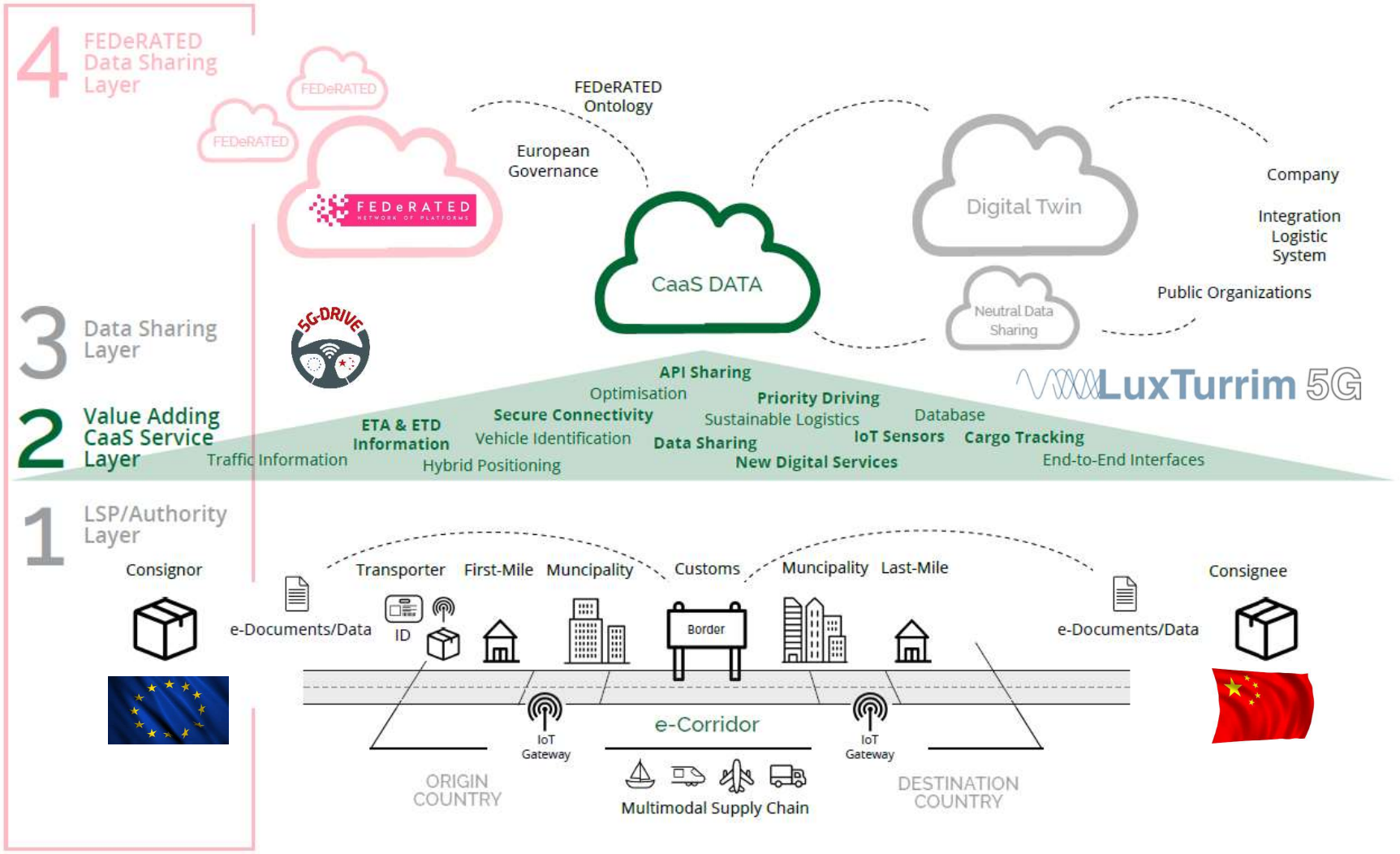
Cooperation between EU and China
Joint trial activities – Vedia

Matti Lankinen
Vediafi Oy

Vediafi develops e-Corridor services



Joint V2X Trial in 4.5.

