



NODES

Creating space(s) for
Collaborative
Mobility

WOCOMOCO 2015
Ivo Cré, Polis

Regulate this, WOCOMOCO!

- Integrated ticketing and information services
- (Semi-) professional drivers
- Taxi permits
- Access to data / privacy
- Tendering – concessions – Quality partnerships
- Allocation of Incentives
- Parking management
- Access restrictions
- Access to terminals/interchanges
- Land use permits integration with transport services
- Standardisation (e.g. For public bicycles)
- Passenger rights in a multimodal services / spaces
- MSP certification
- Payment / ticketing
- Local taxes and fares
- MaaS
- Driverless vehicles
- Role of CoMo in emergency situations
- ...





collectivity meets connectivity

The NODES project

- FP7 Collaborative project
- Total budget: **4.2 million €** (EC cont.: 2.8 million €)
- Project duration: **3 years** (start date: 1 October 2012)
- Coordinated by 
- **17 partners**

Local Government Administrations:

Madrid, Birmingham,
Toulouse, Reading,
Budapest, Thessaloniki

Public Transport Operators:

Rome, Osnabrück, NS,
Cityway

Research centre and consultants:

TU Delft, Berends,
DTV, FIT

3 European associations:

UITP, Polis, EPF

NODES objectives



- Build a **Toolbox** to support European cities, transport authorities and operators, in the design and operation of new or upgraded public transport interchanges
- **Enhance services and satisfaction** for travellers, users and societal/economic actors depending on the efficiency of the interchange

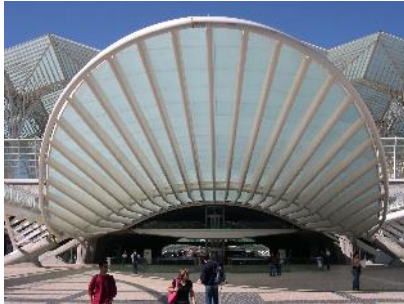
NODES topics



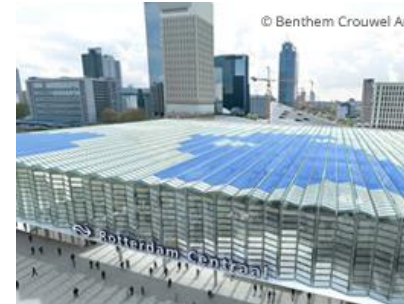
**Land use &
infrastructure
(11 tools)**



**Business
models
(26 tools)**



**Design
(14 tools)**

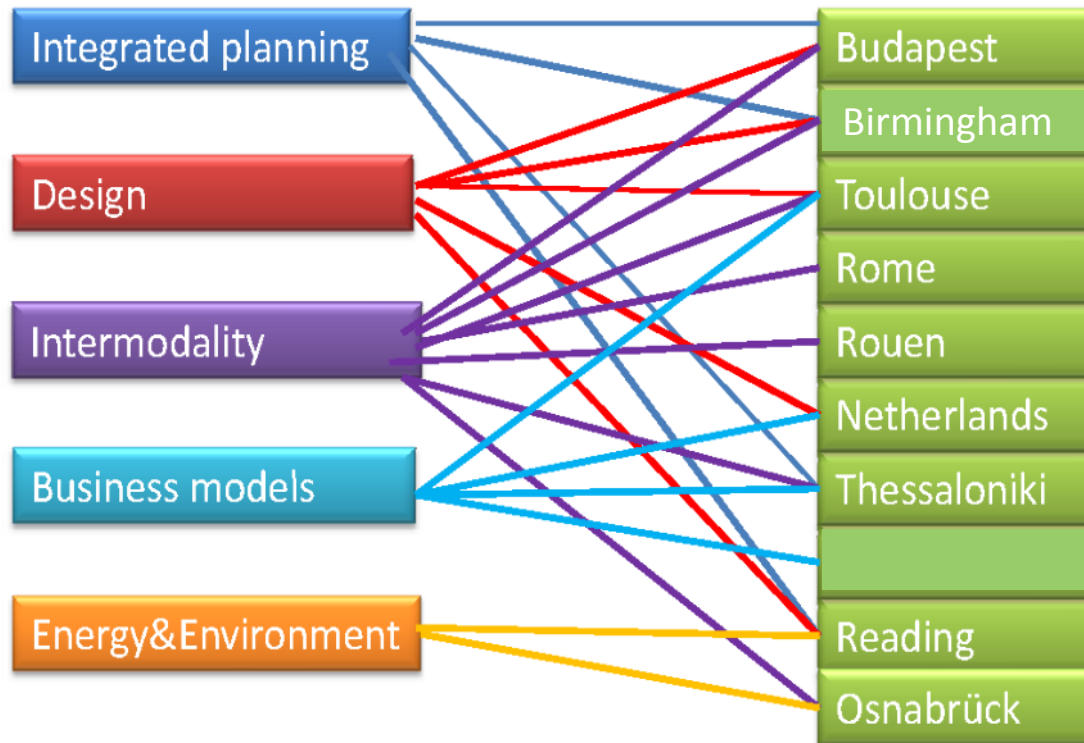


**Energy and
Environment
(14 tools)**



**Intermodality
and ICT
(24 tools)**

Application sites



Vision for intermodality

- Seamless
- Flexible, reliable, secure
- Shared modes
- Enabling modal shift
- ICT supported
- Independent travel



