



Public procurement of smart city innovation

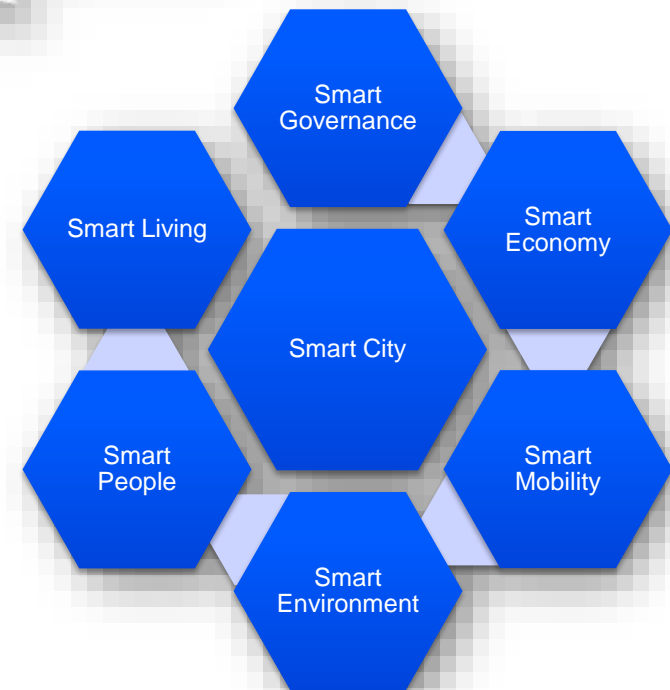
Ville Valovirta

FinEst Smart City seminar

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"A SMART CITY IS A CITY SEEKING TO ADDRESS PUBLIC ISSUES VIA ICT-BASED SOLUTIONS ON THE BASIS OF A MULTI-STAKEHOLDER, MUNICIPALITY BASED PARTNERSHIP."

EUROPEAN COMMISSION, MAPPING SMART CITIES IN THE EU (2014)



Source: Hitachi, Boyd Cohen

The power of public purse

- City governments have large purchasing power: e.g. the City of Helsinki procurement budget ca. 2 billion Euros annually
- Large potential users for smart city solutions: transport, urban infrastructure, energy, water, sanitation etc.
- Potential to kick-start market development – catalytic role
- Demand pull, not only technology push

