



Common Framework for ICT in Transport Logistics

What are the next steps to be taken?

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Perspective towards 2020: New green logistic services needed



Trucks are not going away

- Crude oil expected to rise to over \$ 300 a barrel.
- Electric freight vehicles will reach significant diffusion in urban areas only.

Environmentally-concerned customers will not overlook delivery performance

- Market demand for customized, real-time services.
- Logistics services provider must adapt to customer's green policy demands.

→ Market leaders will be the ones offering the best trade-off between speed, “greenness” and flexibility.

Perspective towards 2020: Cooperative management of resources



The new scenario requires huge investments, beyond the individual company capacity

- New freight corridors.
- Fleet renovation.

Critical logistics resources will have to be managed cooperatively

- Roads, rail networks, ports.
- Logistics facilities in urban areas.

→ All public and private actors will have to cooperate at strategic, tactical and operational levels.

Perspective towards 2020: ICT to fight complexity and empower users



New developments in the Internet of Things will help logistics services providers:

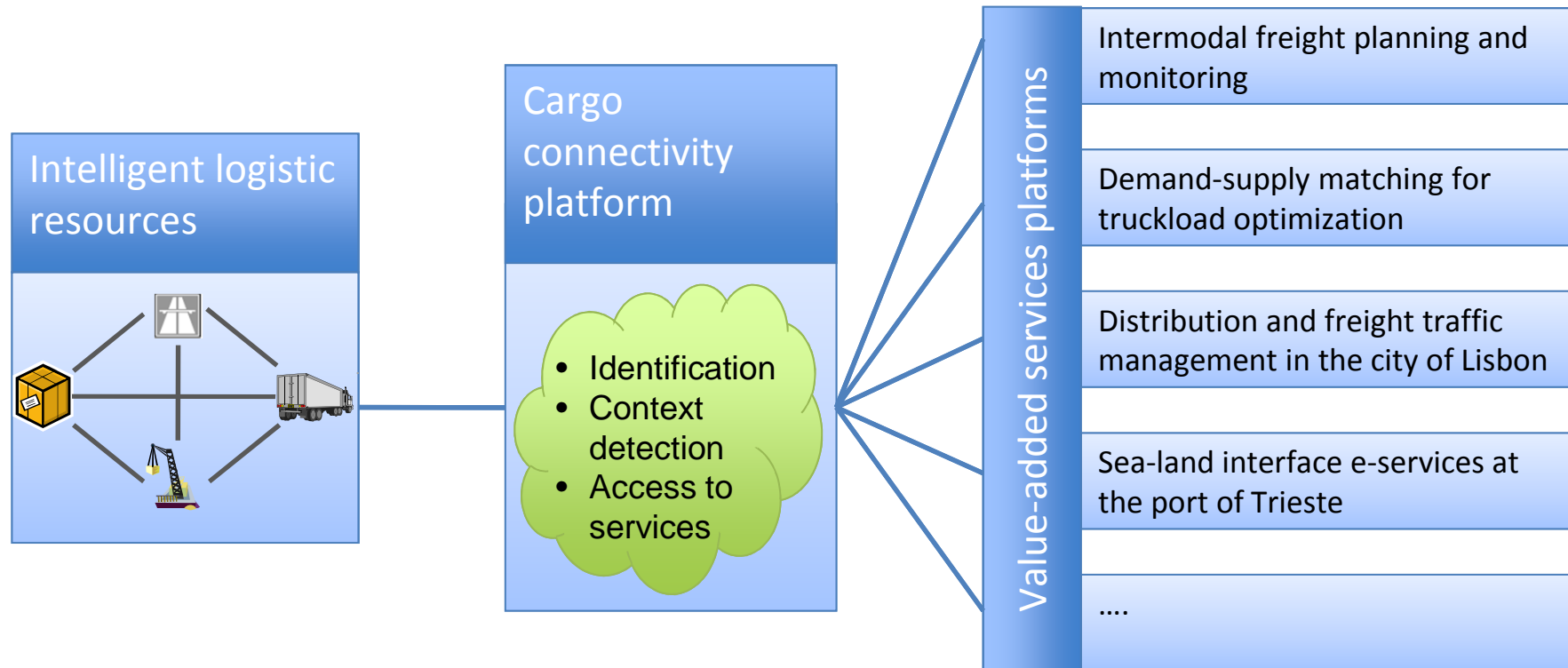
- Monitor and handle events in real-time along the supply chain, regardless of geographical and organizational boundaries.
- Introduce a degree of self-regulation for systems that are simply too complex for humans to handle directly every event.

