accessibility to economic and social activities.
- Nonetheless, **transport may be by itself a factor of exclusion**,
 - because it has environmental and physical impacts (e.g. noise and air pollution, barriers to circulation caused by infrastructure) and because the negative impacts tend to be concentrated in more deprived areas.
- This is a consequence of the fact that **transport infrastructure often degrades its surrounding** areas, decreasing the local land value, which then attracts low income populations
 - (e.g. historically surroundings of railways station , even though they are obviously well-connected, provide evidence for this argument). The evidence of this degradation process brings an additional complexity to the discussion.

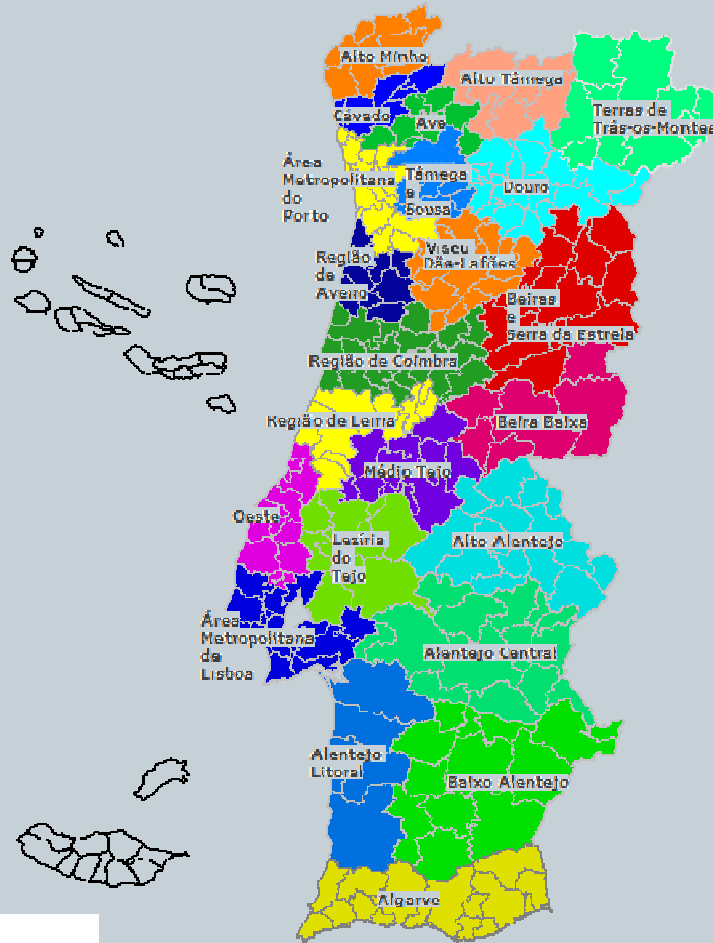
Macário, 2012, "Access as a social good and as an economic good: is there a need for a paradigm shift ?" in "Urban Access for the 21st Century: Finance and Governance models for Transport Infrastructure" Edited by Sclar, et al. Earthscan, 2014

Two sides of the same coin (II)

- While we have seen that accessibility adds value to land-use and business, now, through the social dimension, the **lack of transport is identified as a factor causing degradation** and consequently subtracting value to both land-use and business development.
- **Social exclusion may encompass social, spatial, environmental, economic and political dimensions.**
- Macário, 2012, “Access as a social good and as an economic good: is there a need for a paradigm shift ?” in “Urban Access for the 21st Century: Finance and Governance models for Transport Infrastructure”, Edited by Sclar et al. Earthscan, 2014

PT experience: authorities

Transport Authorities



- Área Metropolitana de Lisboa
- Área Metropolitana do Porto
- Comunidade Intermunicipal do Alto Minho
- Comunidade Intermunicipal do Cávado
- Comunidade Intermunicipal do Ave
- Comunidade Intermunicipal do Alto Tâmega
- Comunidade Intermunicipal do Tâmega e Sousa
- Comunidade Intermunicipal do Douro
- Comunidade Intermunicipal das Terras de Trás-os-Montes
- Comunidade Intermunicipal da Região de Aveiro
- Comunidade Intermunicipal da Região de Coimbra
- Comunidade Intermunicipal da Região de Leiria
- Comunidade Intermunicipal Viseu Dão Lafões
- Comunidade Intermunicipal das Beiras e Serra da Estrela
- Comunidade Intermunicipal da Beira Baixa
- Comunidade Intermunicipal do Oeste
- Comunidade Intermunicipal do Médio Tejo
- Comunidade Intermunicipal do Alentejo Litoral
- Comunidade Intermunicipal do Alto Alentejo
- Comunidade Intermunicipal do Alentejo Central
- Comunidade Intermunicipal do Baixo Alentejo
- Comunidade Intermunicipal da Lezíria do Tejo
- Comunidade Intermunicipal do Algarve