NODES

Vision for the role of the station

- With growing variety of mobility services, the role of interchanges in the network will increase
- Interchanges simplifies the PT system
- 'A mythical place' - 'Cities within cities'
- Interchanges drive urban development
- Centre of the neighbourhood - Place to meet
- Easy to use – Accessible - Comfortable

Interchanges under decompression

- Shrinking time windows of PT operations
 - Negative for CBA and business models of station operations
 - Cost of management increase per passenger
 - Lower Rol
- Shrinking territorial coverage of PT
 - Most likely bad for intermodality
 - Parking pressure at stations
 - Do flexible mobility services really feed mainline PT?

Interchanges under decompression: CoMo / MaaS

- Do (all) flexible mobility services need nodes?
- Localised component (station as asset) vs
- Desintermediated component (connectivity, ownership as barrier to innovation)
- In many cases, the logical location of flexible mobility services is peripheral – but are users located there?

So what?

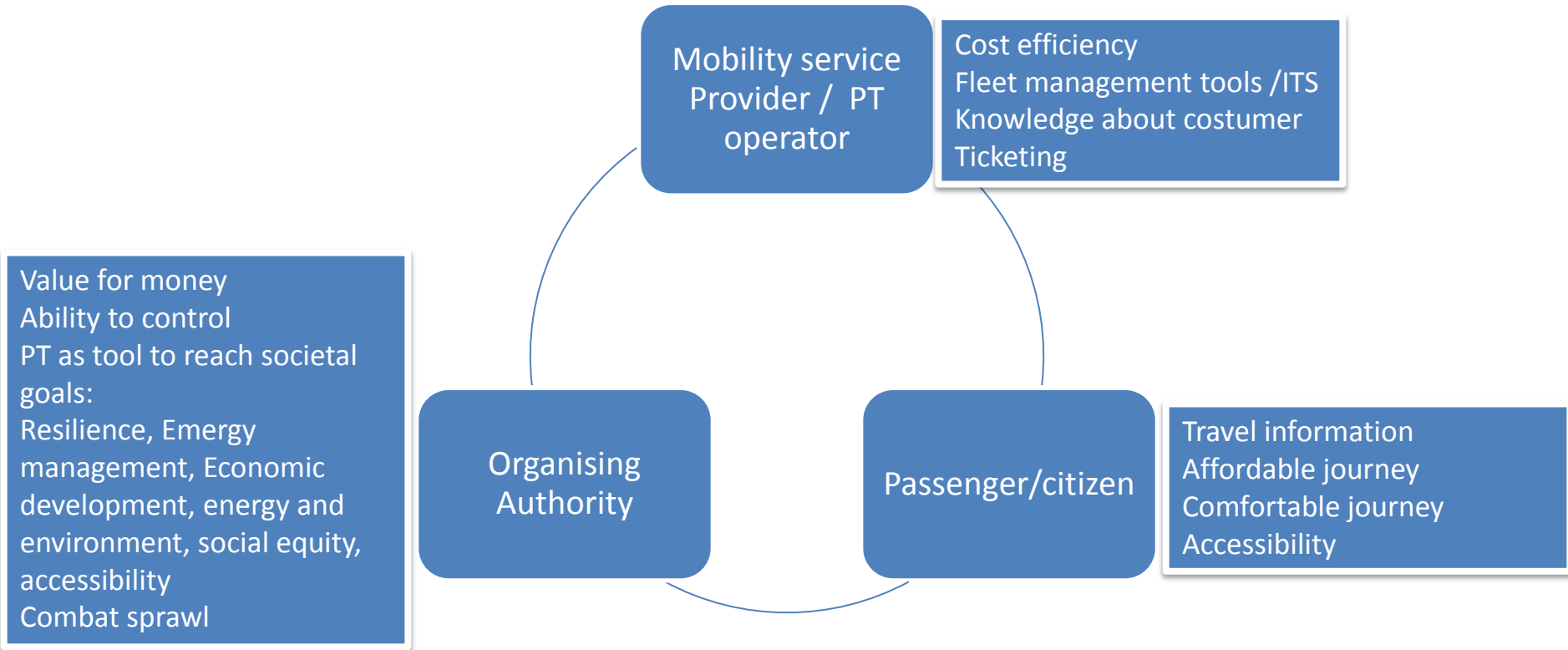
Cost efficiency - profit
Fleet management tools /ITS
Knowledge about customer
Ticketing

Mobility /
PT operator

Passenger

Travel information
Affordable journey
Comfortable journey
Accessibility

But there is more...