Varieties of innovation procurement

Conventional procurement



Procurement of innovative solution



Procurement triggering innovation

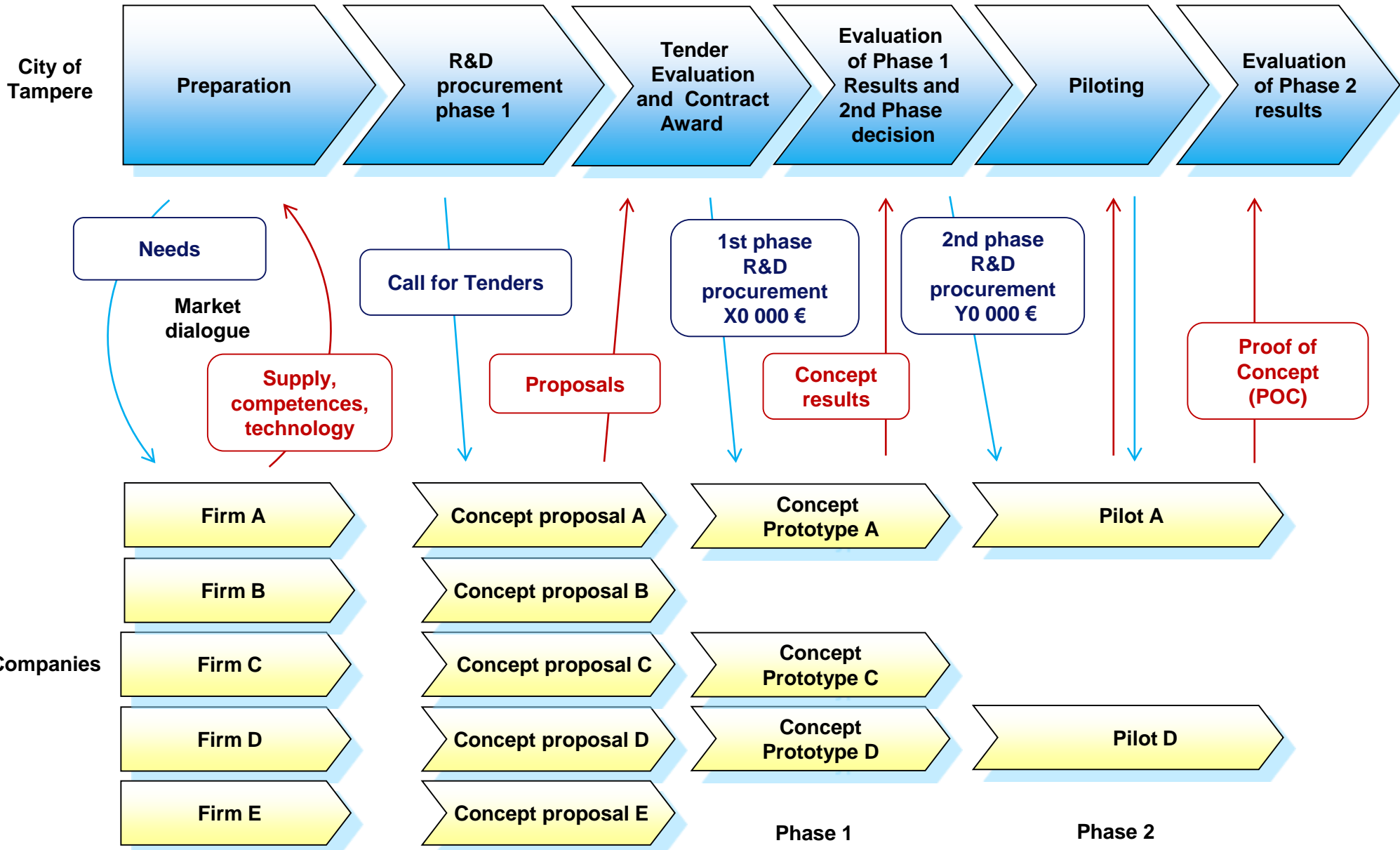


Innovation procurement



Real-time traffic information / City of Tampere

- City of Tampere aims to increase traffic situation awareness by utilization of real time data.
- Open traffic data is provided to developers.
- Not aiming for a single tailored solution, but multiple complementary solutions.
- Enabling third party developers to create new services.
- Two-stage Pre-Commercial Procurement (PCP) process with multiple vendors initiated in 2015.
- Outcome: service prototypes piloted with users.
- IPR will stay with the firm (the procurer will hold user rights).
- Similar procurement is under planning in Helsinki.



Towards Smart City interoperability

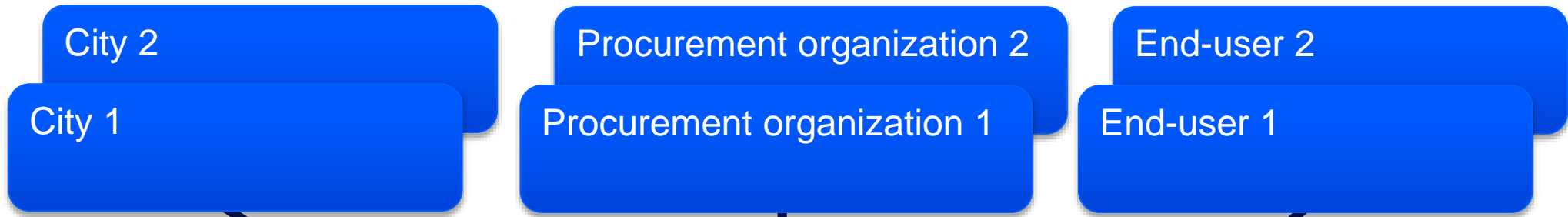
(InterCity project)

1. **Common innovative practices** for public actors
 - Innovative **procurement** of modular systems
 - Harmonized **regulation**
 - Opening of common resources (e.g. **open data**) for the citizens use
2. **Multi-actor** business ecosystem
 - **Multiple buyers** and multiple **vendors** and service providers
 - All delivering their solutions over the same modular ICT architecture
3. **Modular** ICT-architecture
 - **Commonly agreed** open **interfaces**, standards (follow principles from GSM, also Internet Protocol)
 - Established **interoperability certification** mechanism for vendor products

Smart City Interoperability Vision



Demand



Supply

Factors affecting the procurement approach

- What is the **readiness** of suppliers to solve the city governments challenge? Commercial ready, ready to pilot, still require product development?
- **Timeline** of product development required – Innovation within procurement cycle (e.g. a new service concept), or a separate product development stage (e.g. new hardware technology)?
- **Integrated** solution or a system of **modular** parts?
- How to **upscale** and protect **IPR**?