



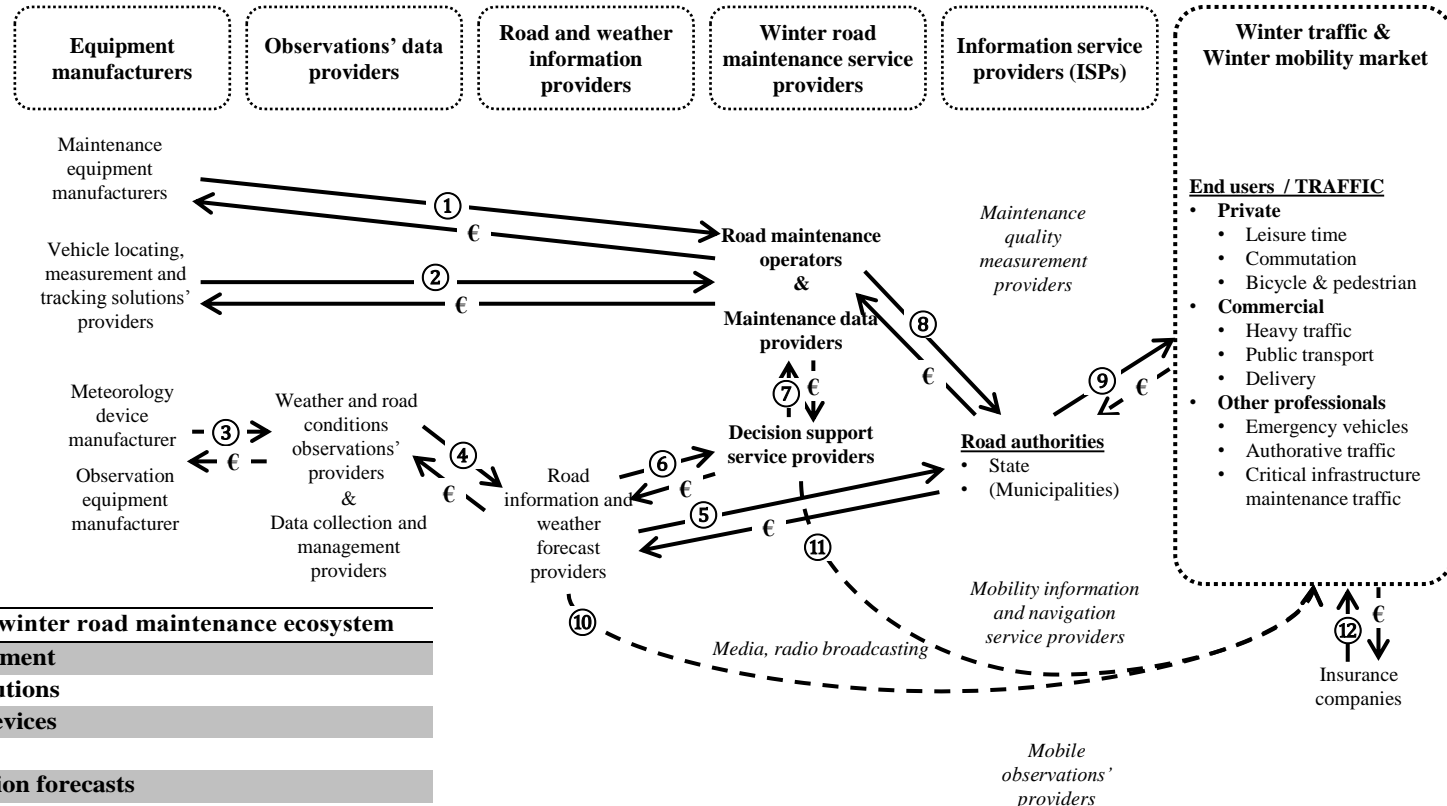
Land Transport Weather Services – Value Creation for the Mobility System

