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LAND SURVEY
OF FINLAND

More with less – the Finnish collaboration model

Collaboration in the Finnish public sector on acquisition and processing of remote sensing data

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Finland - lots of geographical challenges

Finland in a nutshell

- 390 000 km² (forested areas 77 %)
- Between 60' and 70' latitudes
- Bordering countries
 - Norway
 - Sweden
 - Russia (1340 km borderline!)
- Weather conditions quite often cause challenges for data acquisition
- 64th largest country in the world – lots of data needed to cover the whole country



More with less – overcoming the challenges!

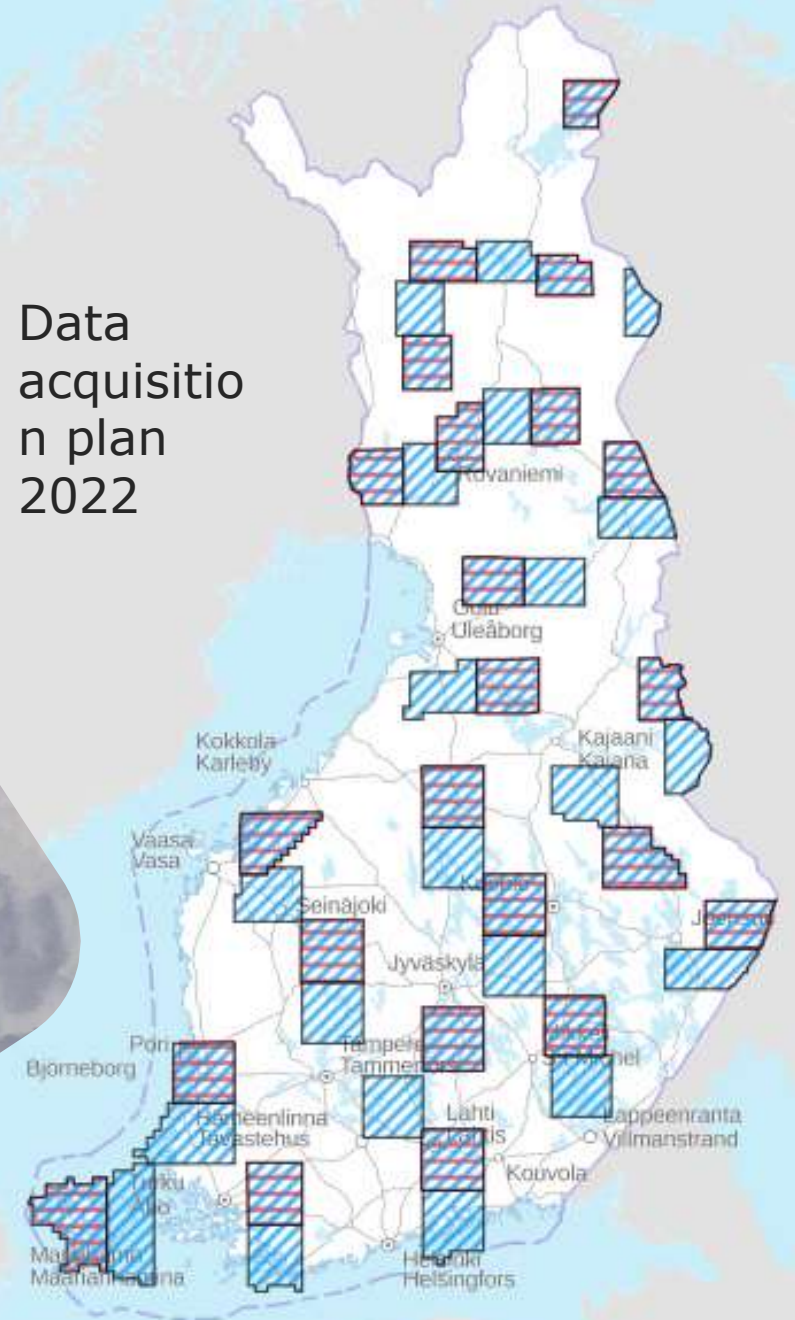
A new model of collaboration has been launched 2020 in the Finnish public sector on acquisition and processing of remote sensing data.

National Lidar and Aerial Image programs produce more data for the whole society every year - with less!

