



Latvian Geospatial
Information Agency

Latvian Geospatial Information Agency national report and activities

NKG Working Group of Reference frames

NKG Working Group on Future positioning services and applications

Reykjavík, Iceland, 10.03.2020.

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Senior expert of Department of Geodesy

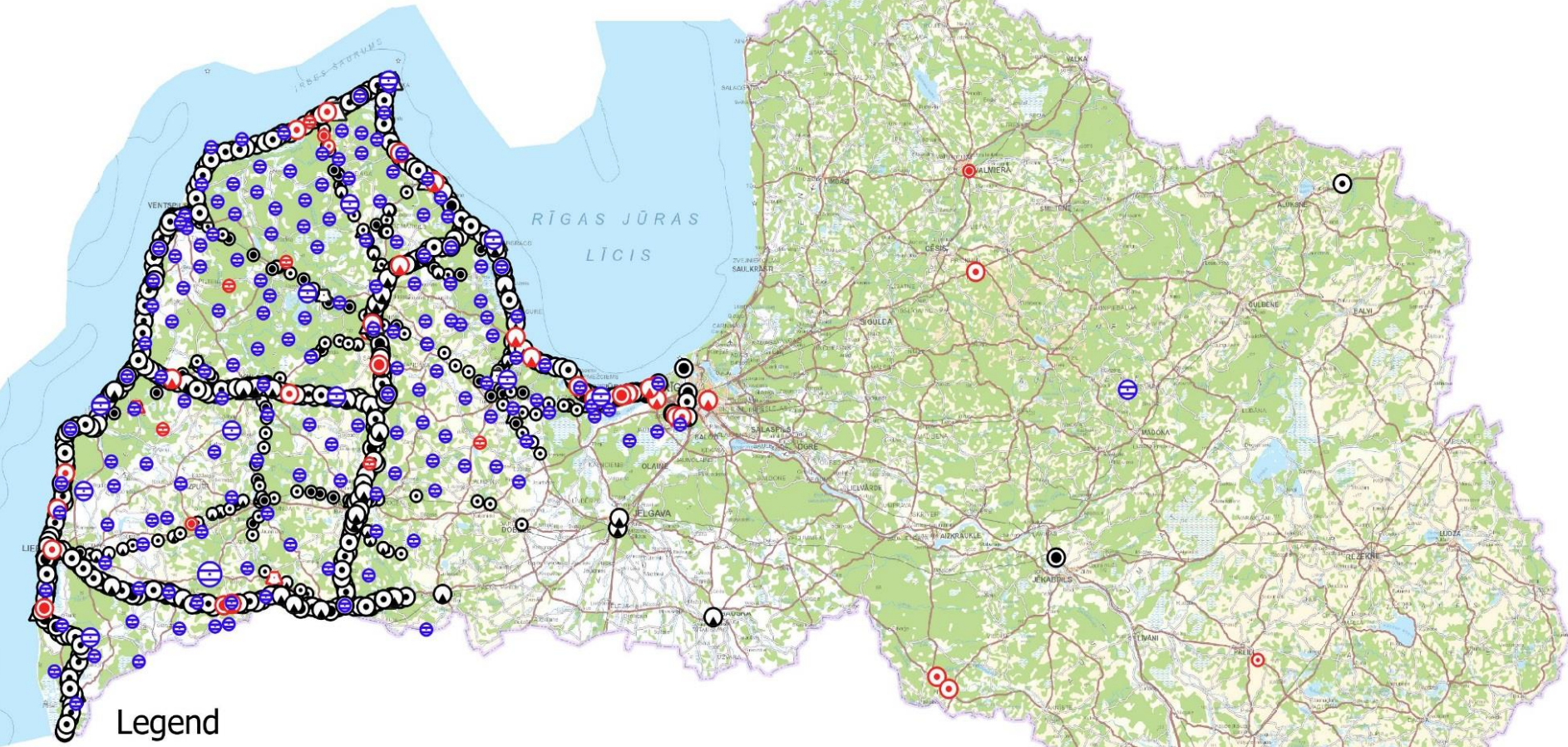
Ivars Liepiņš

Director of Department of Geodesy

Benchmark inspection in Kurzeme 2019



