

IRF – UNECE ITS Event

Session 2: ITS: better mobility services to everyone?

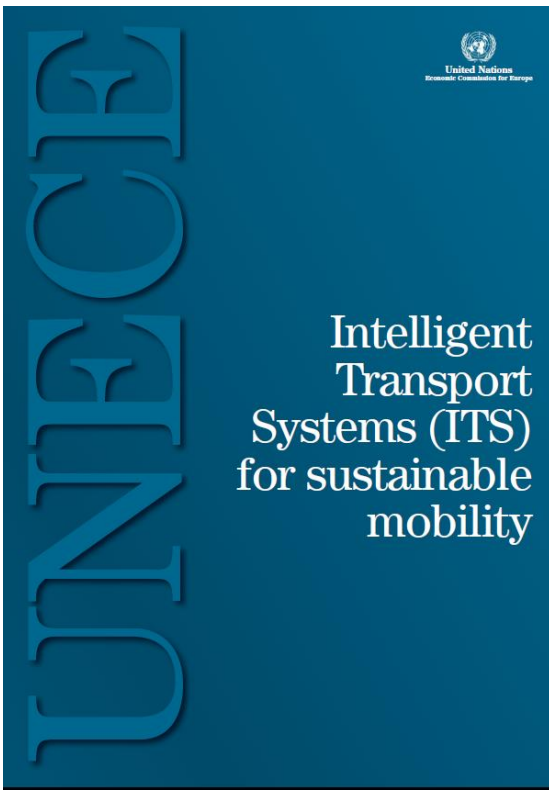
**In a disruptive and challenging world
how can ITS remain relevant to society?**

Governance and Infrastructure for Smart and Connected Mobility
Palais des Nations, Geneva
04 December 2018

Tim Gammons, Director, Arup

Agenda

- ITS as viewed by UNECE and IRF (circa 2011)
- Connected journey
- Governance to support ITS
- Development of ITS projects to support benefits realisation
 - Service design
 - System design
 - Widget/component design
- Summary

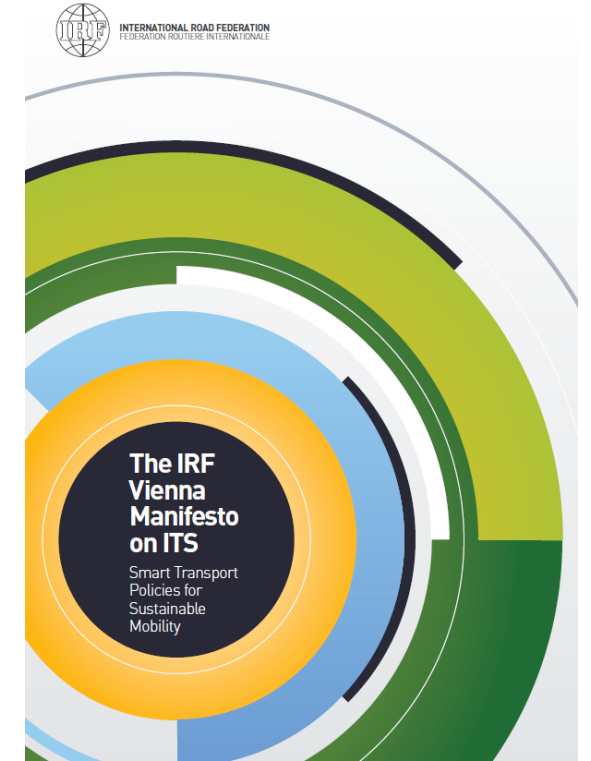


Extract of 20 Global Actions for UNECE

- Scaling up the work on ITS in all working parties
- Enhancing the modal integrator's role of ITS
- Developing cost-benefit assessment methodologies
- Contributing to climate change mitigation
- Launching analytical work
- Contributing to capacity building, education and awareness raising