Portugal: state of the art

- Last years PT (> 2010)
 - Approved Plans, Strategies and National Directives in Land Use, Environment, Energy, Transport, Road Safety;
 - Regional Land Use Plans were made for the whole country
 - Review of all Municipal plans
- Government support with several studies and a global program done with 40 municipalities “Sustainable Mobility Projects”
- National Strategic Reference Framework Program (2007-2013) funded several actions like mobility plans
- A global strategy was established through several guiding documents which set was designated as “**Mobility Packages**”

Guidelines produced in Portugal

- National Directives for Mobility
- Guidelines for the implementation of Accessibility. Mobility and Transportes in Municipal Plans for Land-Use
- Guidelines for mobility plans
- Leaflets on details for capacitation
- Guidelines com corporative mobility plans
- Technical and Financial support

Important messages

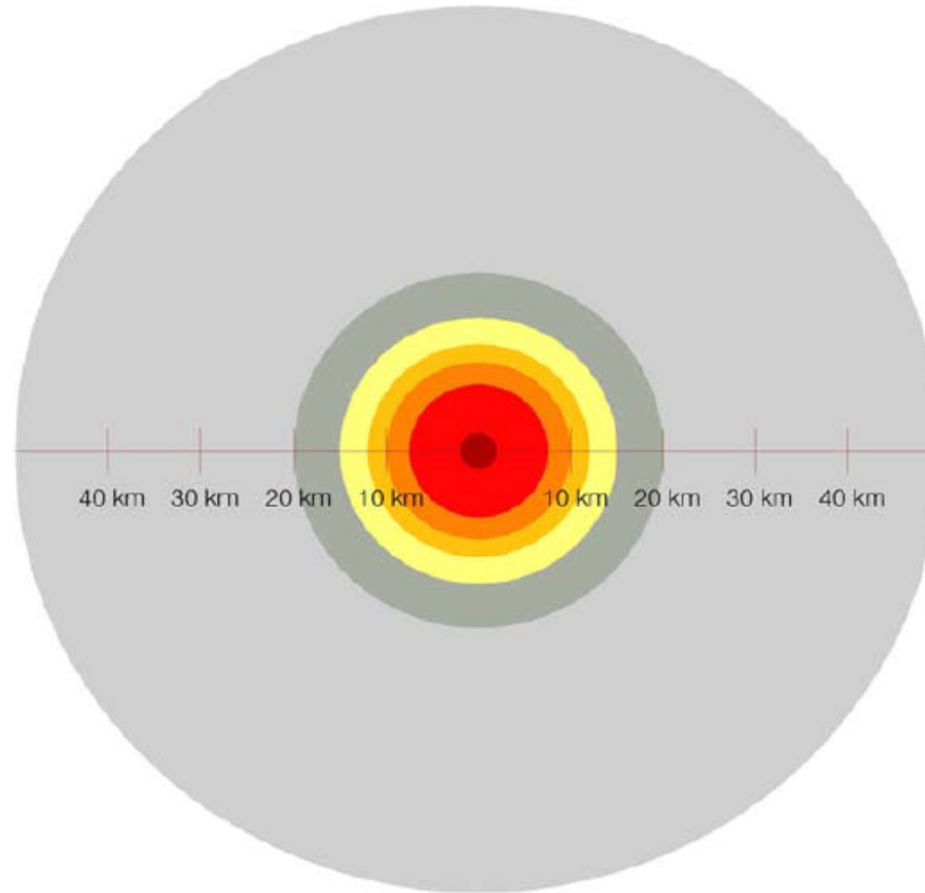
Planning for transport and managing mobility imply assuming **political option often materialized in arbitrating between private interests.**

This is one of the several reasons why **decision makers must involve very early in the definition of strategic orientation** that guide the plans, whatever their nature

The approach to pedestrian spaces and path values both a **smooth intermodal transport and urban proximity**