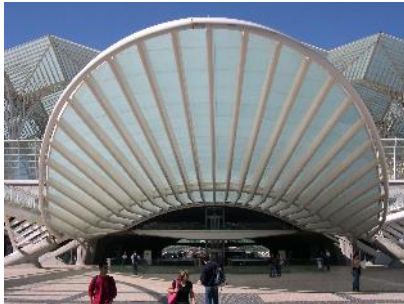
Re-inventing the interchange to enable collaborative mobility



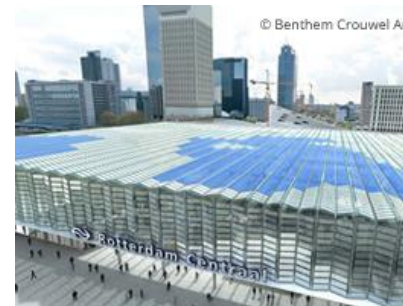
Urban development nodes
Food
Offices/meeting rooms
Off peak alternative use



Building on LU role
Open for all modes, but not for free?
Premium policies?
LA step in again!



Attractive public space
Connector role
Off peak alternative use



Stations as powerhouse for electromobility



Open for all modes

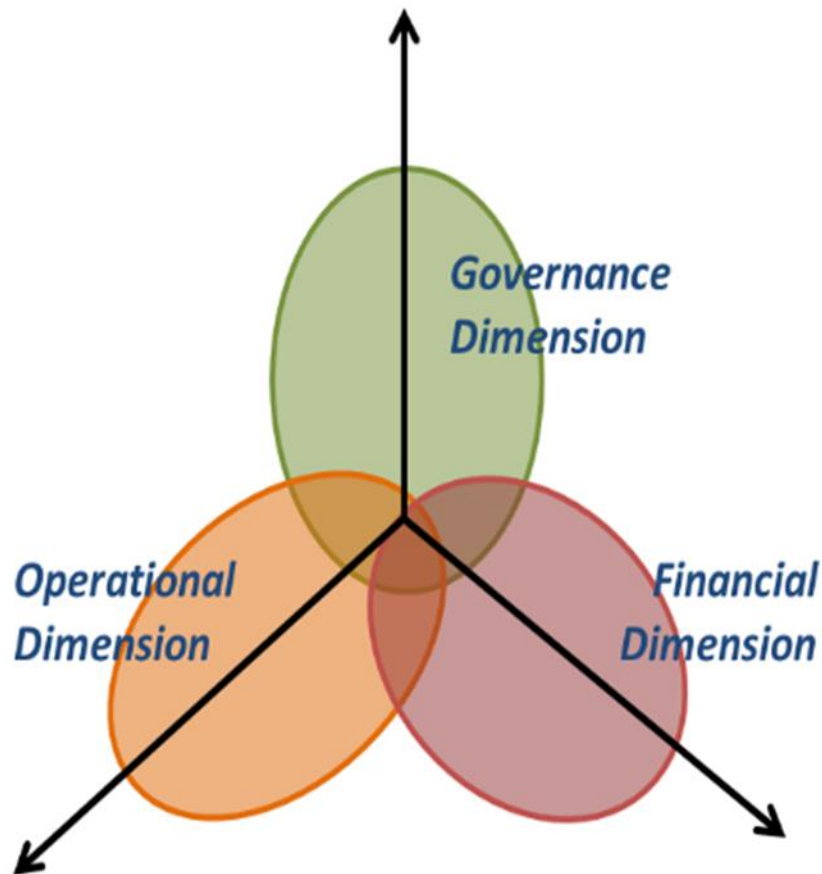
Role of local authorities: push and pull!

- Coordinator
- Planner
- Regulator



- Funder, opening 'common' assets

To conclude: before regulating: understanding when to act?



- ✓ **Governance Dimension**
Capturing politician motivations. (*Service, quality of service, service ownership, citizen's satisfaction, environment protection*)
- ✓ **Financial Dimension**
Mainly focused in ROI
- ✓ **Operational Dimension**
Involving other sources of public value

	Contr. Oc. Temps real	Guiat conductors	T. ocupat vs T. pagat	Inf. alarmes Controlador	Preu Dinàmic	Patrons de comportament
Perspectiva Servei	✓	✓				✓
Perspectiva Operativa	✓		✓	✓		✓
Perspectiva Econòmica	✓		✓	✓	✓	✓

Thank you/ Questions

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www.nodes-interchanges.eu