846 inspected, 47 destroyed



Legend

GP network points

- G0
- G1
- G2

1st order levelling network points

-
-

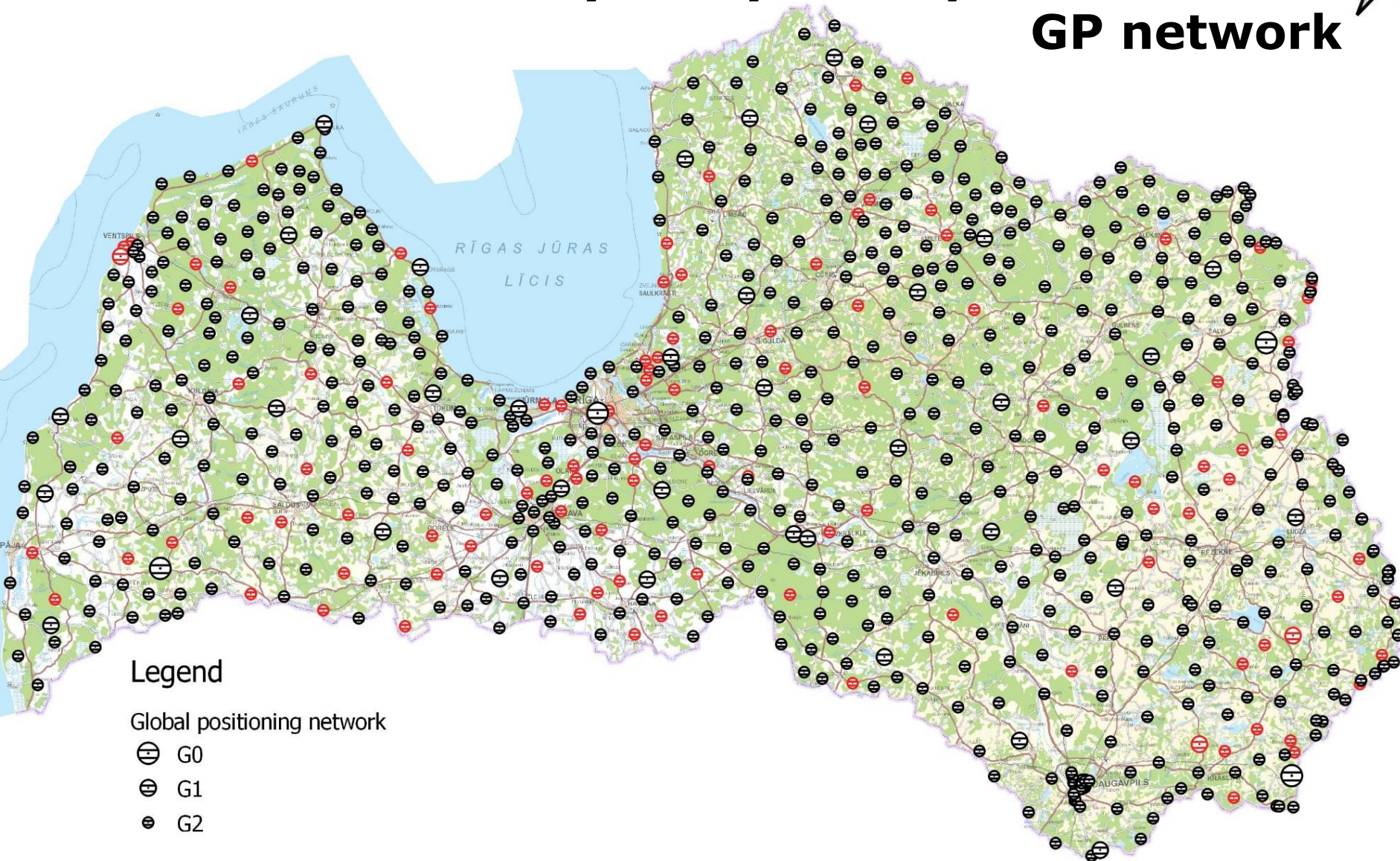
2nd order levelling network points

-
-

Destroyed points

-
-
-

4-year cycle inspection results GP network



Legend

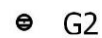
Global positioning network



G0



G1



G2

Destroyed points



G1



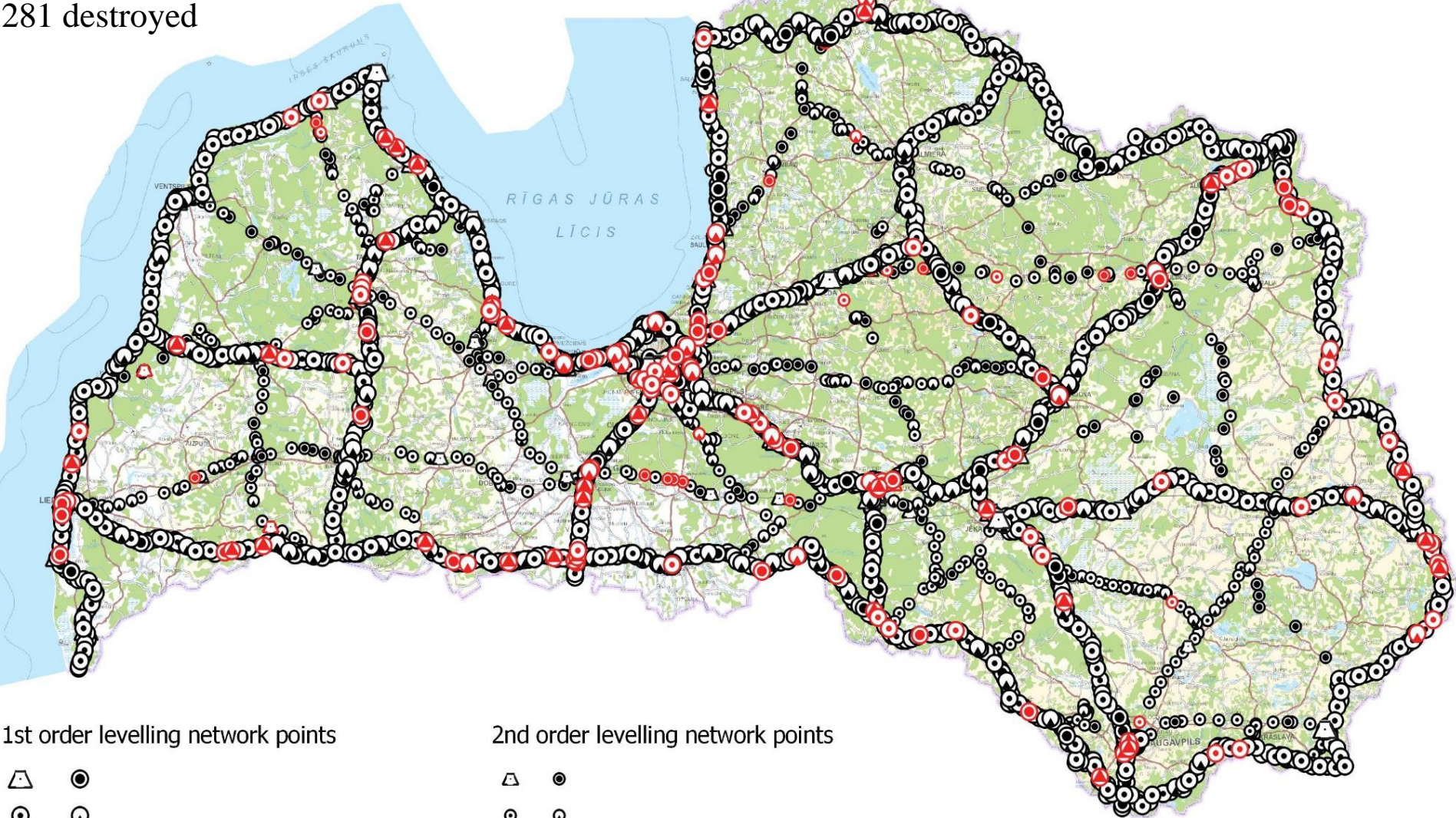
G2

4-year cycle inspection results

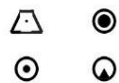
Levelling network



In 4 years 3247 geodetic points were inspected,
281 destroyed



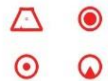
1st order levelling network points



2nd order levelling network points



Destroyed 1st order levelling network points



Destroyed 2nd order levelling network points





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Geodetic points after inspection