WMO ad hoc expert group meeting, 28-Jan-2015

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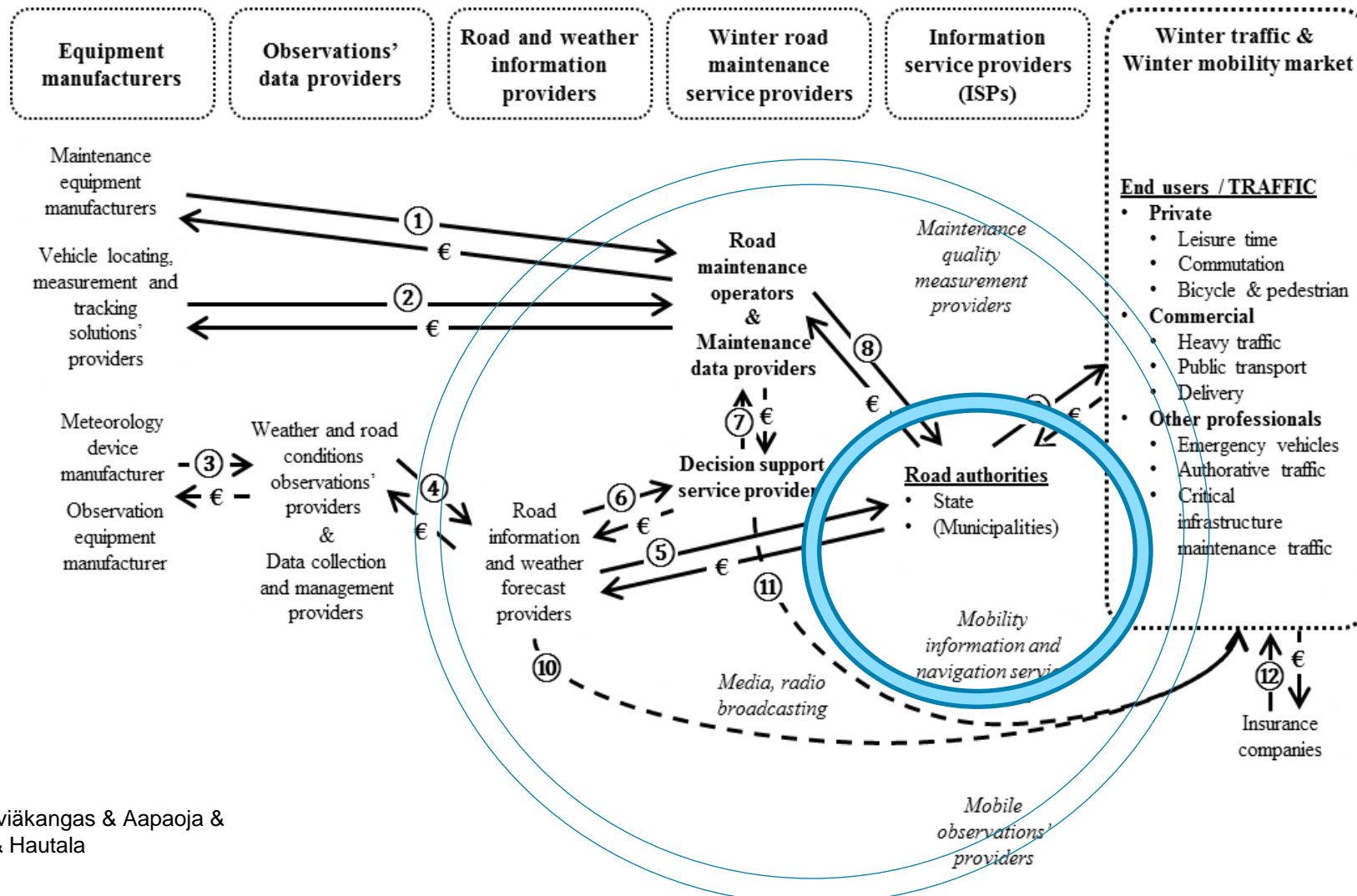
Research professor, Univ. Of Oulu

