

FUTURE of MOBILITY

Elīna Lidere

LMT Innovation Ecosystems Lead



LMT – ICT company

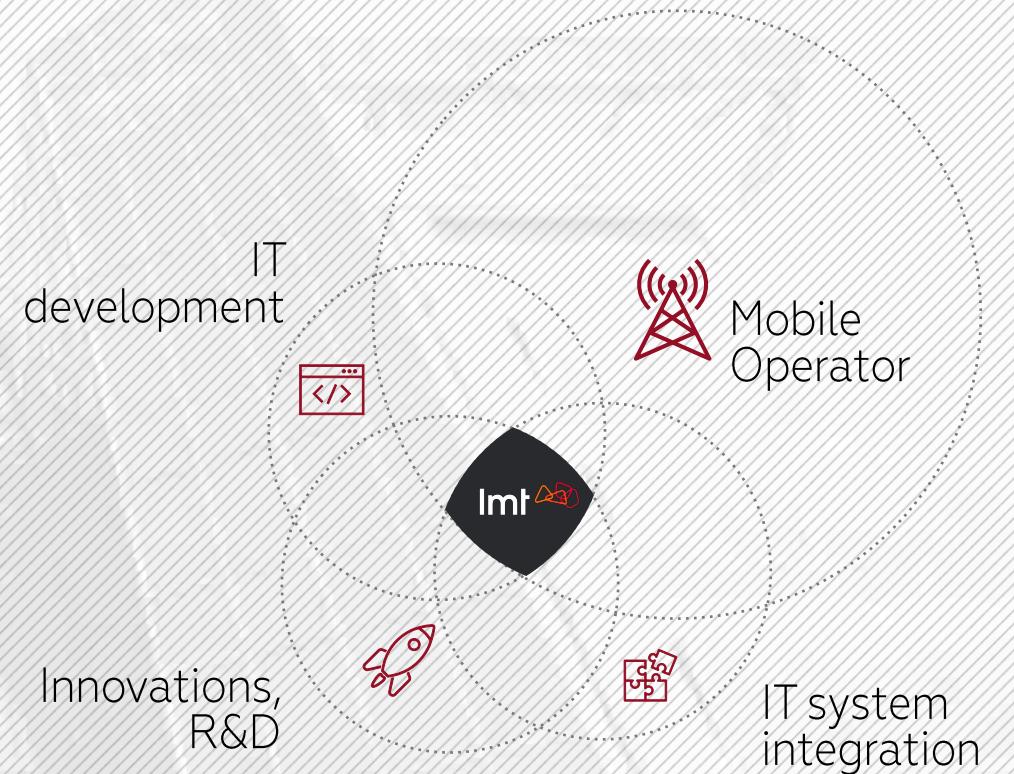
LMT is an industry-challenging mobile services provider and market leader in Latvia with 30 years of experience.

Introduced high quality IT development and integration

IT competencies developed for more than 10 years

International research and development projects building innovative and 5G-compatible solutions

Member of:



Certifications:



Quality management

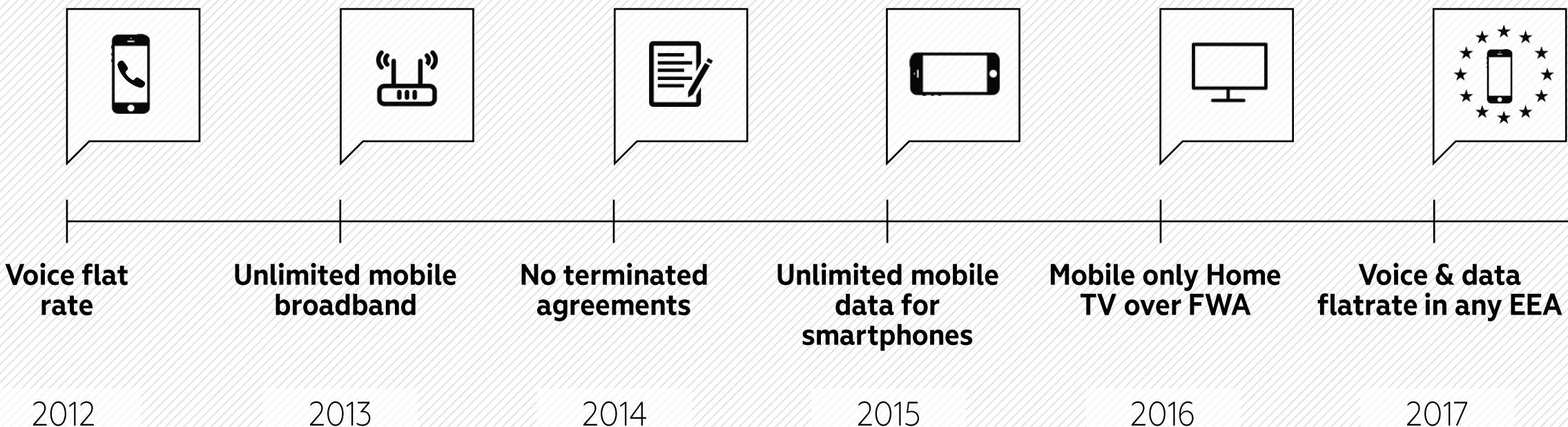


Environmental management



Information security

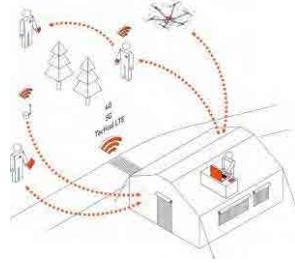
Our Journey Towards the Best Customer Service



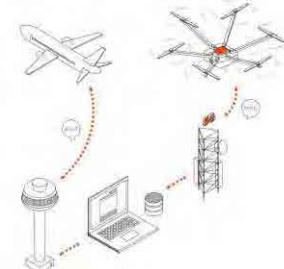
LMT research and development, innovations for export