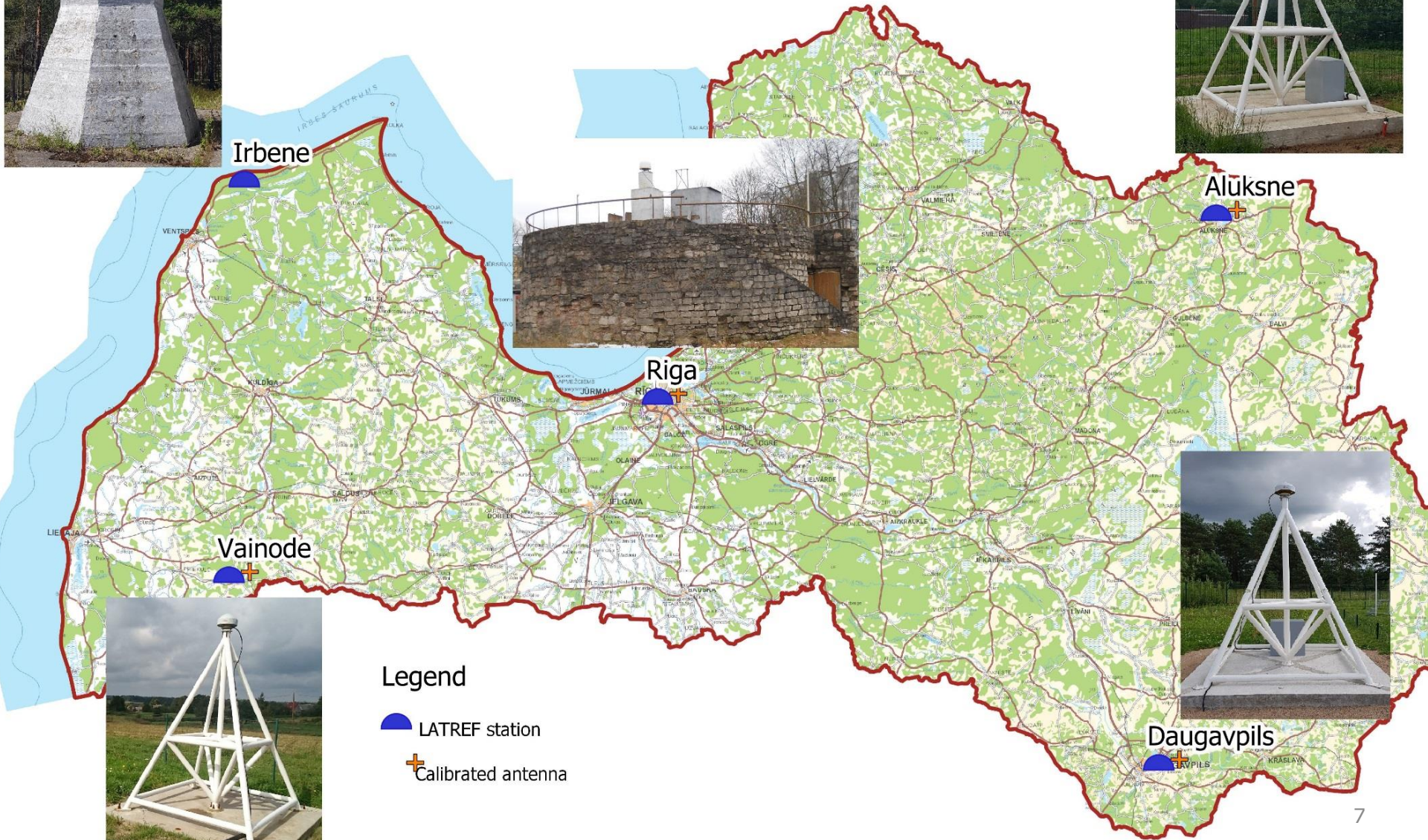


LatPos modernization

Leica GR30 receiver (+Galileo, Beidou)
LEIAR20 LEIM antenna with individual calibration