The concept of **“sustainable mobility”** demands the transport system to have the following major objectives:

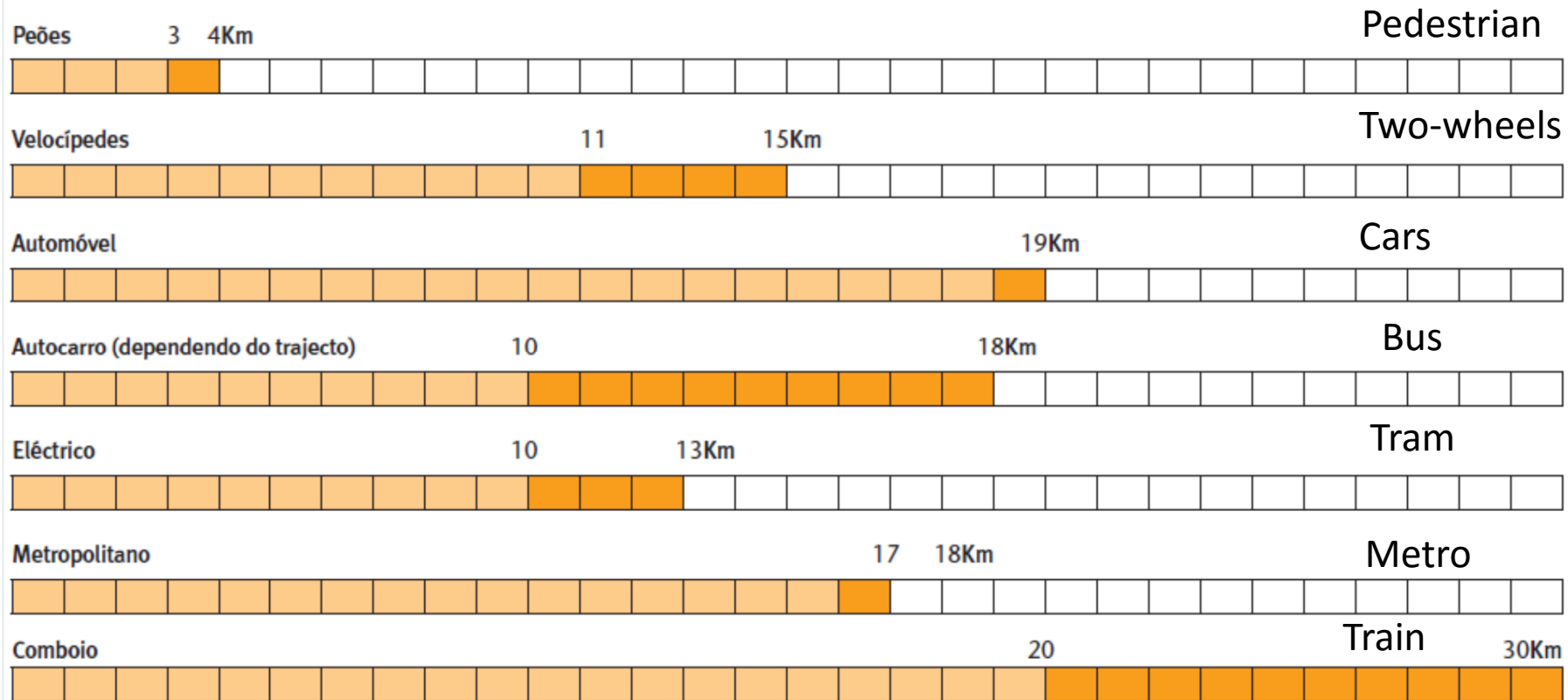
- 1) Contain the use of private car;
- 2) Increase the use of public transport;
- 3) Increase active mobility with soft modes.



- A pé (1256 ha; 4km/h; r=2km)
- Autocarro (17671 ha; 15km/h; r=7,5km)
- Bicicleta (31415 ha; 20km/h; r=10km)
- Metropolitano (45238 ha; 24km/h; r=12km)
- Automóvel em meio urbano (196349 ha; 30 Km/hora; r=15km)
- Comboio (125663 ha; 40km/h; r=20km)
- Automóvel em auto-estrada (785398 ha; 100 Km/hora; r=50km)