Challenges

- Interoperability is essential
- Possible penetration into consumer markets



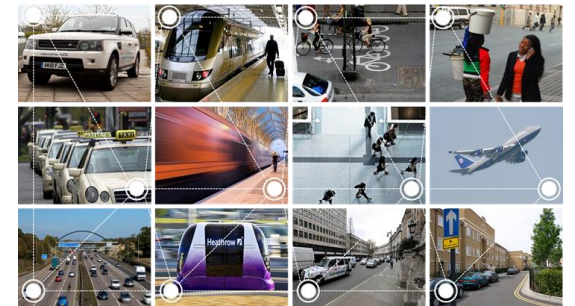
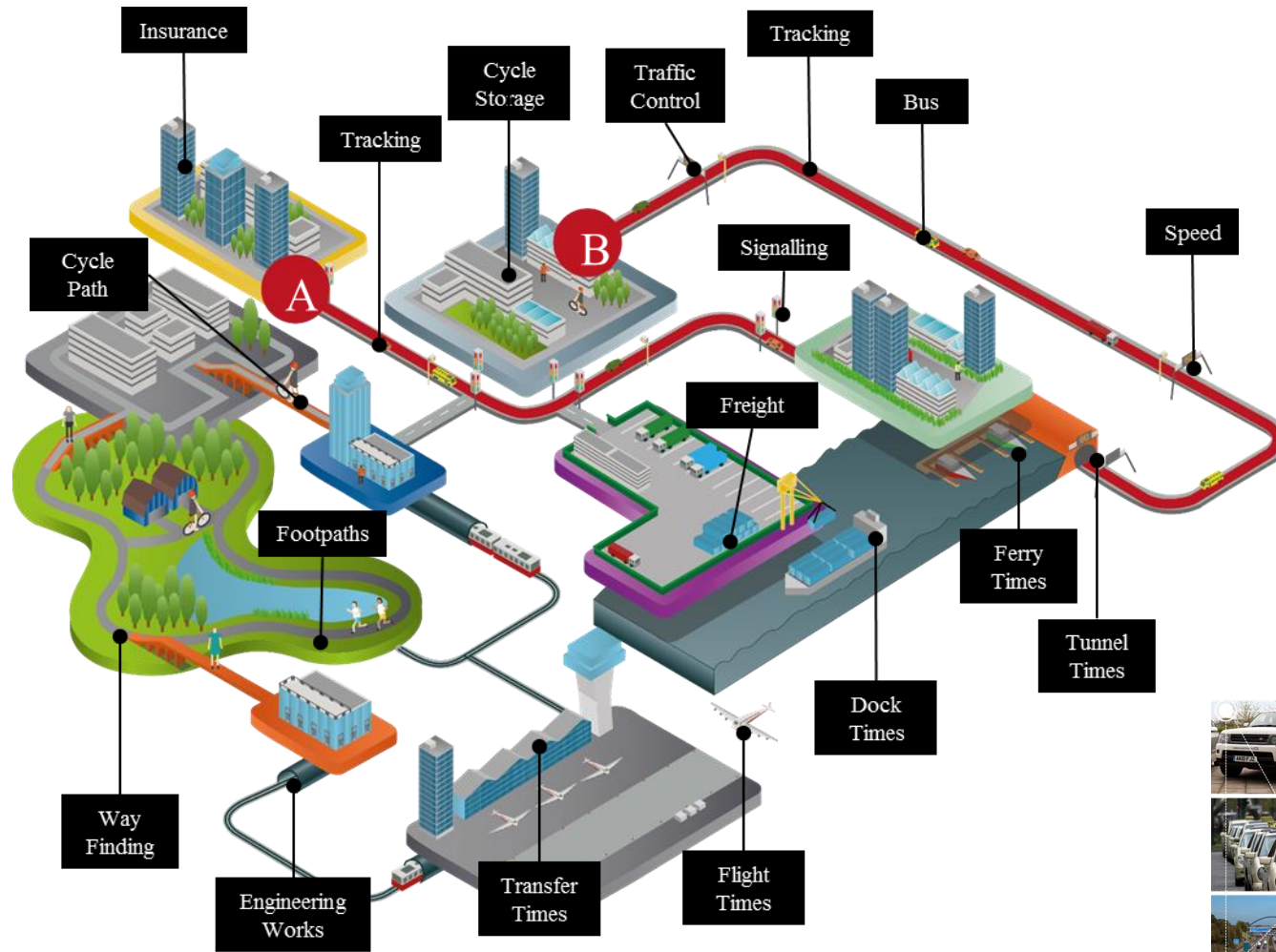
IRF Recommendations

- Incorporate ITS in Existing Policies
- Enhance ITS Partnership and Collaboration
- Encourage Sustainable Mobility Behaviour
 - Plan for ITS Deployment
 - Foster ITS Harmonisation
 - Stimulate ITS Education