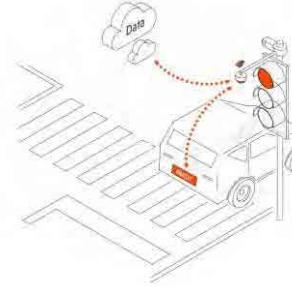
**IoT and
SmartCity**



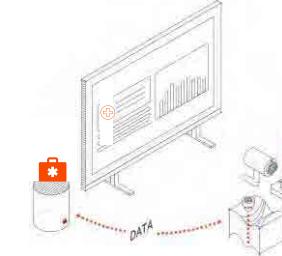
**Defence &
Public safety**



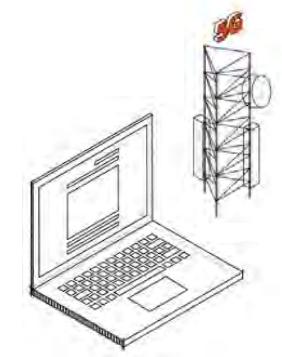
Drones



Mobility



Health



Education

EU R&D projects



Drone technologies

Digital security

Unmanned platforms

5G large-scale field trials

Ground combat capabilities

Communication systems for public safety and security

5G mobile communications technology

50 partners
in 8 countries

44 partners
in 14 countries

28 partners
in 6 countries

22 partners
in 9 countries

25 partners
in 10 countries

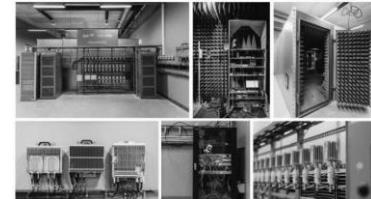
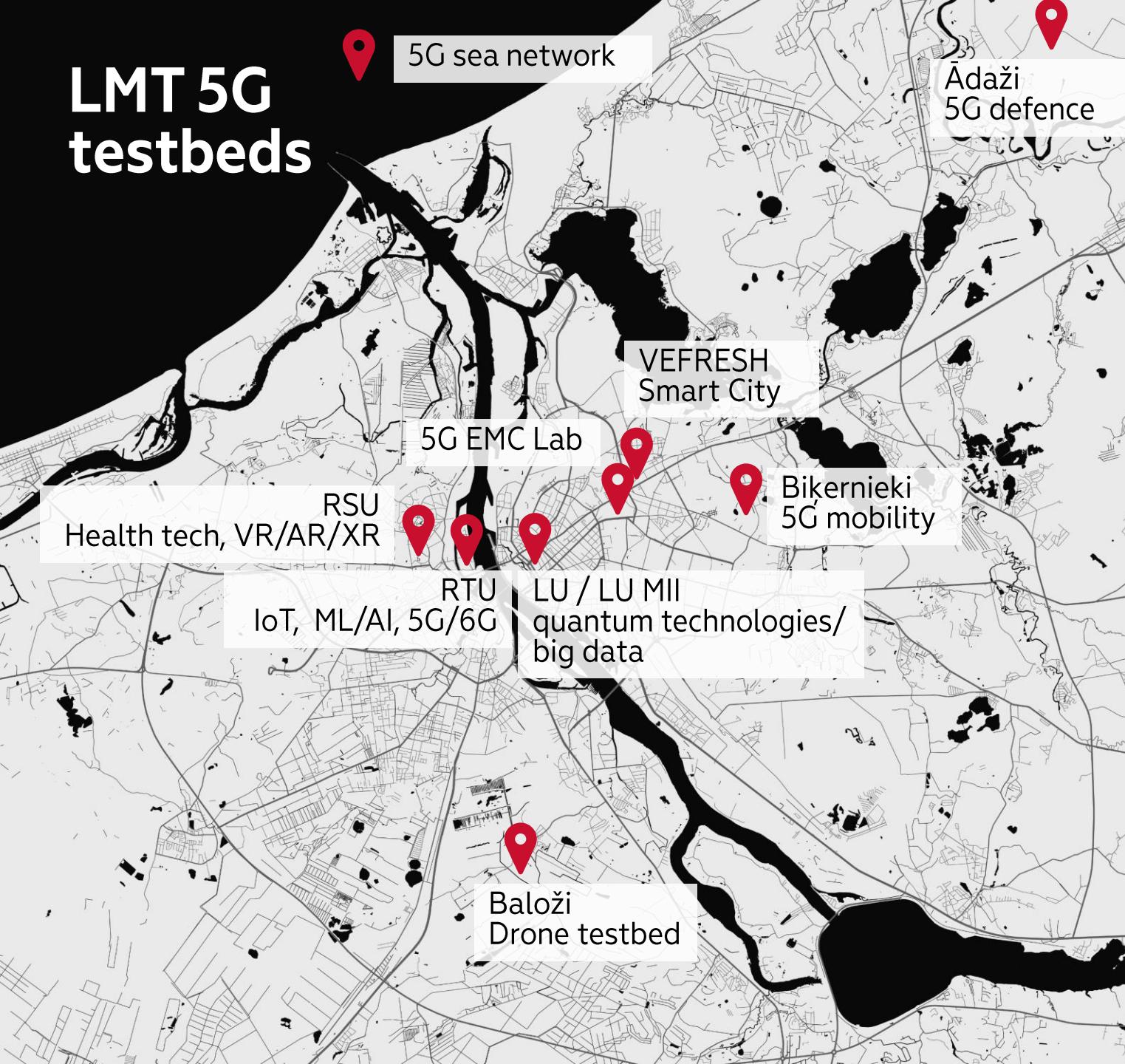
34 partners
in 13 countries