LATREF stations



Restoration of Struve geodetic arc's point Nesaule-kalns





New levelling line in Riga

Legend

⊕ 0 order GP network benchmark

📏 tide gauge

Local network geodetic benchmarks of Riga

⊕ ground benchmark

⊙ ground benchmark

⊞ ground benchmark

⊙ wall benchmark

⊞ wall benchmark

New benchmarks

⊙ ground benchmark

⊙ wall benchmark

1st order leveling network benchmarks

⊞ fundamental benchmark

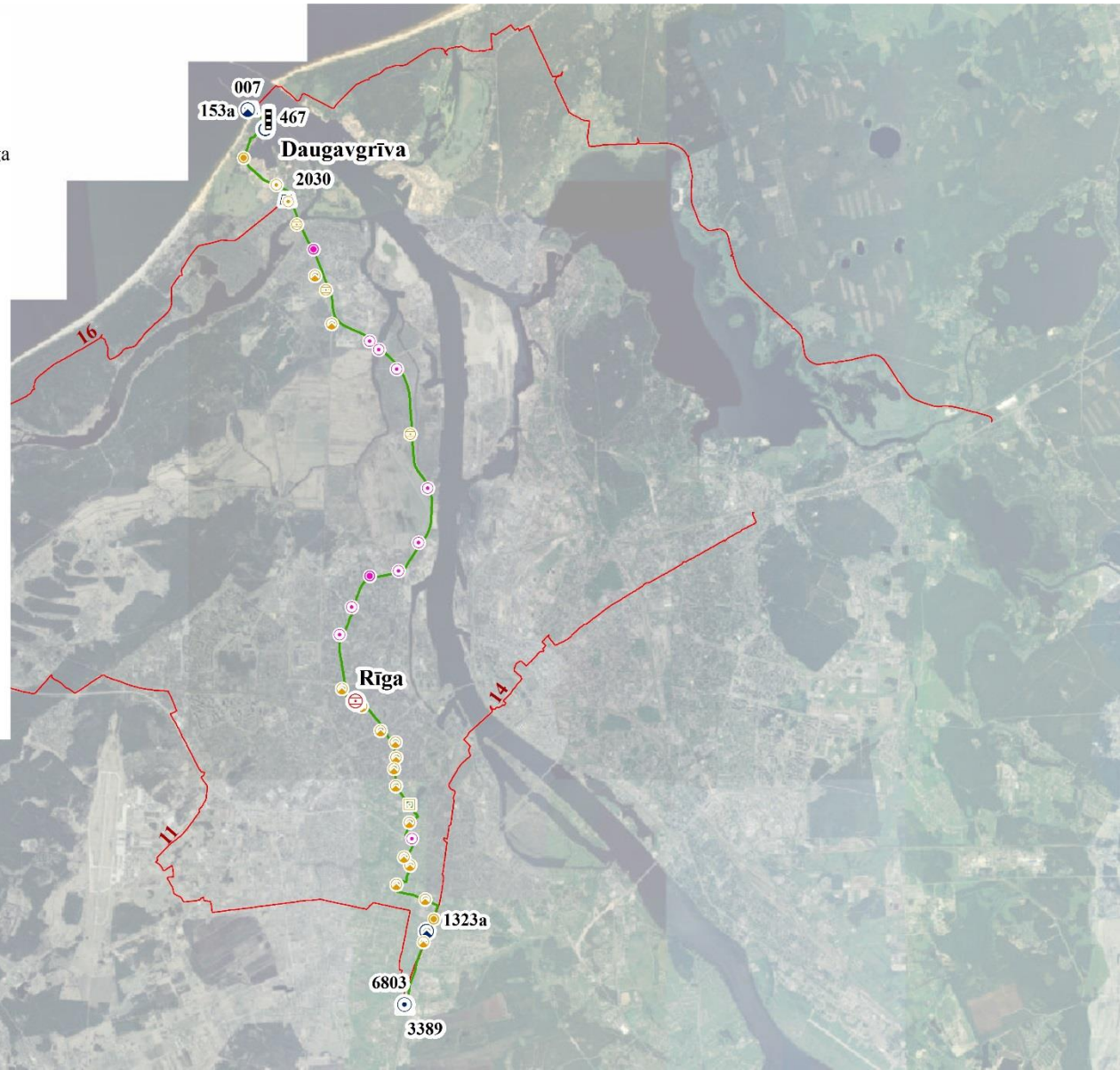
⊙ ground benchmark