Familiar ITS Deployments

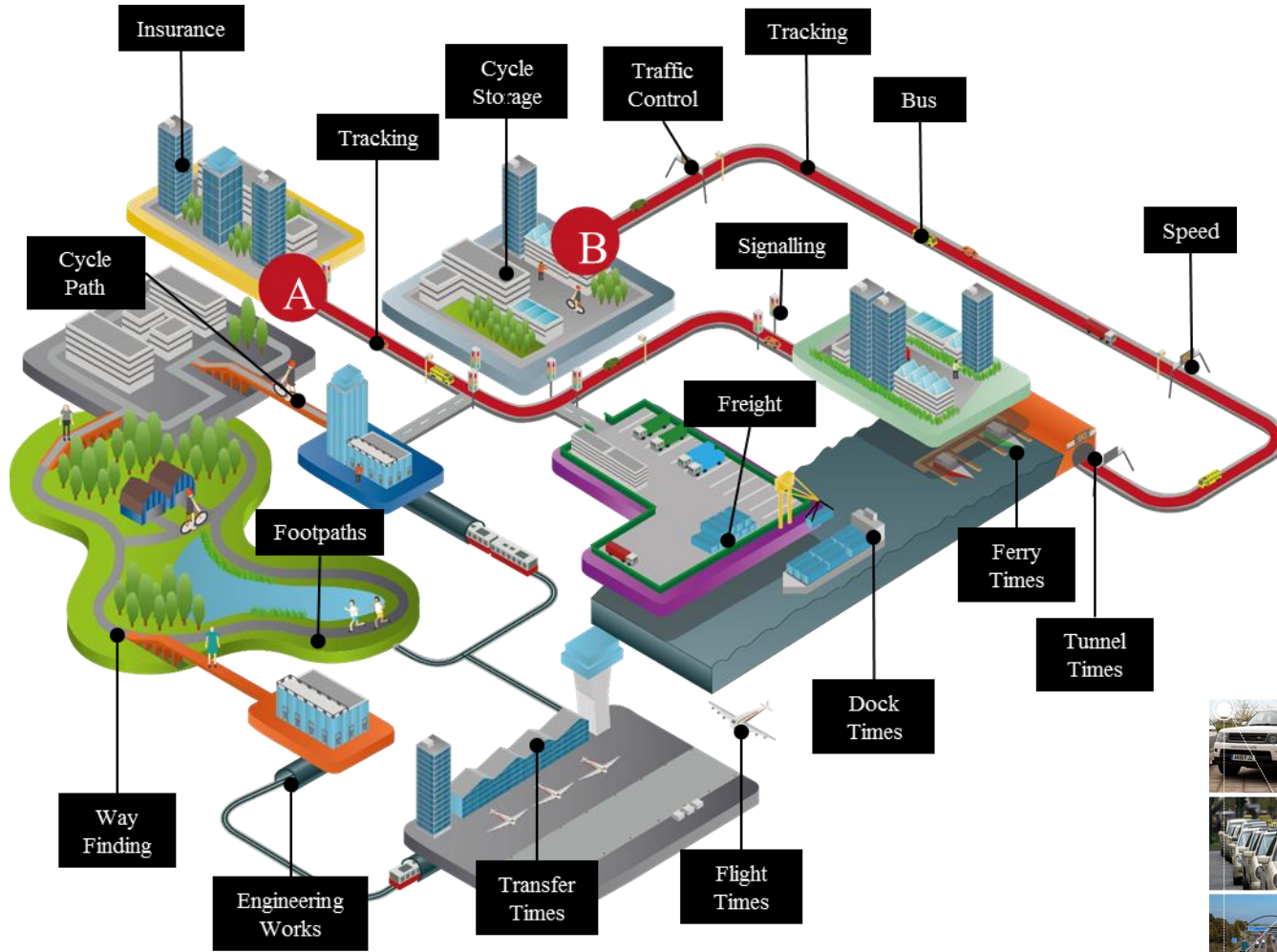


The Connected Journey



Reality check

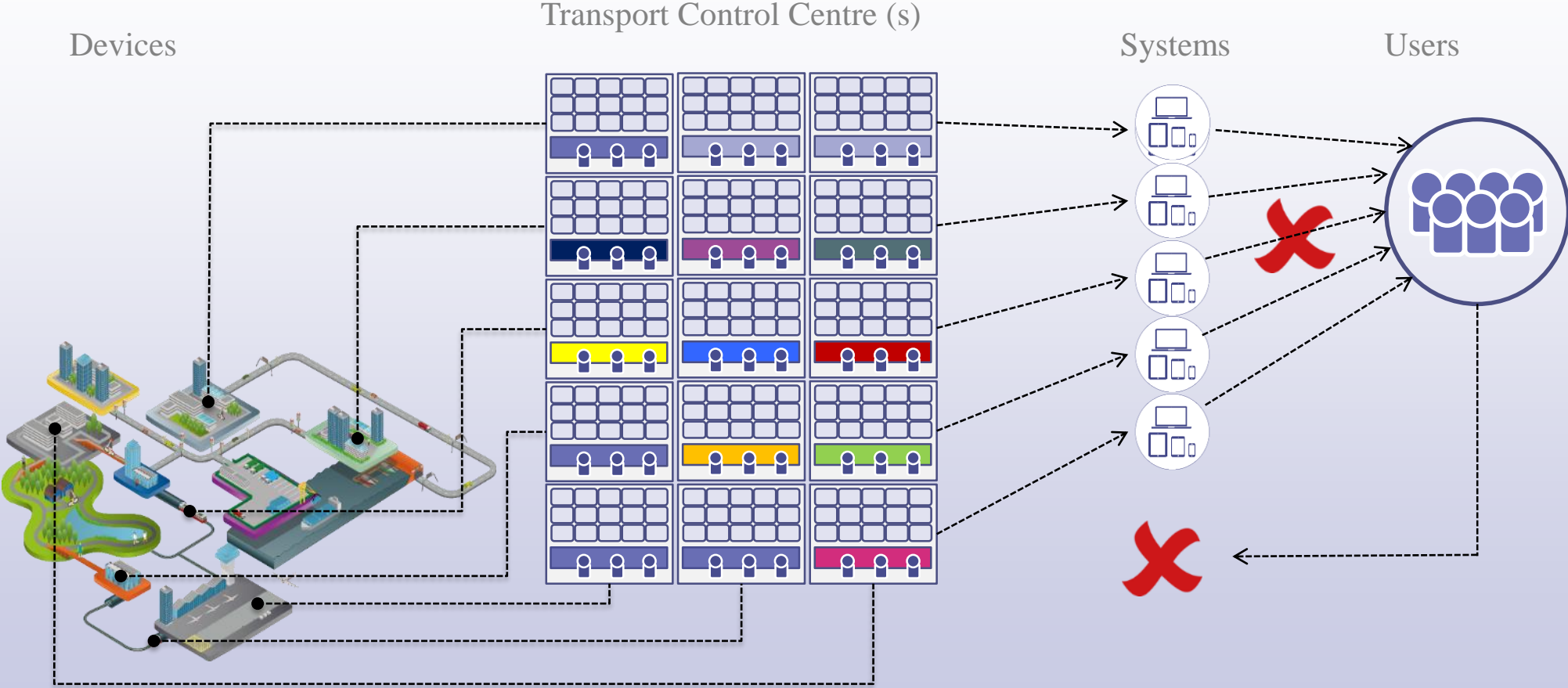
- ❖ Silo'd
- ❖ Fragmented
- ❖ Proprietary