19 partners
in 12 countries

LMT 5G testbeds



5G sea network





IMT
Mobility

BIVERDIERU TRASE

www.imt.it

5G Cross-Boarder Mobility Test Site



Ericsson 5G SA network for R&D



5G Cross-Border Mobility Test Site

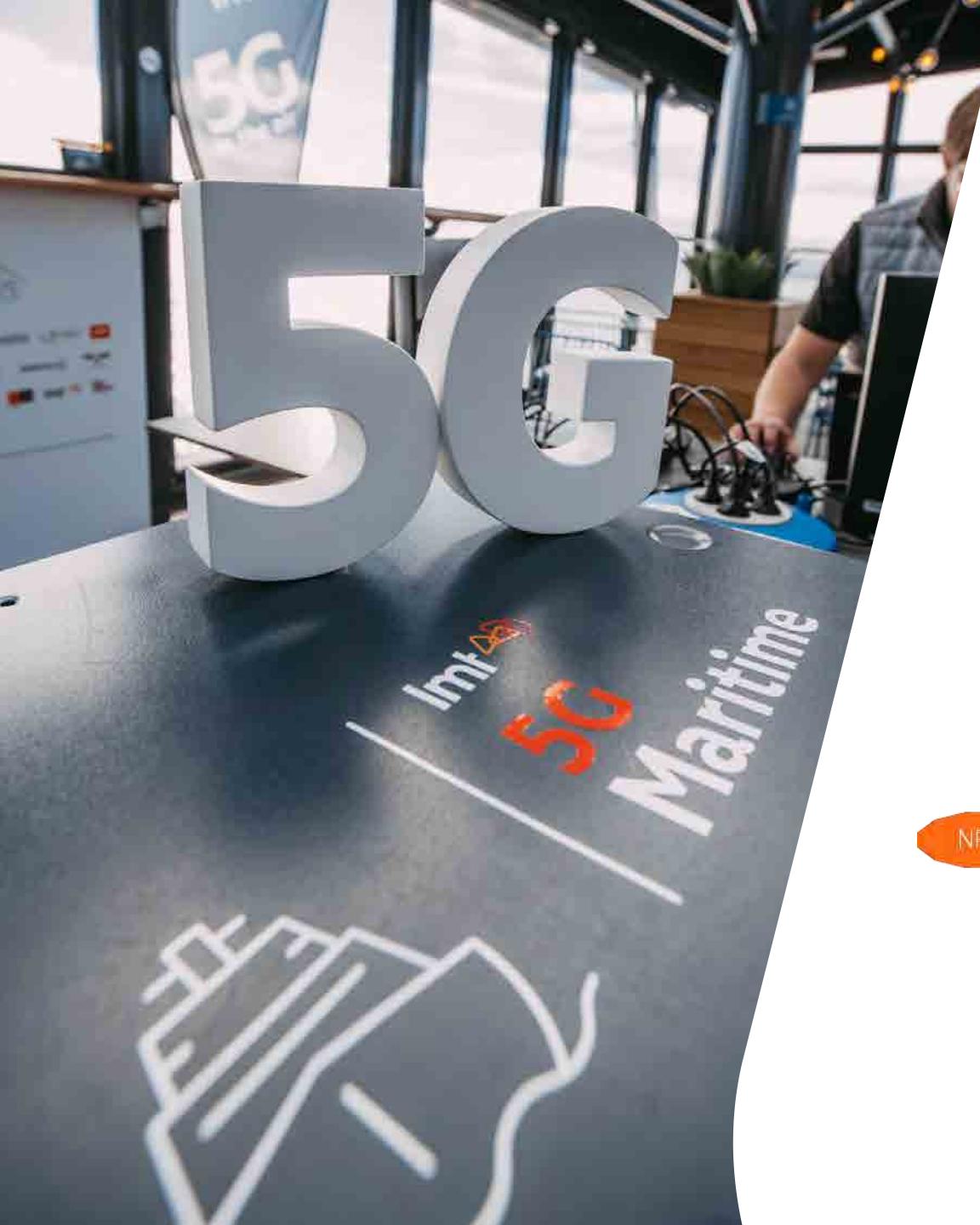
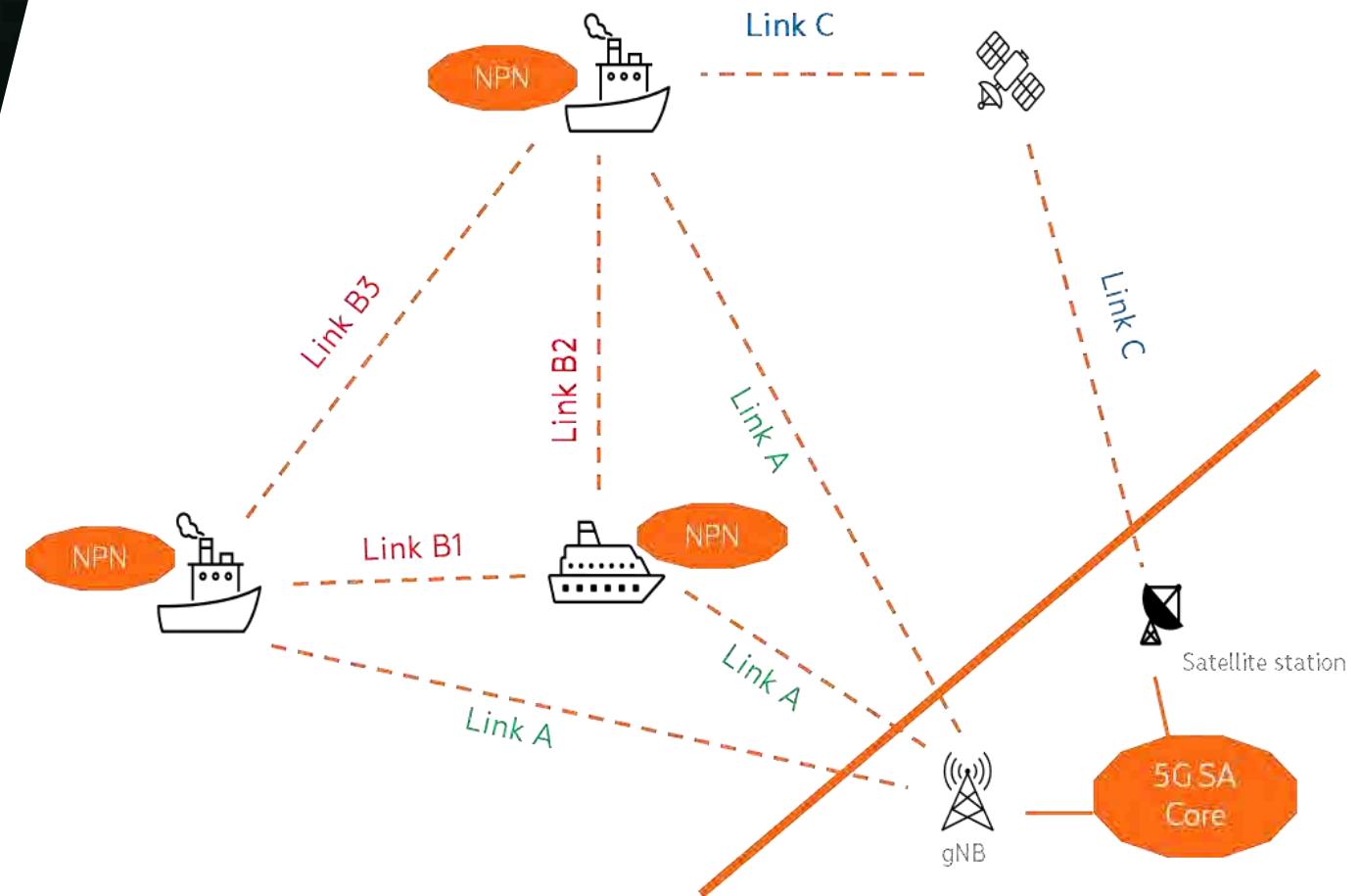