Source: PMOT, IMT

Distances / 45 min

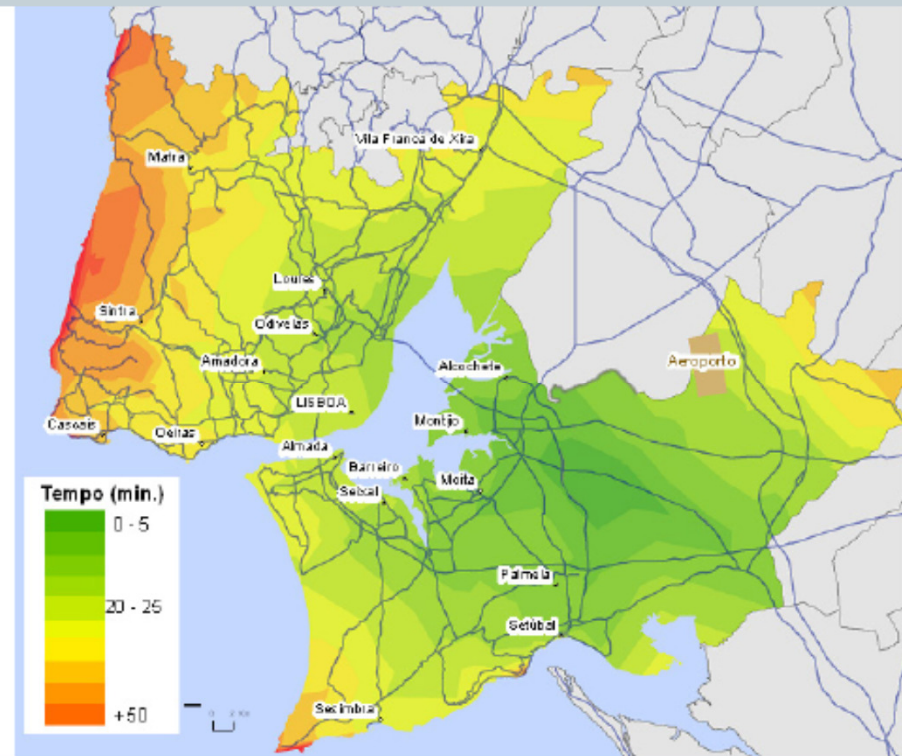
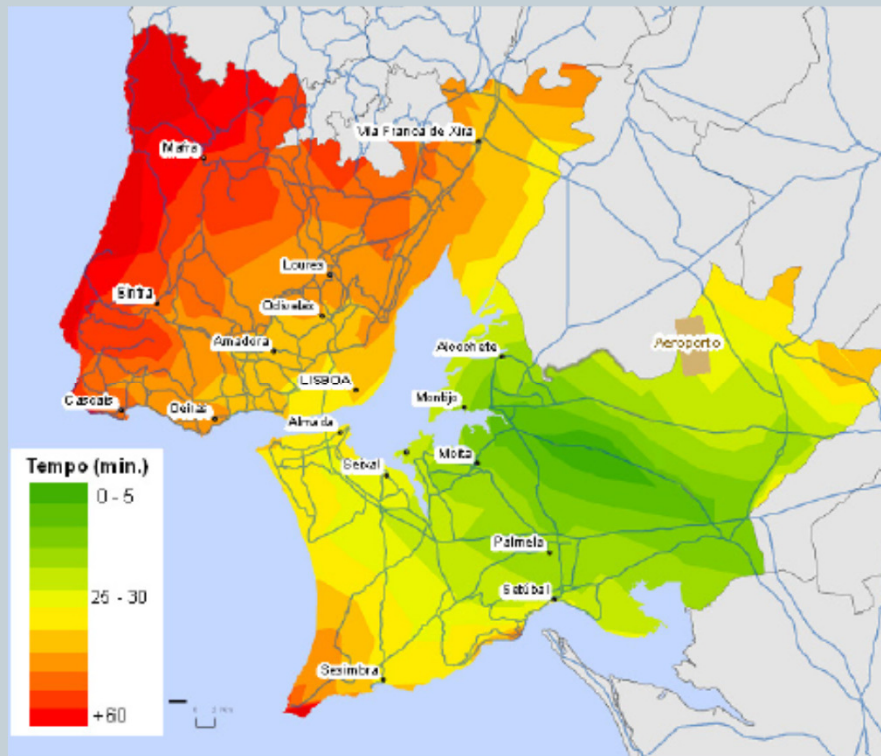


Guidelines, IMT, 2011

PT Guidelines 2010-2020 for SUMP'

- Develop networks of centrality articulated with networks of accessibility
- Ensure intermunicipality continuity
- Contain urban sprawl
- Structure accessibility networks integrating low density areas
- Densification of urban use
- Value proposition for the interfaces
- Promote corridors for public transport and soft modes
- Develop and upgrade pedestrian networks
- Manage parking offer

Lisbon 1997 – 2007



Guidelines IMT - 2011

REFLECTIONS FOR THE FUTURE

What have we learned ?