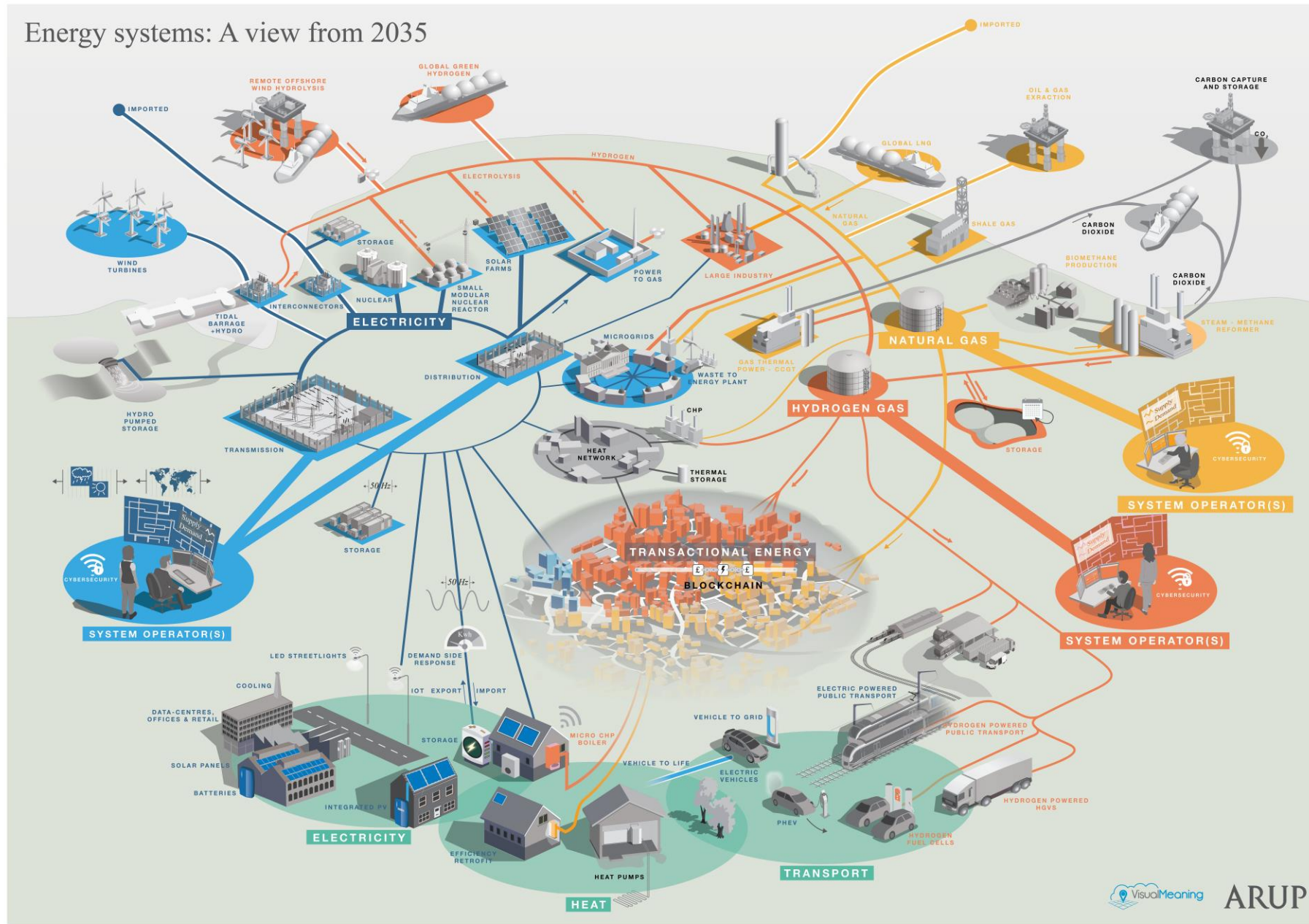
ROADWORKS AHEAD	SPORTS LIVE	FOOTPATH CLOSED
1	2	3
P Queensgate Car Parks P	ROADWORKS AHEAD	ROADWORKS AHEAD
BLUE FULL	ROADWORKS AHEAD	ROADWORKS AHEAD
RED FULL	ROADWORKS AHEAD	ROADWORKS AHEAD
GREEN FULL	ROADWORKS AHEAD	ROADWORKS AHEAD
YELLOW FULL	ROADWORKS AHEAD	ROADWORKS AHEAD
3	ROADWORKS AHEAD	ROADWORKS AHEAD
Service update	ROADWORKS AHEAD	ROADWORKS AHEAD
Bakerloo Severe delays	ROADWORKS AHEAD	ROADWORKS AHEAD
Central Severe delays	ROADWORKS AHEAD	ROADWORKS AHEAD
Circle Severe delays	ROADWORKS AHEAD	ROADWORKS AHEAD
District Severe delays	ROADWORKS AHEAD	ROADWORKS AHEAD
East London Severe delays	ROADWORKS AHEAD	ROADWORKS AHEAD
Hammersmith & City Severe delays	ROADWORKS AHEAD	ROADWORKS AHEAD
Jubilee Severe delays	ROADWORKS AHEAD	ROADWORKS AHEAD
Metroplitan Severe delays	ROADWORKS AHEAD	ROADWORKS AHEAD
Northern Severe delays	ROADWORKS AHEAD	ROADWORKS AHEAD
Piccadilly Severe delays	ROADWORKS AHEAD	ROADWORKS AHEAD
1210 BOARDING	ROADWORKS AHEAD	ROADWORKS AHEAD
210 BOARDING	ROADWORKS AHEAD	ROADWORKS AHEAD
15 DELAYED	ROADWORKS AHEAD	ROADWORKS AHEAD
0 BOARDING	ROADWORKS AHEAD	ROADWORKS AHEAD
5	ROADWORKS AHEAD	ROADWORKS AHEAD
a no & City	ROADWORKS AHEAD	ROADWORKS AHEAD
Planned closure	ROADWORKS AHEAD	ROADWORKS AHEAD