- **Task 4.5 Joint trial and reporting (Vedia, VTT, Dynniq, ERC, JRC, Orange, UKent, UL) (M8-M30)**
- This task will define the joint trial plan on C-V2X with the Chinese partners. Joint trials will be carried on in this tasks.
- The trials would be performed using VTT's automated car and Vedia's mobile testlab vehicle within the range of Espoo(Tampere) 5G test network **(1st tests on May 2019).** Demonstrate the 5G connected automated car (VTT-Marilyn) in Espoo test network and driving fully connected test route.
- The validation data is reported in this task in terms of available data sharing capacity and latency times.
- The joint sharing of resources and report will be prepared together with Chinese partners
  - è **Test drive from Espoo to Shanghai 2020**

5G-Drive-LuxTurrim5G+ collaboration

- **Test site Nokia campus Karaportti**
- 5G-DRIVE aims to demonstrate 5G technologies at pre-commercial testbeds with V2X services and then demonstrate Internet-of-Vehicle (IoV) services using Vehicle-to-Network (V2N) and Vehicle-to-Vehicle (V2V) communications.
- **Co-operation with LuxTurrim5G+ aims to demonstrate two V2X use cases at the Espoo trial site: one is green Light Optimized Speed Advisory (GLOSA) V2I, in which the automated vehicle communicates with the infrastructure sub-system via hybrid LTE/5G channels to obtain traffic light status; the second is Intersection V2V, in which two or more cars are exchanging trajectory data through C-V2X and ITS G5 channels when approaching an intersection area.**
- LuxTurrim5G project will provide an urban environment to experiment information exchange between vehicle and infrastructure. As part of collaboration, 5G-DRIVE and LuxTurrim5G project define a joint test plan.

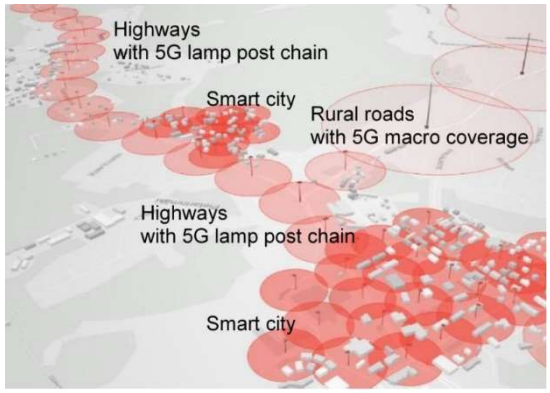


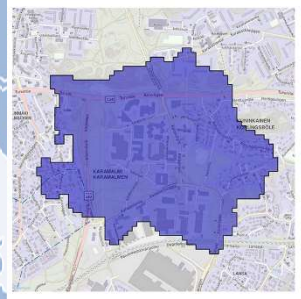
Figure 1. LuxTurrim5G – 5G concept vision

Joint trial implementation

C-V2X test cases Espoo vs Shanghai

Joint 5G-Drive C-V2X pilots 2020 with Vedia testlab vehicle to verify service interoperability at both ends of the China- North Europe transport corridor.

5G/UU
on vehicle ID with mmw and RTK-Inertia hybrid positioning



Helsinki
St Petersburg
Moscow

Espoo - Karaportti

Shanghai

5G/UU on vehicle recognition with mmw and RTK assisted positioning

Tested applications

EU
- Glosa
- ID recognition for hubs
- RTK-inertia/5G-UU latency
- Vulnerable road user warning

China
- Glosa
- Vulnerable road user warning
- ID recognition for hubs

C-V2X OBU & RSU from VTT/Dynniq

Thank you for your attention!

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Find us at www.5g-drive.eu

Twitter: 5gDrive

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