Teleoperated driving



5G Maritime

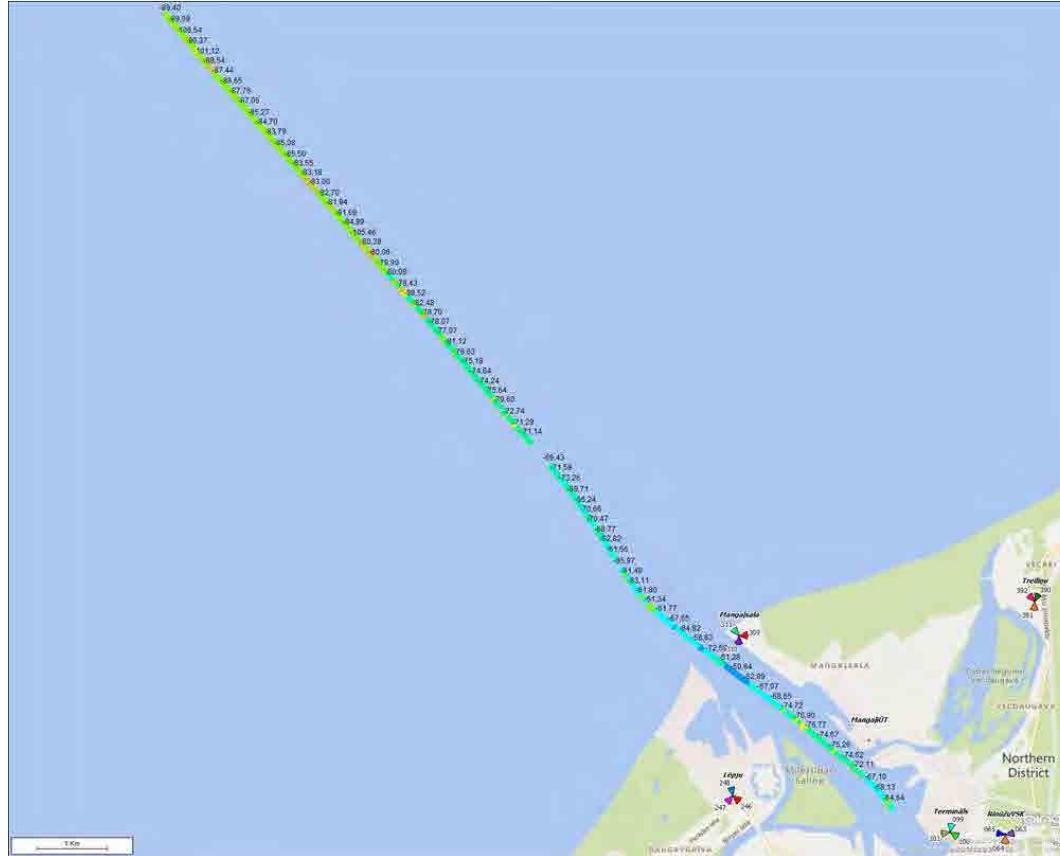
Multi-Hop connectivity



Memorandum with the Port Services Provider

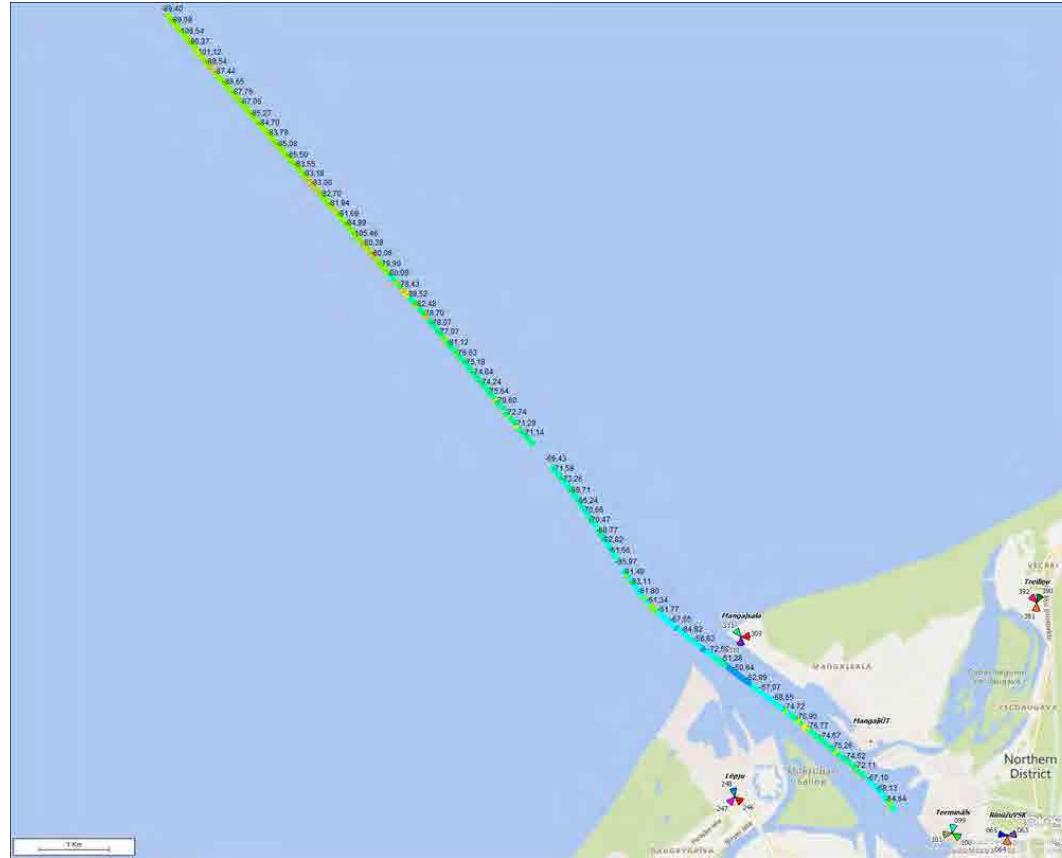


Maritime 5G connectivity tests in Riga Bay

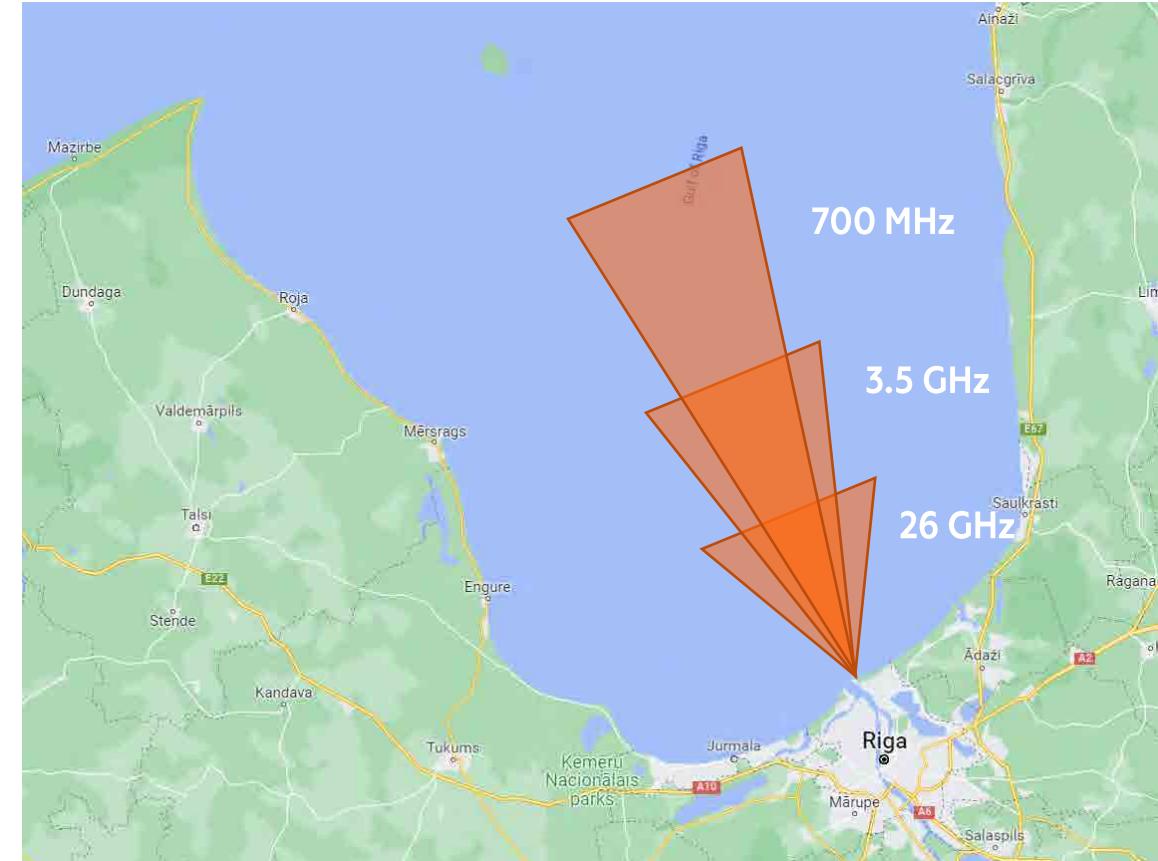


Existing signal strength – till 20 km

Maritime 5G connectivity tests in Riga Bay



Existing signal strength – till 20 km



Next step – tests in different frequencies

Maritime 5G connectivity tests in Riga Bay



Latvia - Estonia

Valka - Valga

Connectivity
C-V2X & 5G

Technological enablers validation

Mobile Edge Computing, Slicing, Integration fabric & others

Automotive large-scale trials

CAM cross-border trials in real city environment

Railway use cases

Infotainment & FRMCS



Estonia – Finland

Muuga - Vuosaari



Extreme coverage

Gulf of Finland (~80km distance)