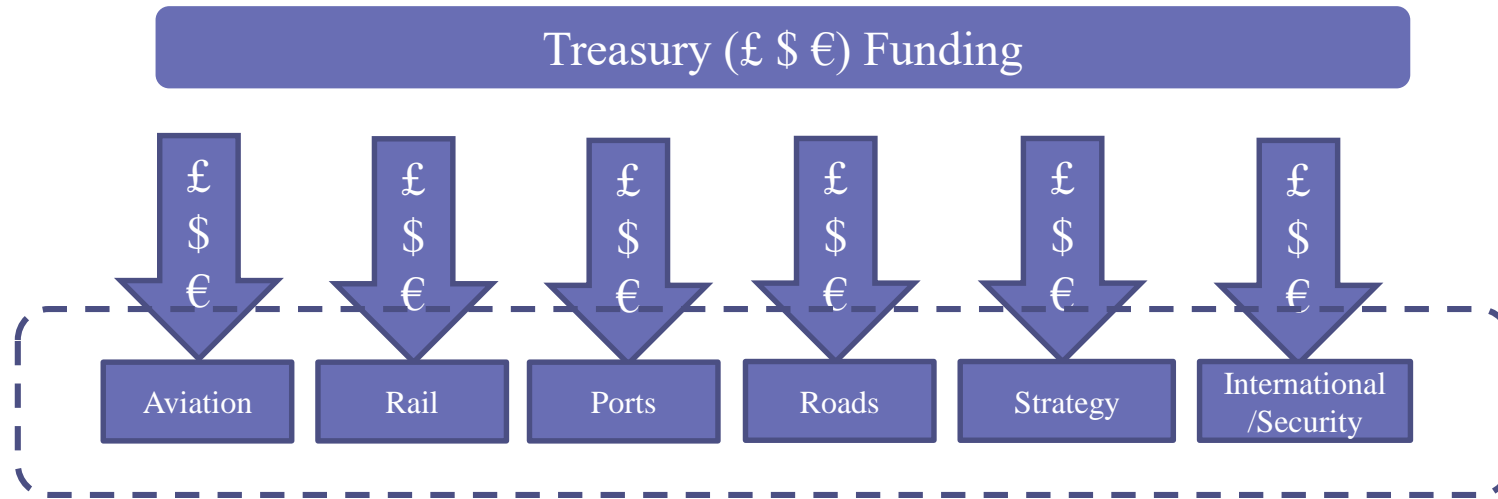
Incomplete Value Chain



Energy systems: A view from 2035

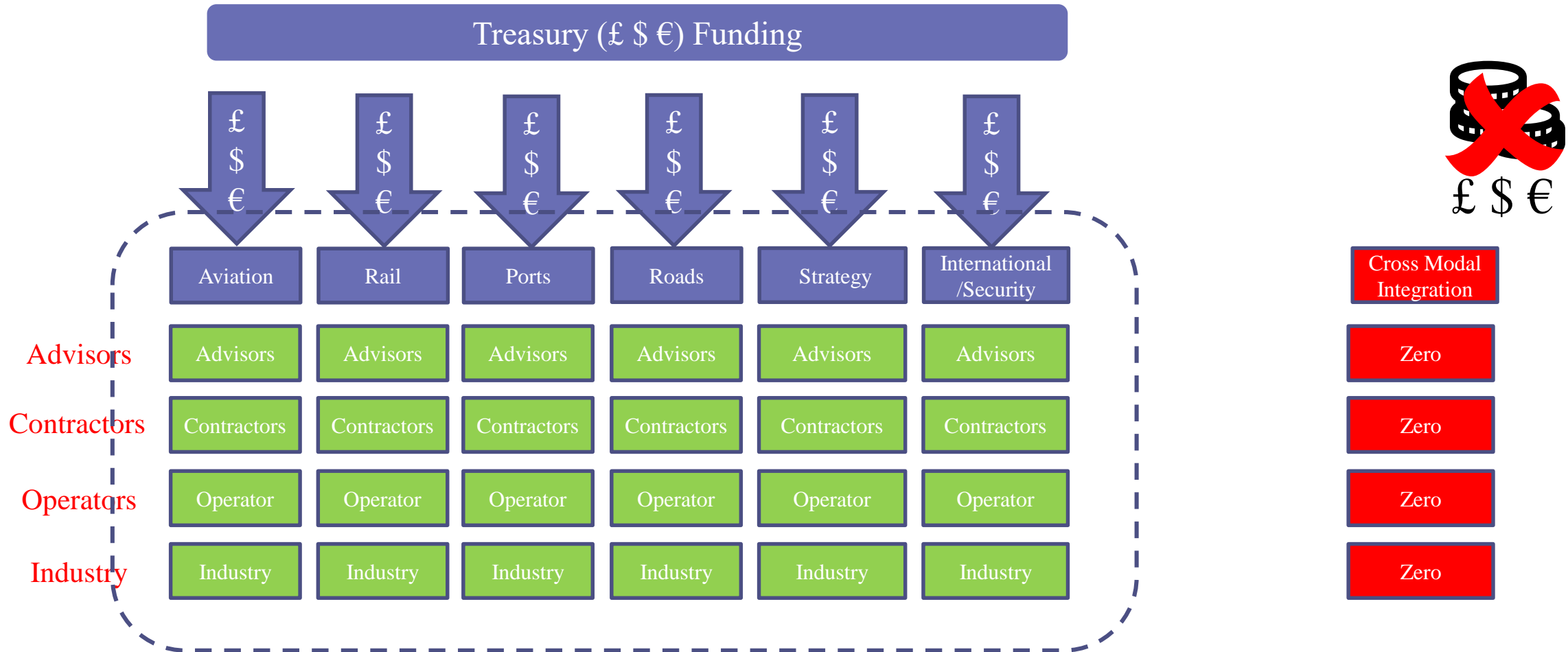


Typical Governance and Departmental Structure

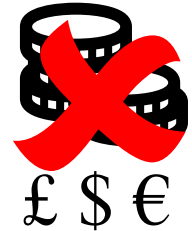
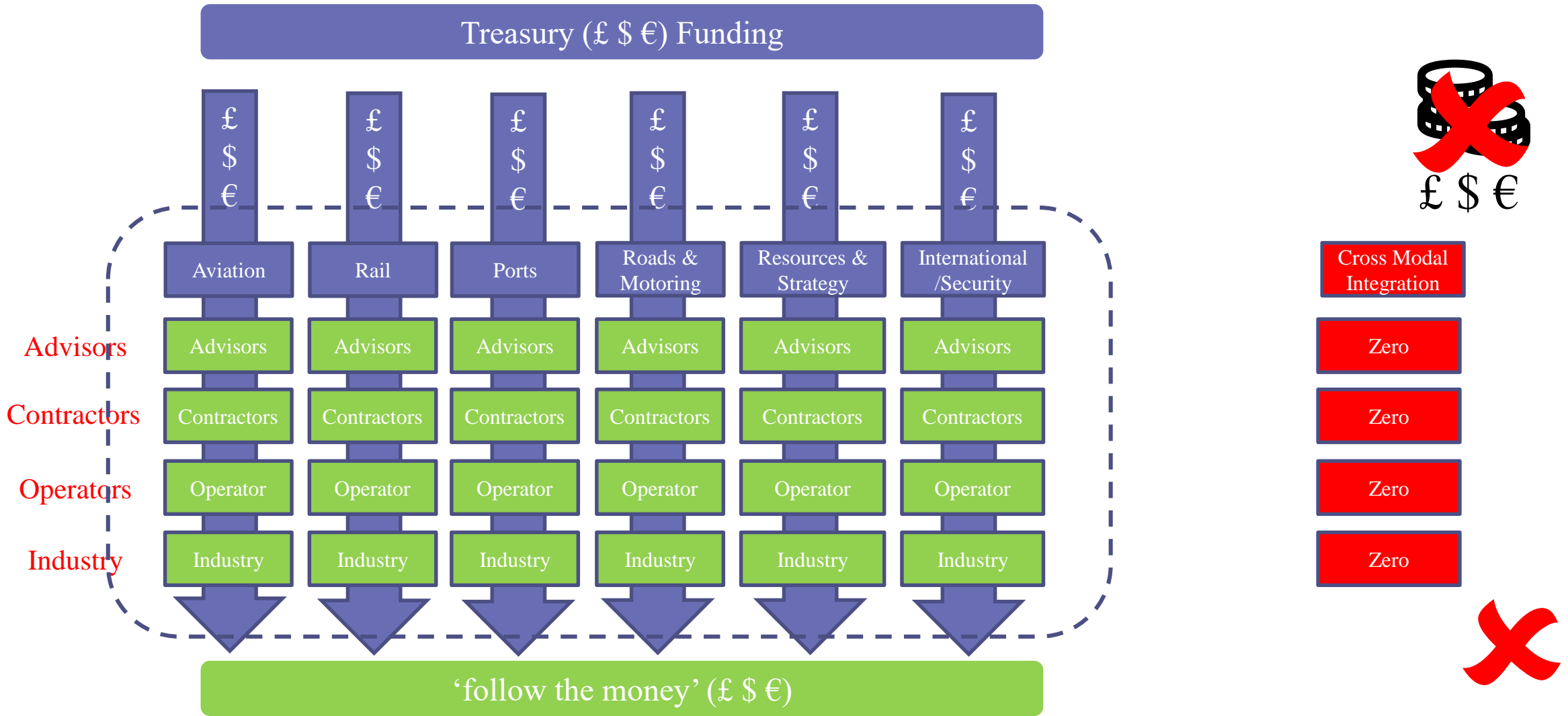