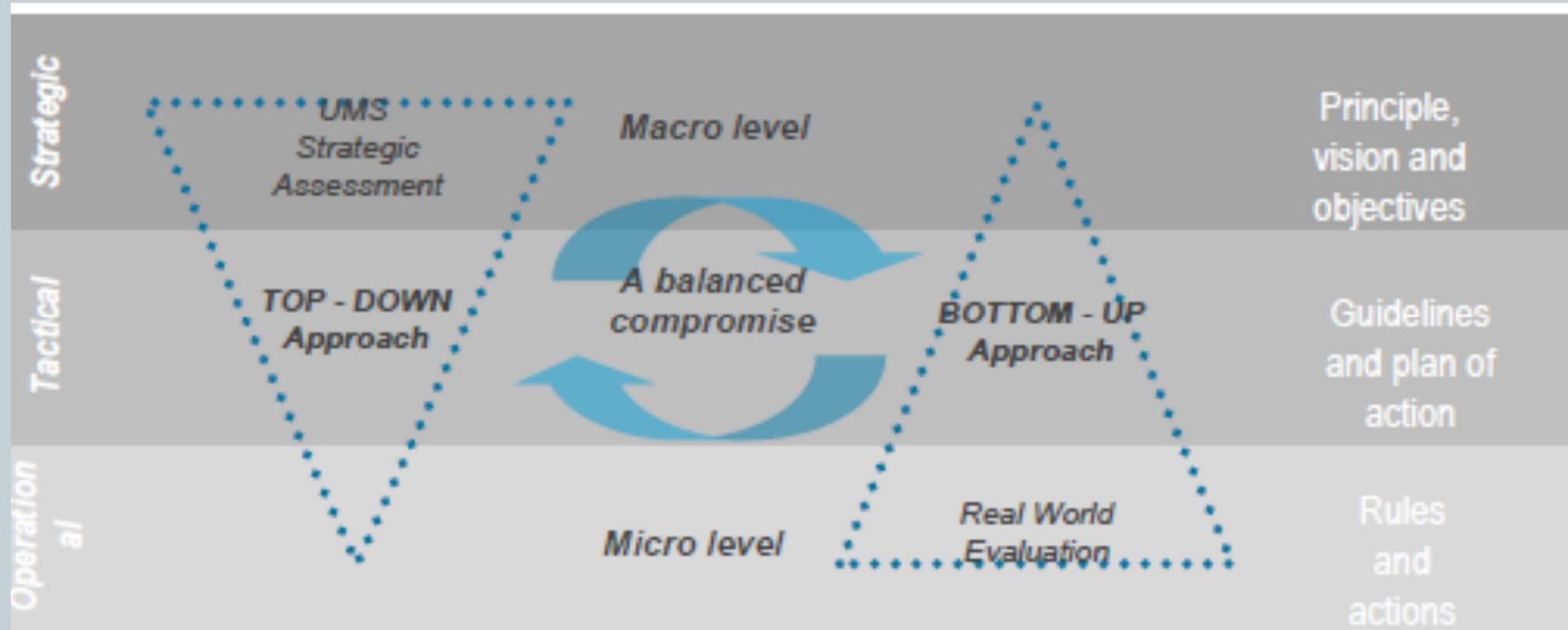
South America

Africa

Asia

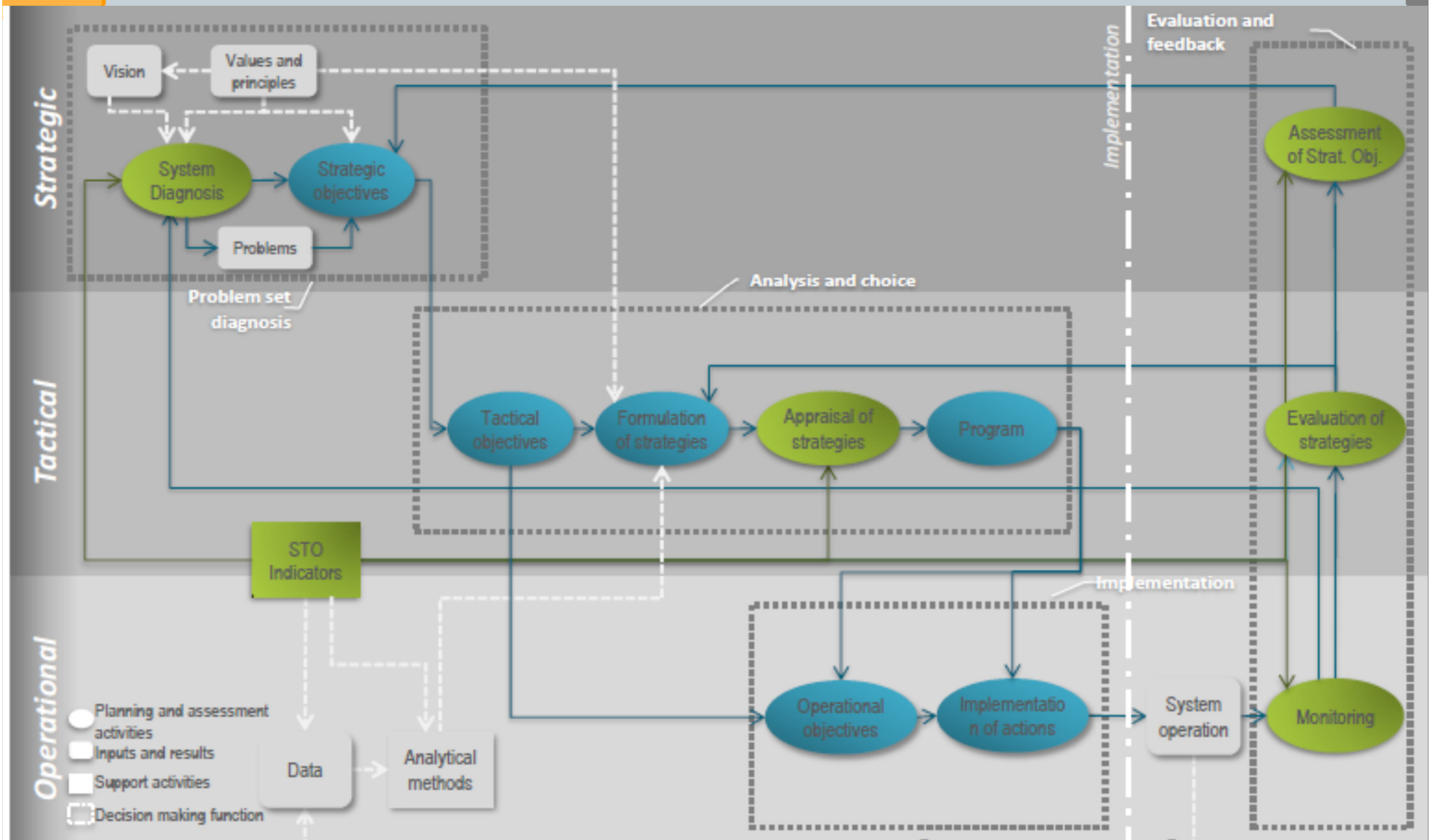
Europe

Strategic network development



Garcia 2016 (PhD) w/Prof Macário

UMS new planning process



Need to Shift Planning Paradigm (I)

- Understanding change is a matter of understanding the **interaction between the entities** that form a specific organizational field and their environment.
- In mobility systems the symbiotic relationship between actors forces the system to have **structural consistency** to evolve in a sustainable way.
- Decisions lie on the border of domains that usually represent autonomous political powers, i.e. environment, land-use, social and transport policy, all in a silo oriented approach

Need to Shift Planning Paradigm (II)

- **Cities differ** substantially in their development strategies. Even if we are dealing with similar problems, in any given moment each city is conditioned by the choices made in the past that configure a different departure point and, consequently decision makers will have different perceptions on which are the main problems that need to be addressed and which are the best solutions to mitigate them.
- The intertwined relationships between accessibility, land use, environment and social aspects suggest that institutional design should develop in such a way that decision-making within these sectors lies on **articulated processes that over time can build the necessary institutional trust** that guarantees long term thinking and vertical and horizontal consistency

- Thank you !

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