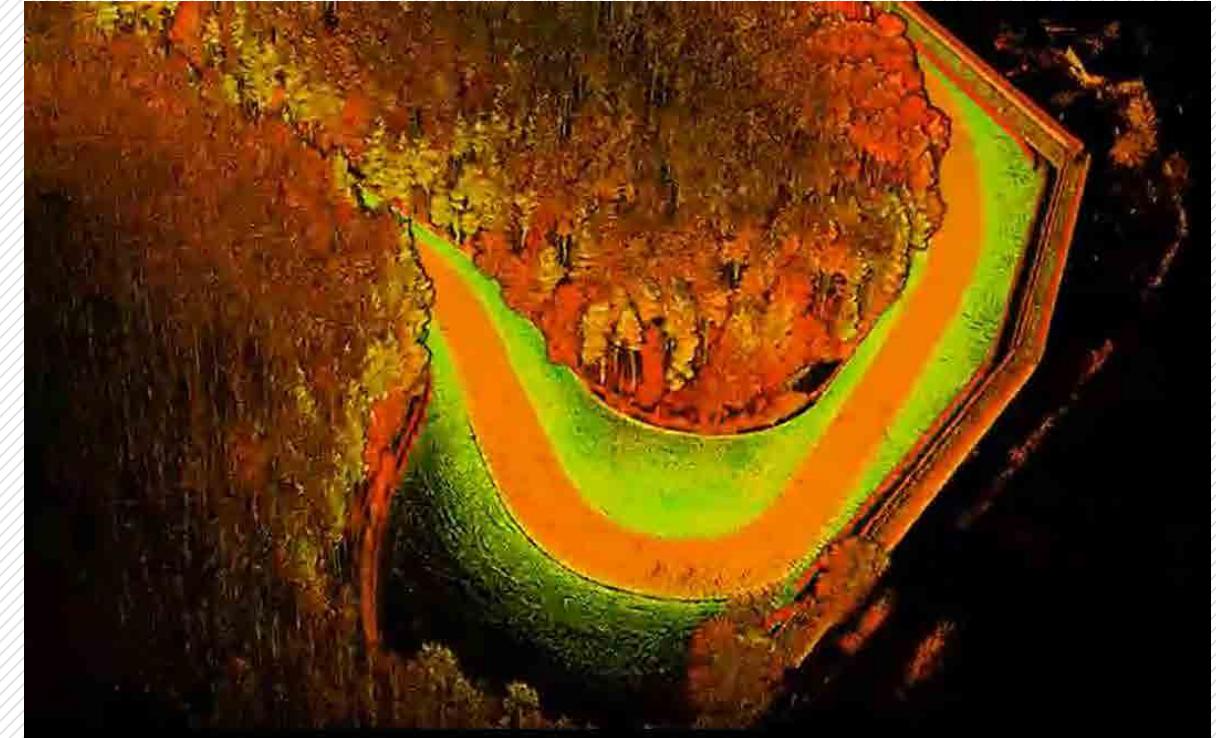
Terrestrial-Satellite 5G connectivity

Seamless handover between 3GPP and trusted
non-3GPP access

Multimodal cross-border logistics

Enhanced goods tracking visibility

Digital Twin of 5G mobility test site



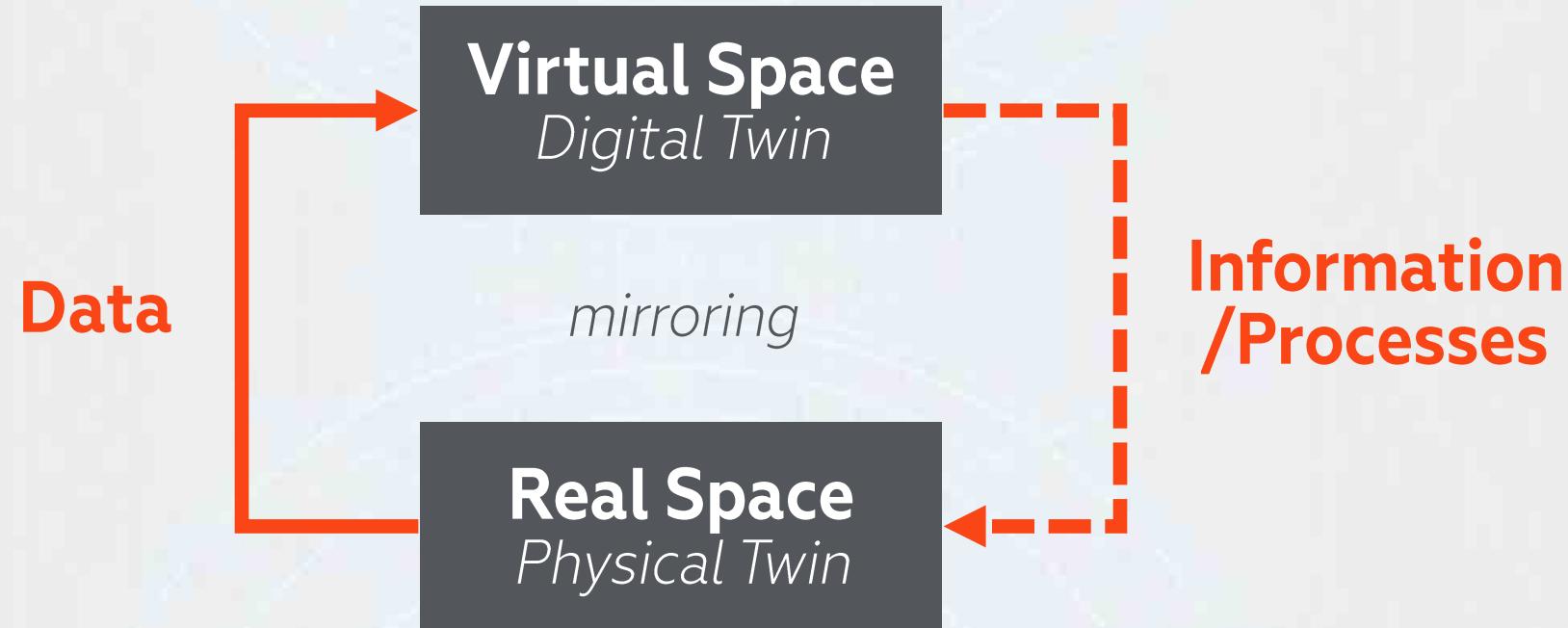
In cooperation with  **GEOpro**
www.geopro.lv