Cross Modal
Integration

Typical Governance and Departmental Structure



Typical Governance and Departmental Structure



How do we know when we achieved success ?

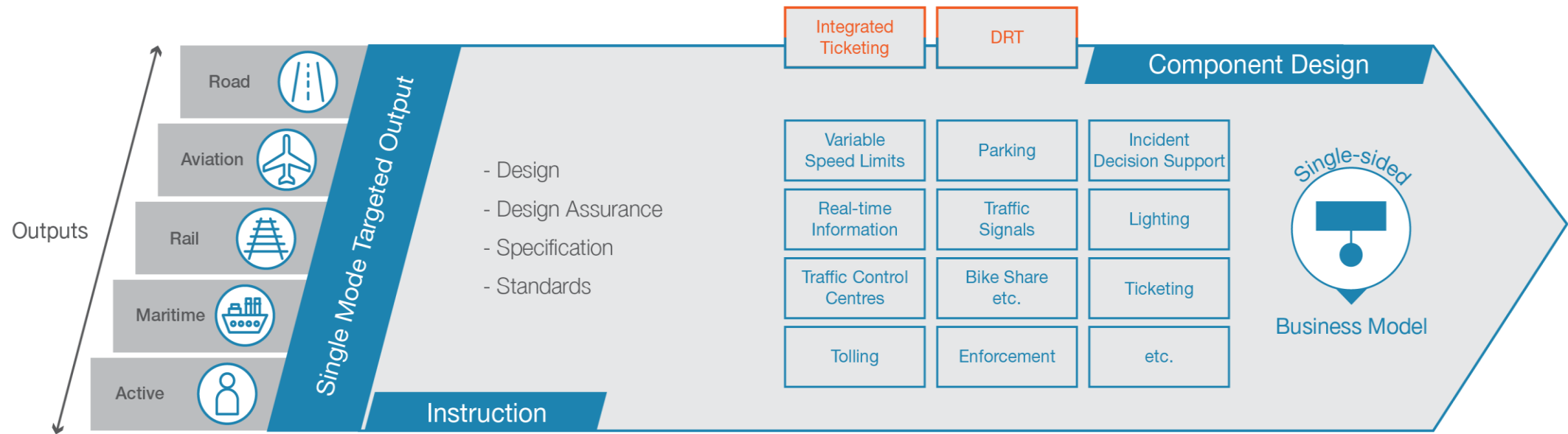
Mike Bloomberg (former Mayor NYC):