- Aerial images 3-year interval
- Lidar data 6-year interval



Data
acquisition
plan
2022



Co-operation to boost the Finnish economy

Most important public sector partners in the collaboration:

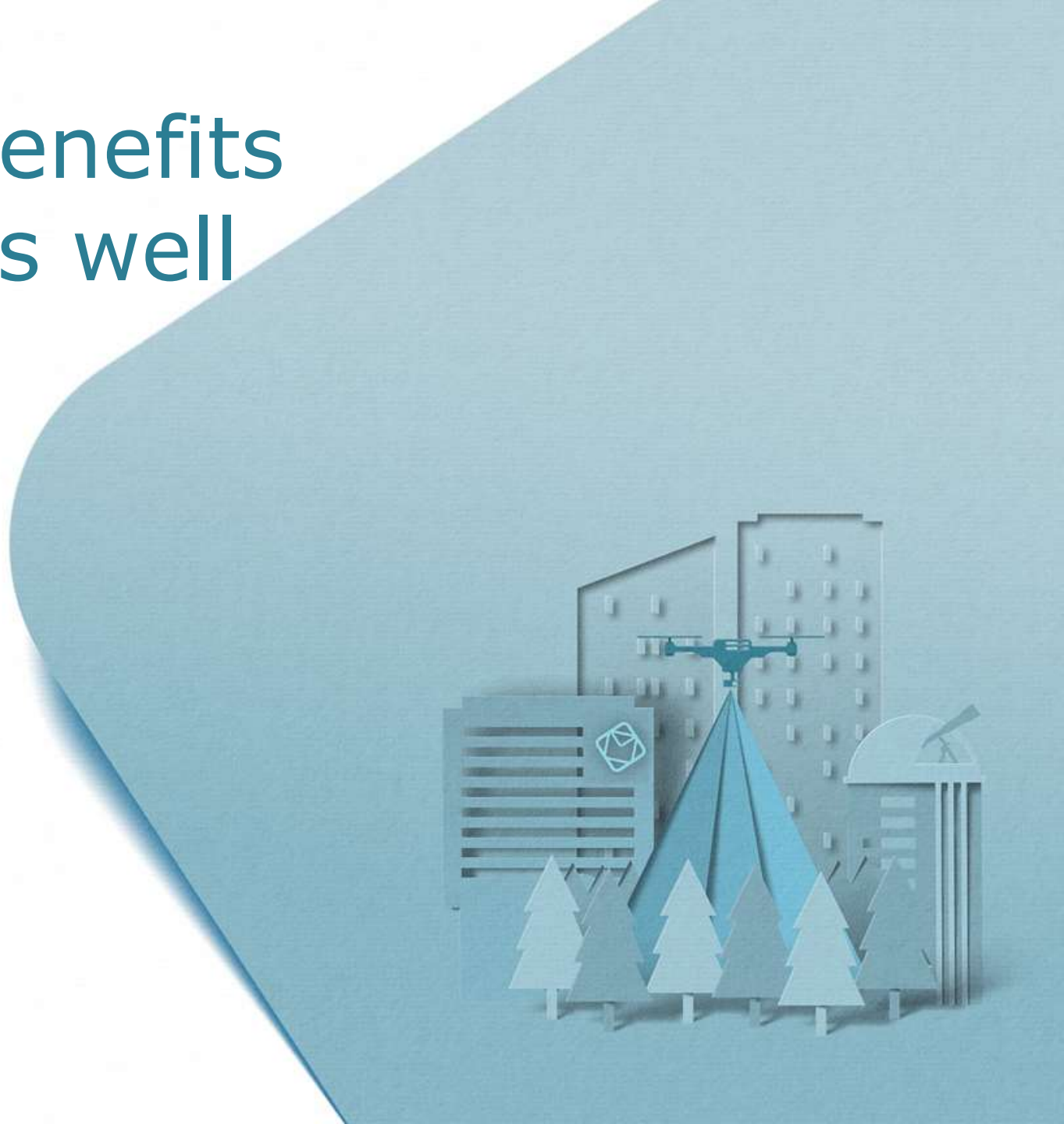
- Forestry
- Agriculture
- Environmental protection
- Defence forces

5 public organizations planning and funding the data acquisition costs together (4 million €/year).