Digital Twin of 5G mobility test site



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Digital Twin

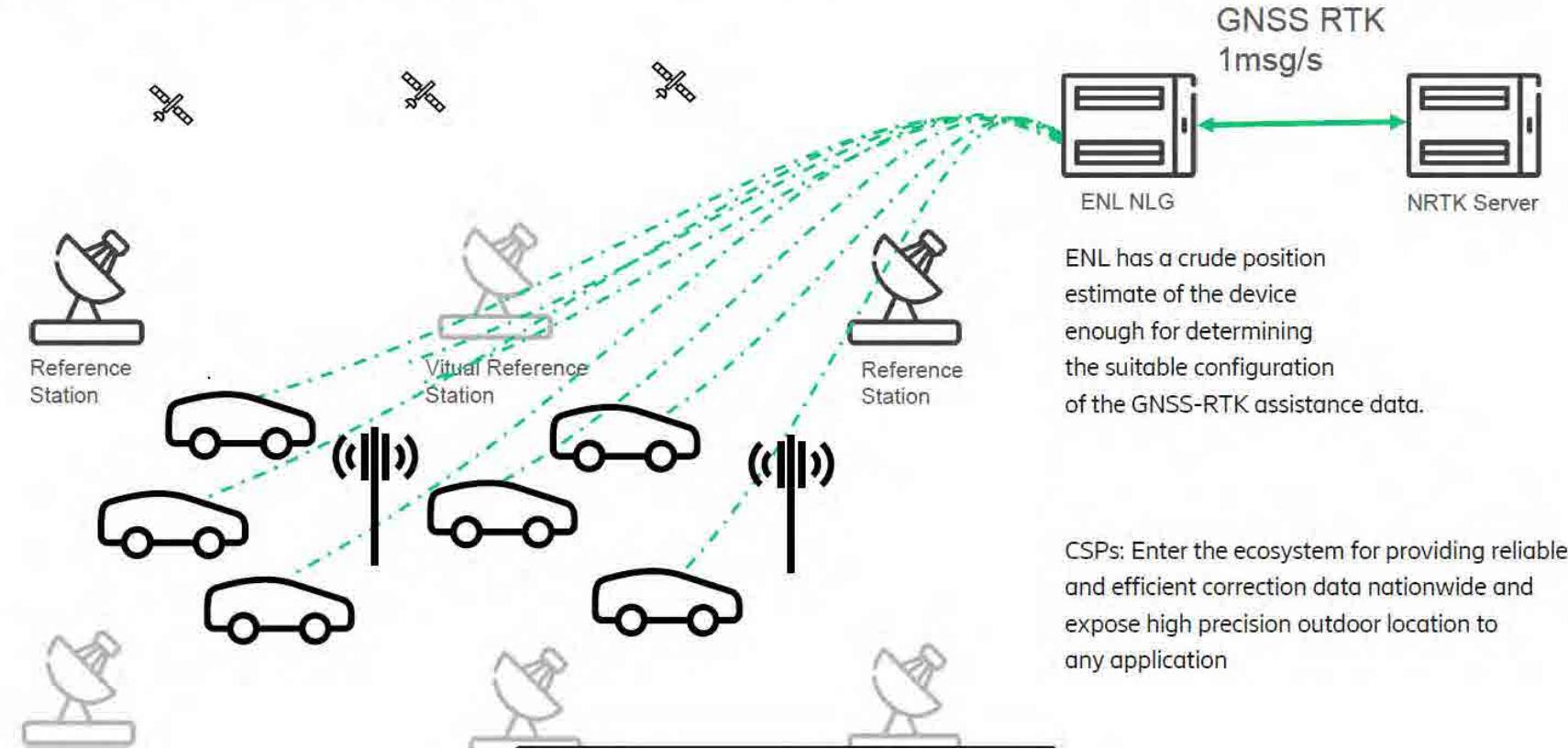


Source: <https://digital-strategy.ec.europa.eu/en/library/destination-earth>

5G positioning

3GPP accurate positioning enhancements

GNSS assistance via 3GPP unicast



Source: 3GPP, Ericsson

LMT transport monitoring platform: computer vision and artificial intelligence for traffic safety

 Object detection and classification

 Visual determination of traffic light signal

 Object trajectories and locations

 Logical algorithms for detection of violations

 ANPR & OCR

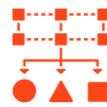
 Web interface and Road Traffic Safety Directorate integration