*If you can't measure **it**,
you can't manage **it** and
you can't fix **it**.*

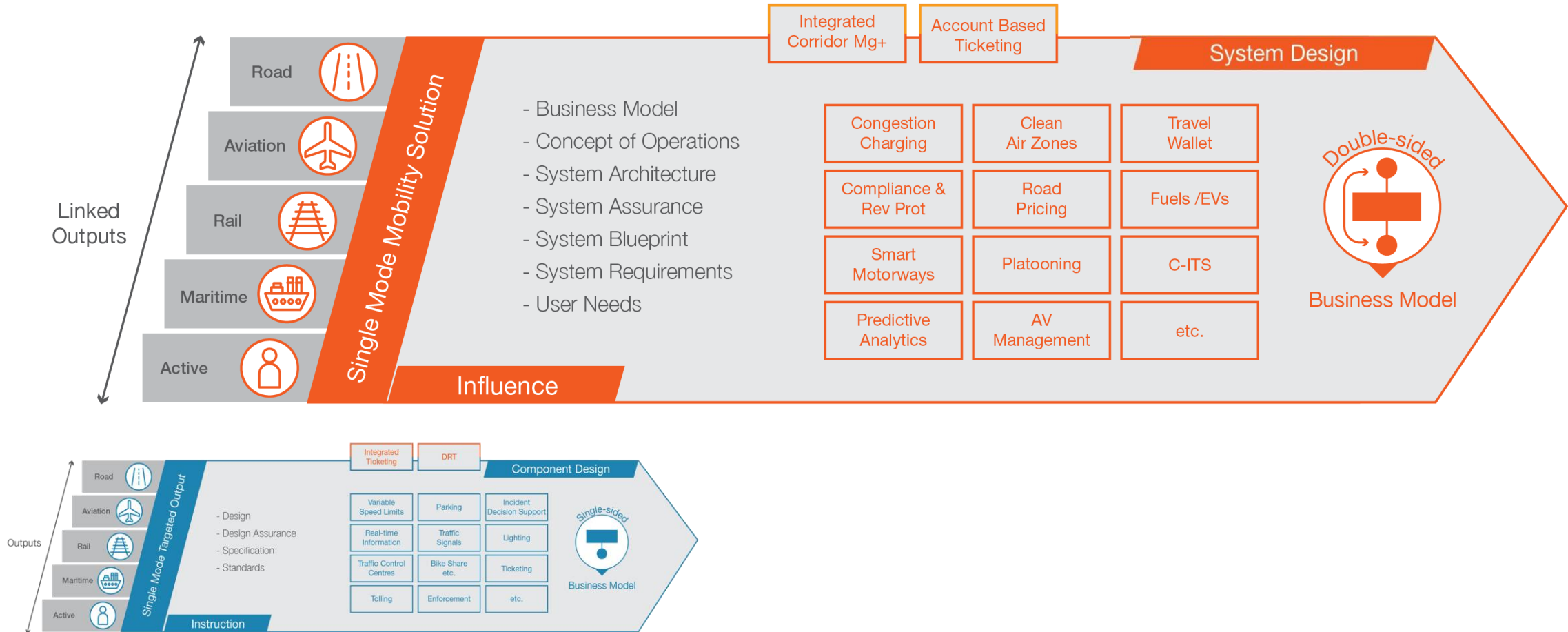
Anon:

- 1) *We design widgets and systems to find a problem.*
- 2) *We fund projects to buy widgets and systems.*
- 3) *We operate below the problem statement*
- 4) *We don't always define the outcome*