⊙ wall benchmark

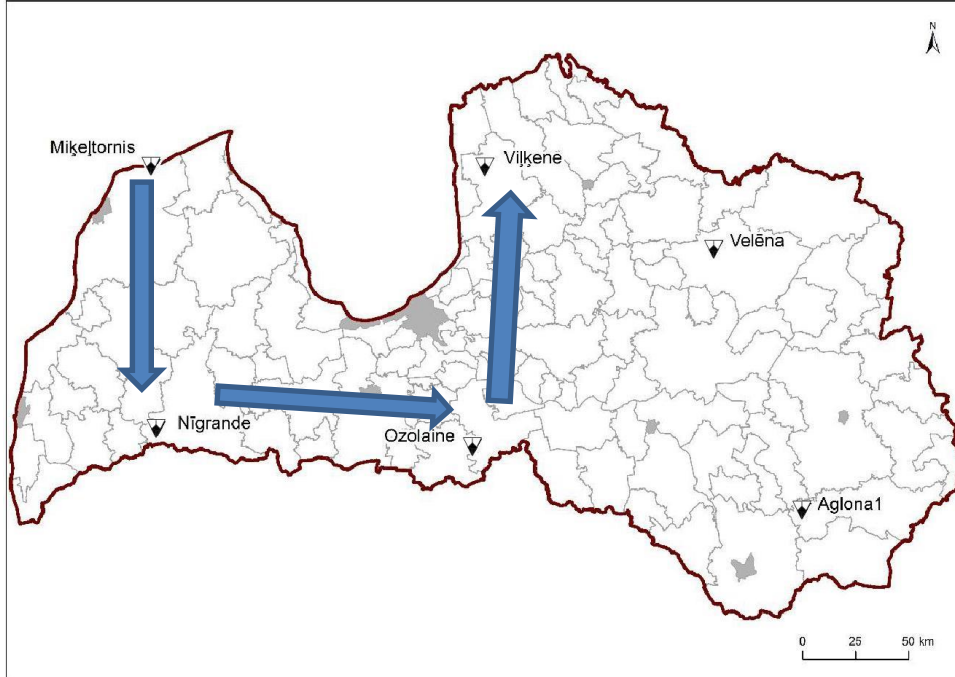
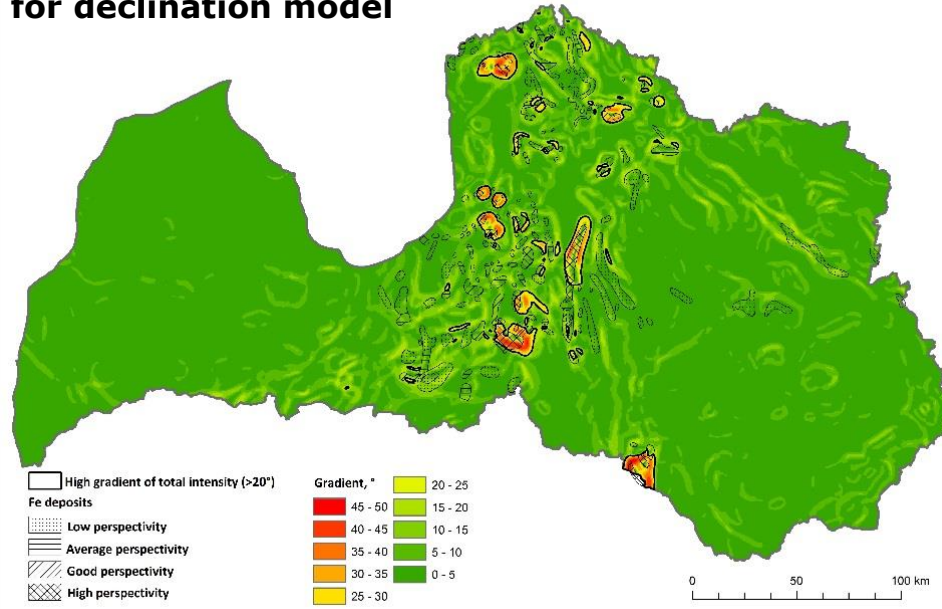
📏 wall benchmark

— planned leveling line

— 1st order leveling line



Pilotproject: geomagnetic measurements for declination model





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Absolute gravimetric measurements in Latvia, 2019





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Thank you for your attention!

Paldies par uzmanību!

Takk fyrir athyglina!