Common semantics and open interfaces will empower users visibility:

- Relate information and infer knowledge from a variety of sources and domains (business, traffic, environment, ...)
- Construct personalized views on the supply chain.

→ The logistics industry will have IT services at its core.

Evolution of the offer (what the market will provide)

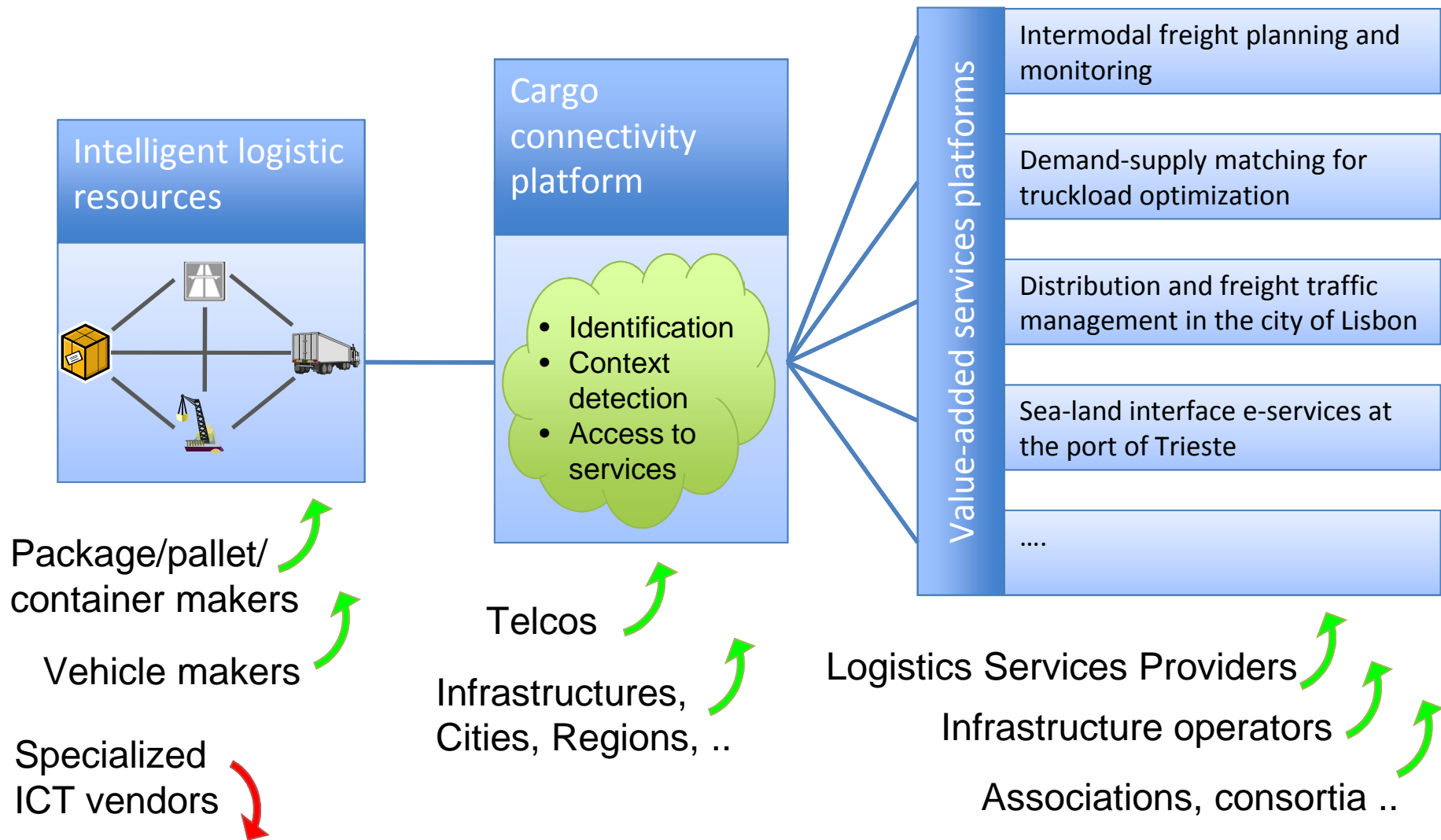


- Interoperable
- Cheap
- Embedded

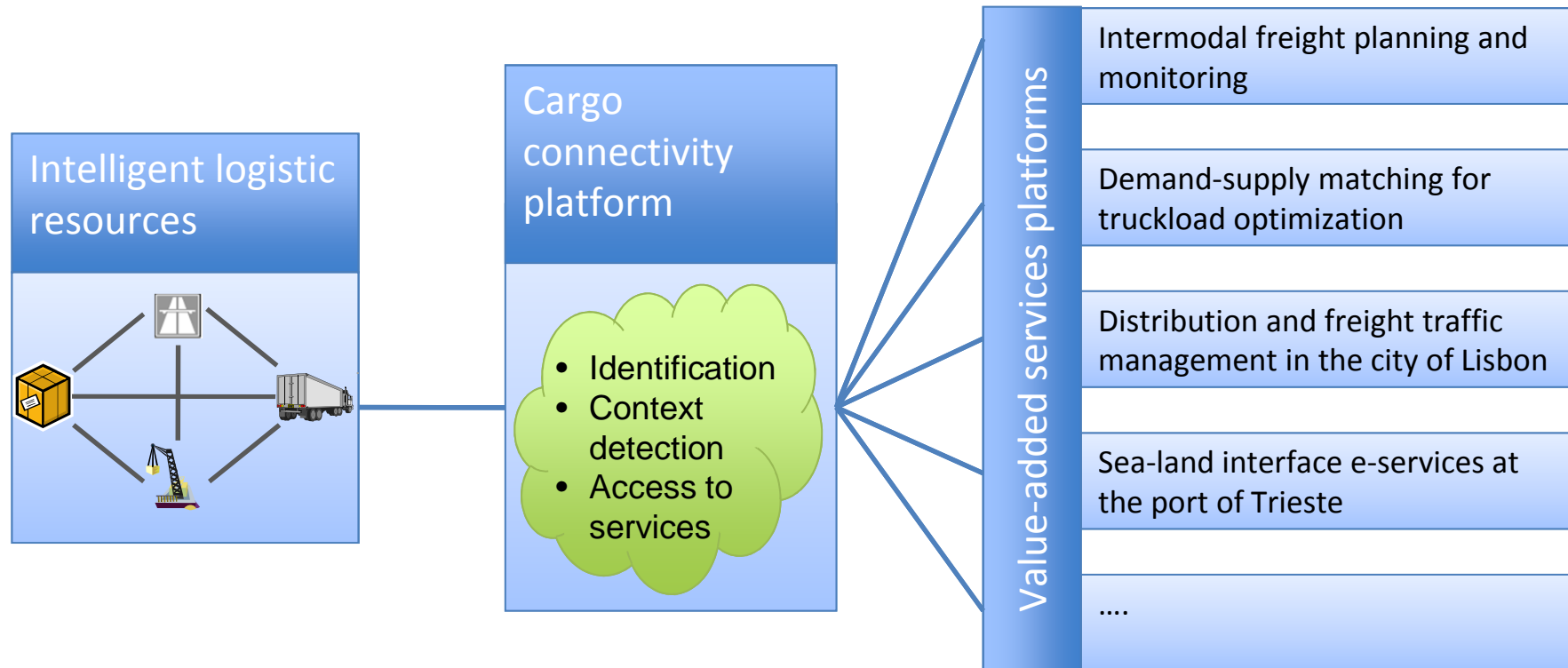
- Public
- Open
- Widespread

- Application-specific services
- Tailored to users
- Community involvement (network externalities)

Evolution of the market (who will provide what)



Next steps needed (research and development)



- Devices standardization
- Seamless connectivity (short- to long-range)
- Miniaturization
- Low power devices
- Printed electronics
- Public ID platforms
- Trusted publication and access to services
- Cooperative infrastructures
- Cooperative cities
- Common data and process semantics
- New business models