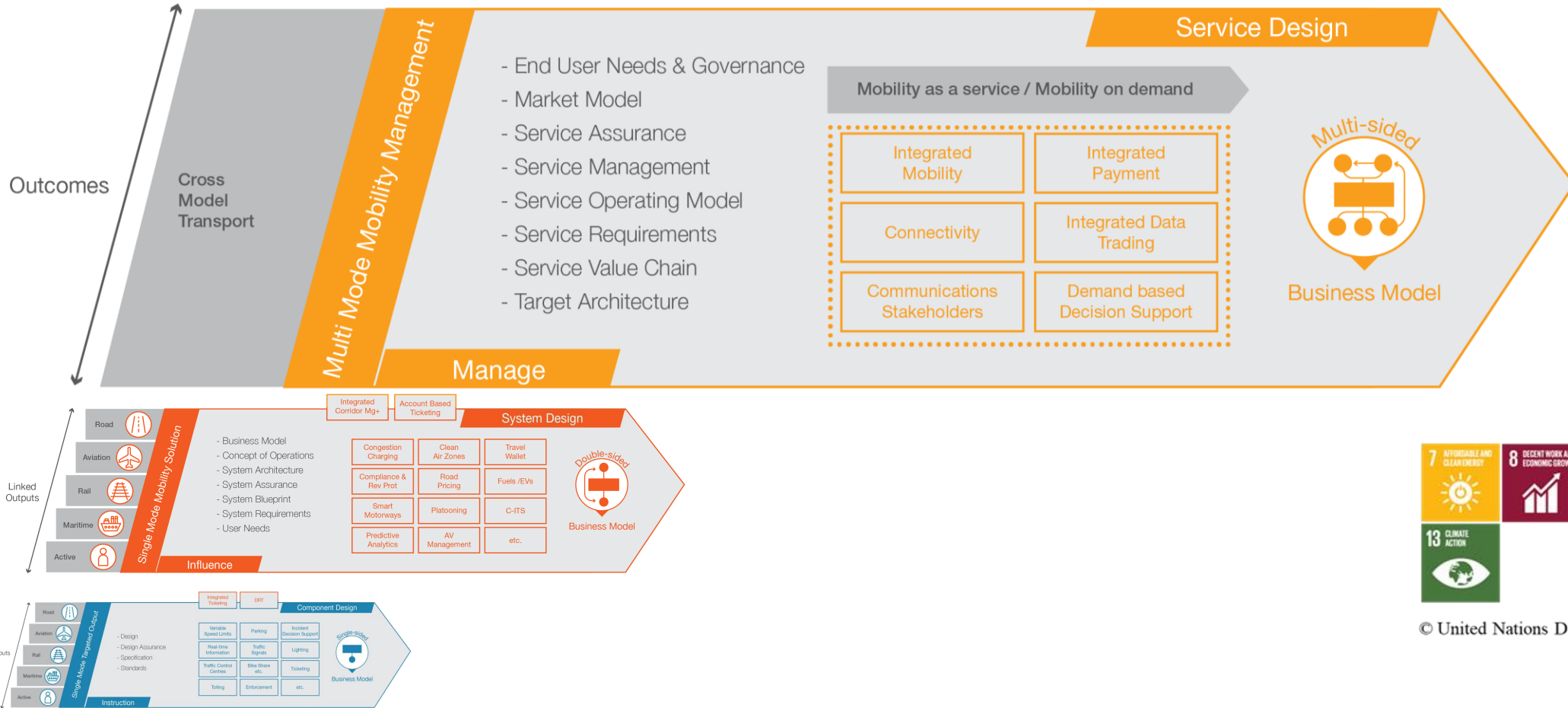
Widget/Component Design



System Design

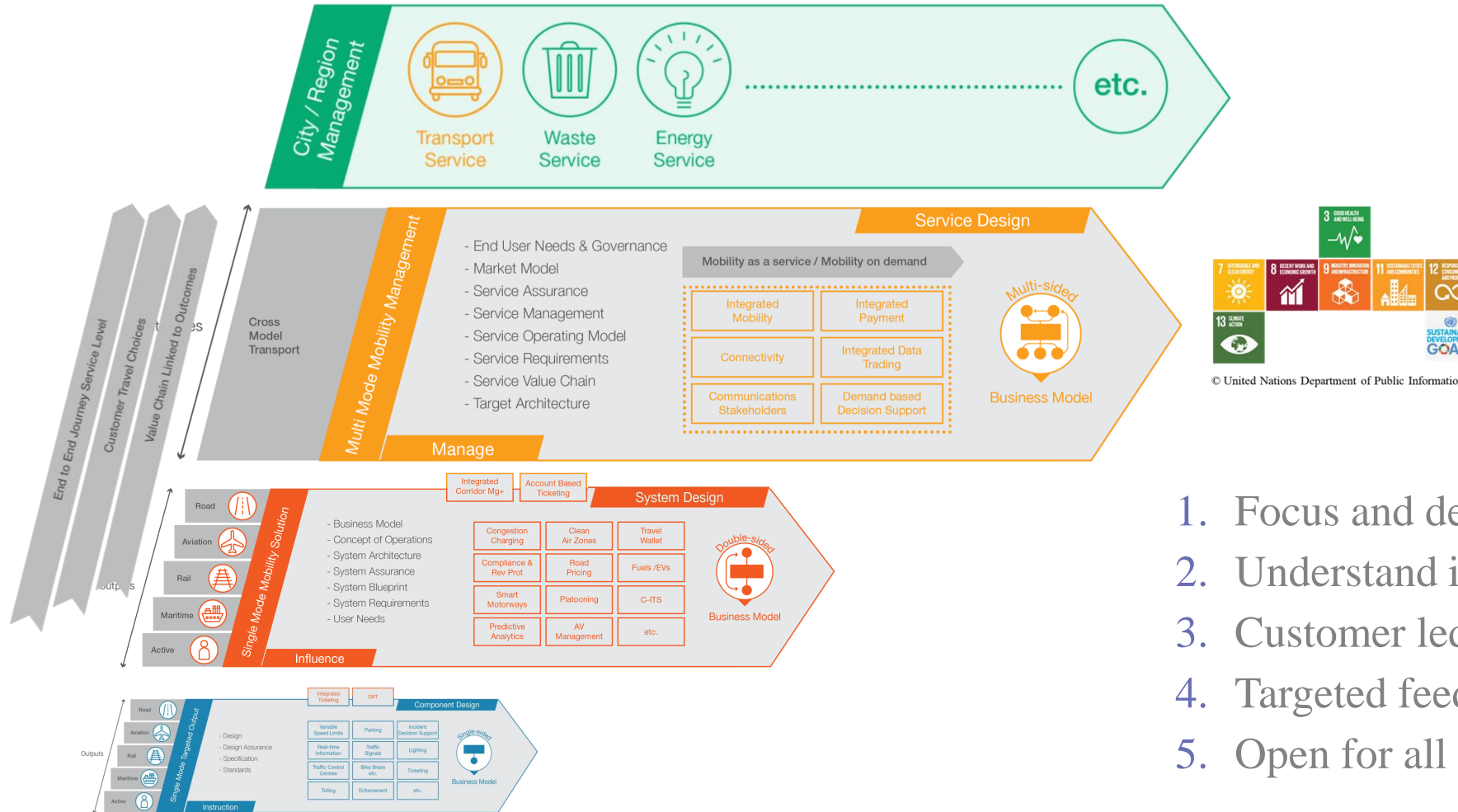


Service Design



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Delivering Outcomes Through Intelligent Mobility



1. Focus and define the problem
2. Understand interrelationships
3. Customer led services
4. Targeted feedback to understand use
5. Open for all to participate

Summary

More encouragement of:

- Governance that advocates cross modal/sector collaboration
- Elevation to the problem statement
- A service model to describe desired outcomes
- Benefits capture
 - Identify and measure the before state, so that, outcomes can be measured
- Sharing experiences and socialising success
- Planning before procurement
 - Service ➤ System ➤ Widget