Example: Finnish winter road ecosystem for public roads



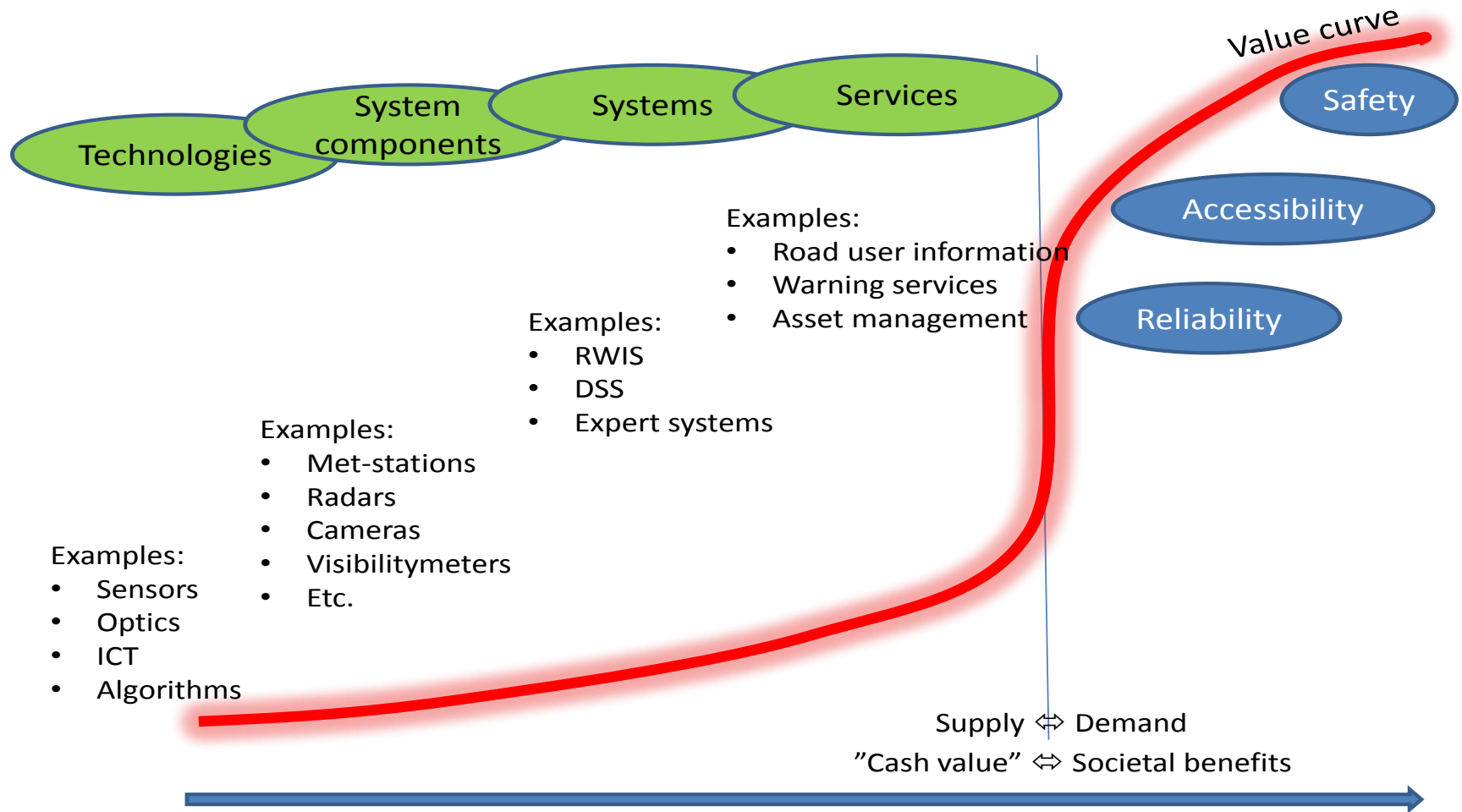
- Ecosystem actors' offerings in Finnish winter road maintenance ecosystem**
1. Winter road maintenance equipment
 2. GPS and vehicle technology solutions
 3. Meteorology and observation devices
 4. Observation data
 5. Public road weather and condition forecasts
 6. Additional road weather information services
 7. Emergency and road weather information services
 8. Road maintenance services
 9. Safe road conditions for winter traffic
 10. Weather and winter road condition information
 11. Winter mobility information
 12. Motor insurance

Shrinking role of road authority => increasing role of service providers => service network delivering the value