Video analytics



Detecting and tracking objects



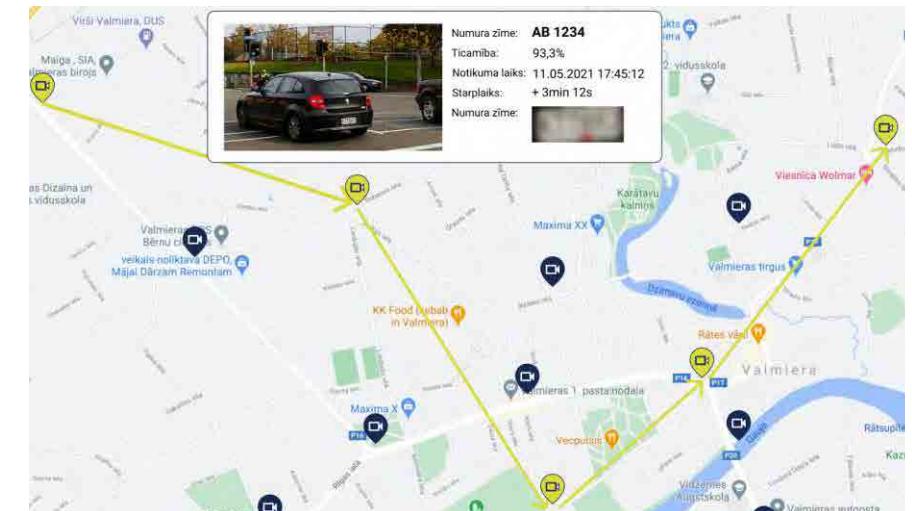
Object classification



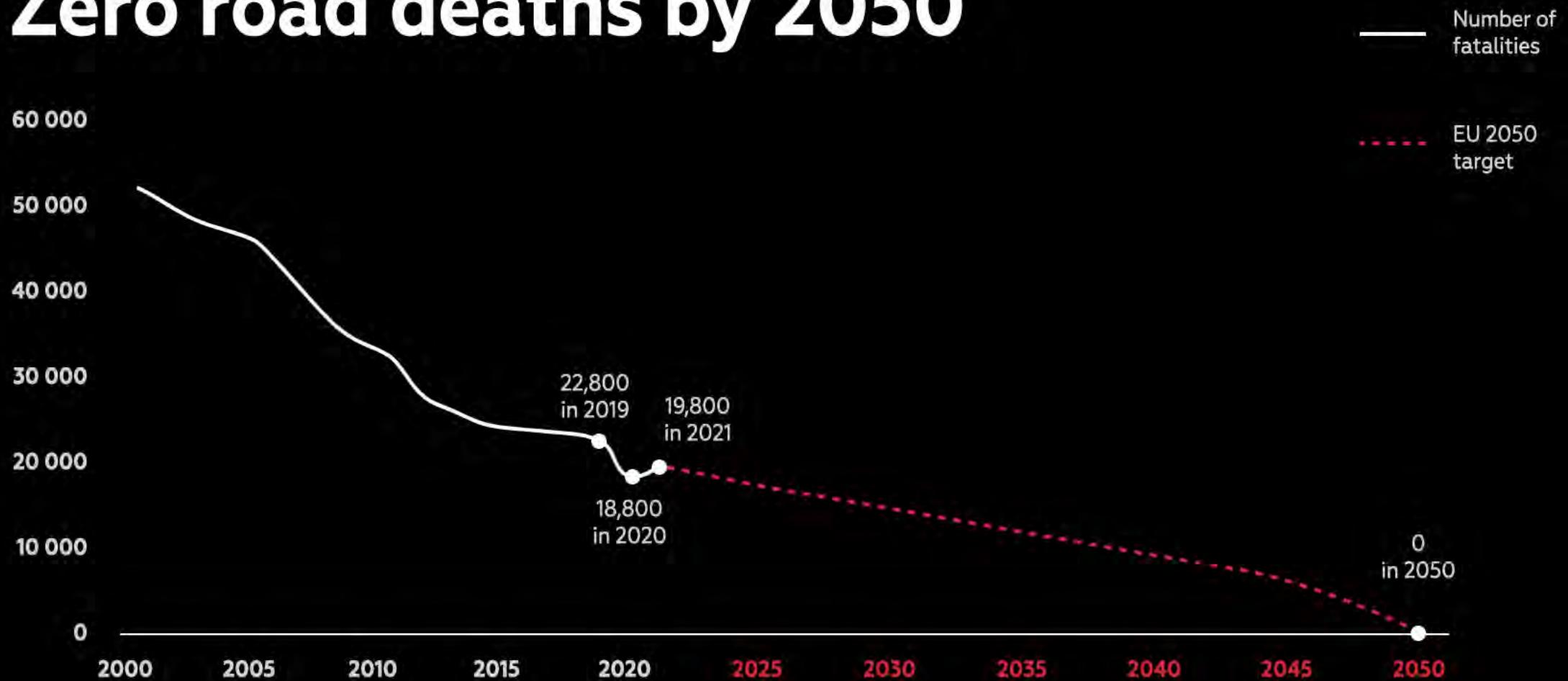
Adoption of algorithms



Re-identification

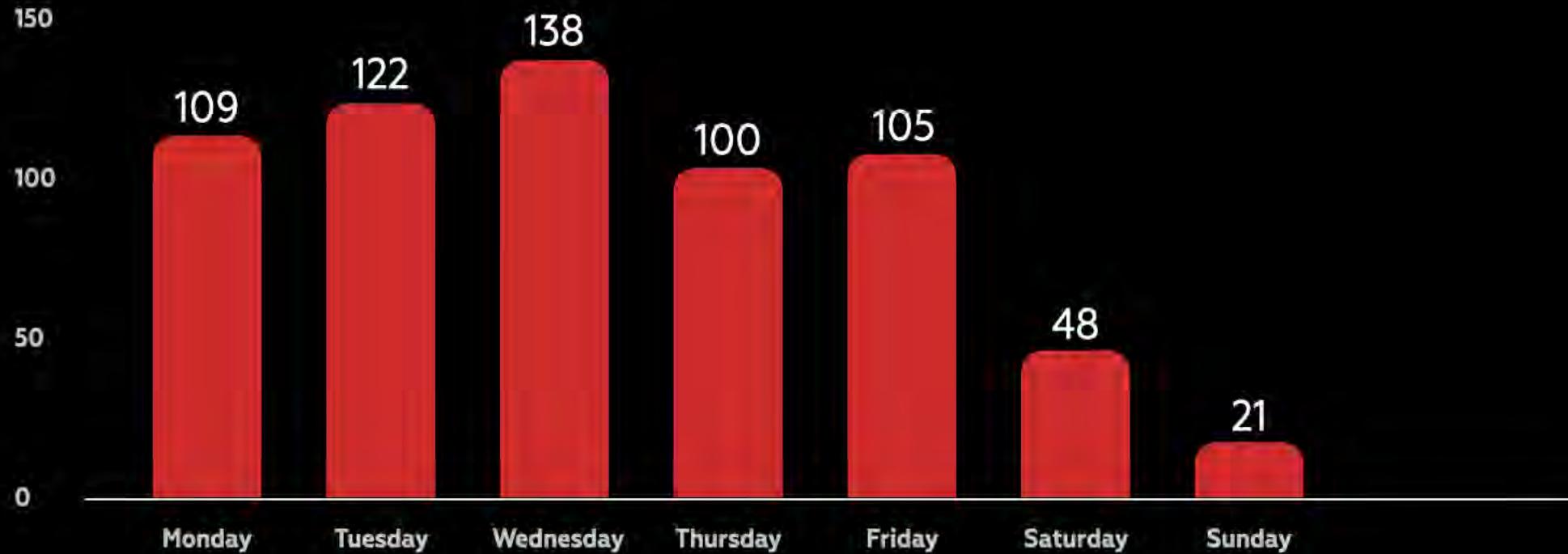


Zero road deaths by 2050



Road accident statistics

Average events per **weekday**



Innovators welcome!



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innovations.lmt.lv