Co-operation that benefits the private sector as well

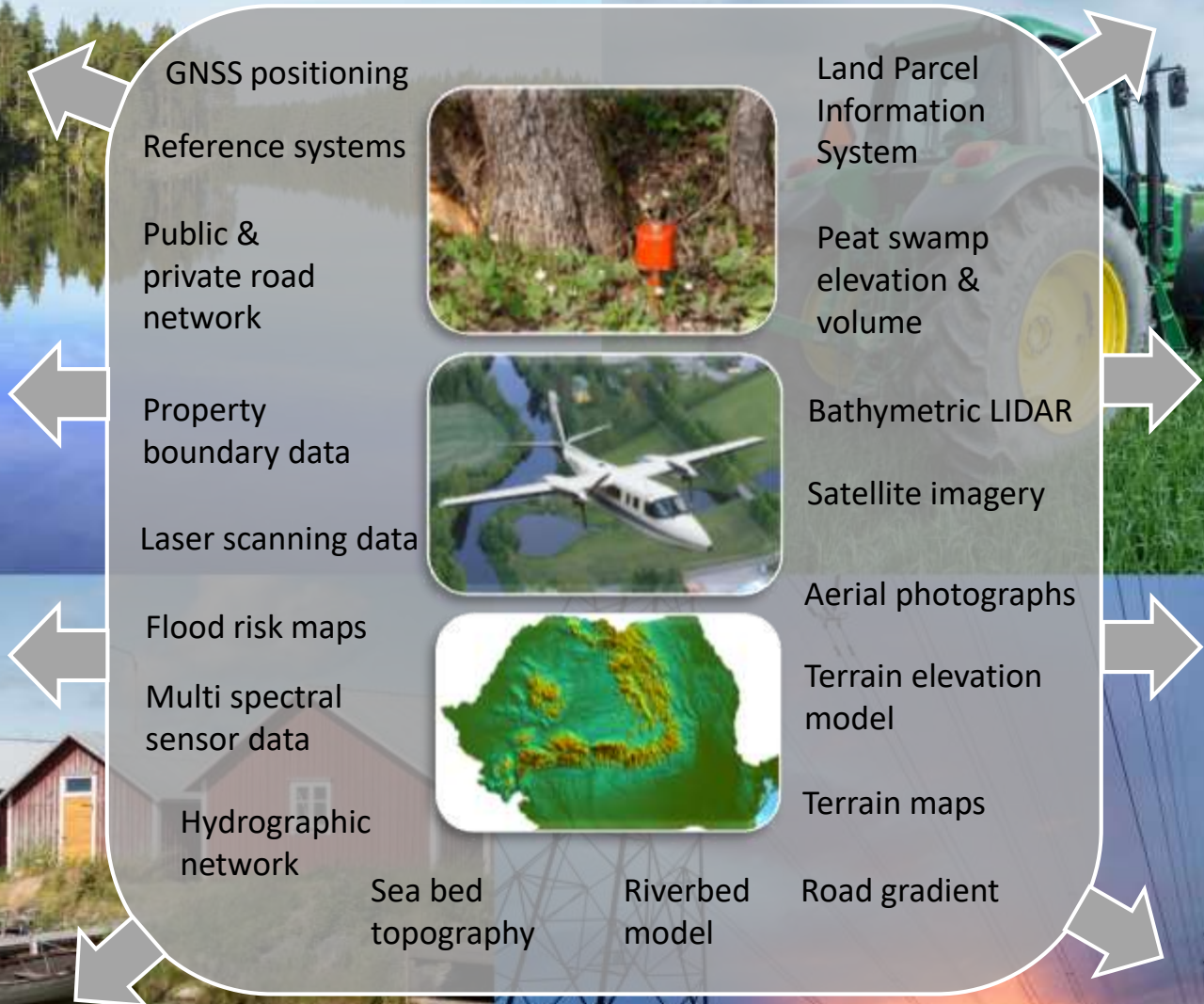
- Interesting business opportunities for private contractors in data acquisition
 - 60 000 km² Lidar data and 110 000 km² aerial photos / year
 - 2022: 5 companies working in 2 framework agreements (aerial imagery and lidar)
- All data as public data to boost and create new business models



BIOECONOMY ECOSYSTEM

Connecting Spatial Data with bio-ecosystem challenges

- Forest inventory
- Coordinate assisted logging
- Accessibility
- E-trading of timber
- Recreation



- Nutrient runoff management
- Recycling of nutrition
- Agriculture subsidiaries
- Peat inventory
- Logistic planning

- Water protection
- Flood control
- Pest control
- Water resource management
- Fish farming

- Define protection zones
- Energy optimization
- Water cycle management
- Biodiversity protection
- Land use planning

Thank you!



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