Source: Leviäkangas & Aapaoja & Kinnunen & Hautala

Value build-up in the network



Client – Producer model, example of market structure

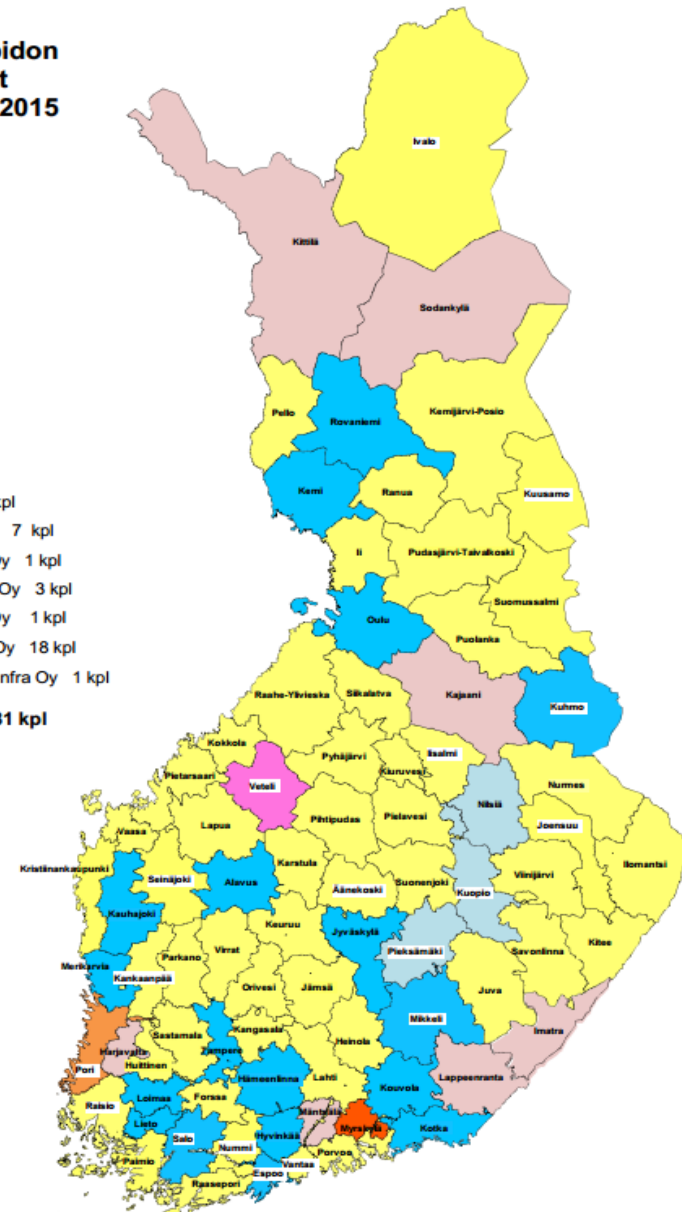
- 7 main contractors
 - 81 multi-annual contracts
- Dozens of local, small subcontractors
 - Short contracts
- Who has the correct view on mobility system's service performance?
- What are the road authorities procuring exactly? Safety, traffic flow capacity, just snow plowing,... ?

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Urakoitsija



Urakoita yhteensä 81 kpl



Met-service providers' positioning with regard to infrastructures

- Liberalised transport asset management (infrastructure) markets:
 - Need to understand the market and needs => as a partner of the ecosystem accommodating value delivery for the ultimate client who is paying for the service
- Non-liberalised asset management markets:
 - Collaboration with key stakeholders: infrastructure owners and managers
- Ownership and market structure
 - Roads – public; many private tolling operators
 - Rails – public; usually with monopoly service operator on tracks
 - Airports – both public and private
 - Ports – both public and private
- Different markets and structures => different main partners and collaborators!

Sum-up

- Whatever the market, there's a need for good met-information => the value chain must work seamlessly

- The "selling arguments" are different for different markets and actors => Private, public and semi-public infrastructure owners and transport operators have different "revenue logics"

- What works for one country or one mode of transport, might not work for another – at least the logic and motivational arguments must be tailored
 - However, the need for socio-economic benefits is always there
 - ...and, there is always a value chain; its content and structure might vary



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