

# Ecosystem Extent Account

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Nordic cooperation on land cover and habitat mapping using  
earth observation including the launch of NCP CLMS 16.4.2026



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Suomen ympäristökeskus  
Finlands miljöcentral  
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# Statistical Regulation for Ecosystem Accounts

- New amendment to (EU) 691/2011 regulation on Environmental Accounts
- Updated regulation (EU) 2024/3024 was approved and came into force on December 2024
- First obligatory reporting round for EU MS by end of 2026 (using year 2024 as reference baseline)
- Ecosystem extent, ecosystem condition, supply and use of ecosystem services (in physical terms)
- Syke has started a new Eurostat funded project to **develop reusable workflows for collecting, processing and compiling a new national ecosystem type map suitable for the reporting needs of the regulation.**

# Ecosystem extent reporting needs?

		Opening area (Extent in the previous reference year)	Additions	Reductions	Closing area (Extent in the current reference year)	Net changes (additions less reductions ; +/-)
1	Settlements and other artificial areas					
2	Cropland					
3	Grassland (pastures, semi-natural and natural grasslands)					
4	Forest and woodland					
5	Heathland and shrub					
6	Sparsely vegetated ecosystems					
7	Inland wetlands					
8	Rivers and canals					
9	Lakes and reservoirs					
10	Marine inlets and transitional waters					
11	Coastal beaches, dunes and wetlands					
12	Marine ecosystems (coastal waters, shelf and open ocean)					

- Extent of ecosystem types and their transitions, every 3 years
- Use EU ecosystem typology
  - hierarchical with 3 levels
- In the first round, only **opening extent** is reported.
  - Ecosystem transitions mandatory for second round (2029).
- Extents are aggregated to **level 1** of the typology (minimum requirement)
- However, **level 2** is de facto needed as input data for modelling supply and use of ecosystem services and **level 3** for national needs

# Alternative ways to compile the account

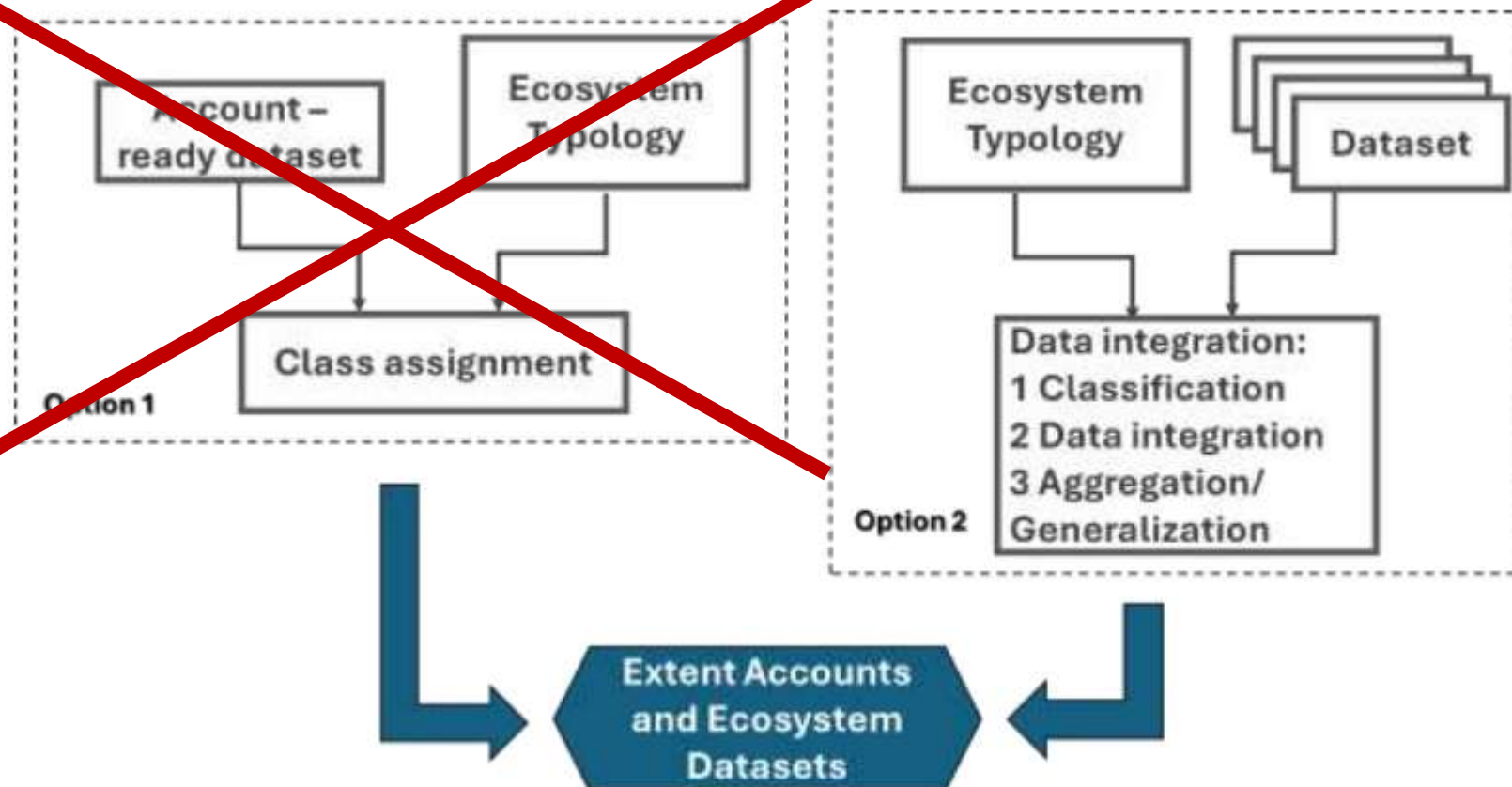


Figure 2 Principal steps to compile ecosystem extent accounts.

# Why National CLC is not suitable?

- Compilation of experimental extent account from national CLC was piloted in 2023 → not suitable for ecosystem accounting as it is
  - Coarse resolution -> users need higher
  - Land cover / land use vs. ecosystem / habitat types
  - Production methods of CLC has a number of shortcomings due to legacy reasons (backwards compatibility of the time-series)
  - Diverging class definitions of CLC and EU EA typologies (e.g. built-up)
    - Direct 1:1 class assignments often not feasible
  - Missing ecosystem types (e.g. marine inlets and transitional waters completely missing)
  - Future of CLC is still uncertain
- Compilation of a new ecosystem type map has many benefits:
  - Higher resolution
  - Facilitates better fit to EU topology and inclusion of nationally important ecosystem types
  - Independence from CLC: no legacy restrictions, uptake of new production methods and datasets, while adapt good practices learnt from CLC production
  - Can make use of best available national geospatial data (also CLC2024)

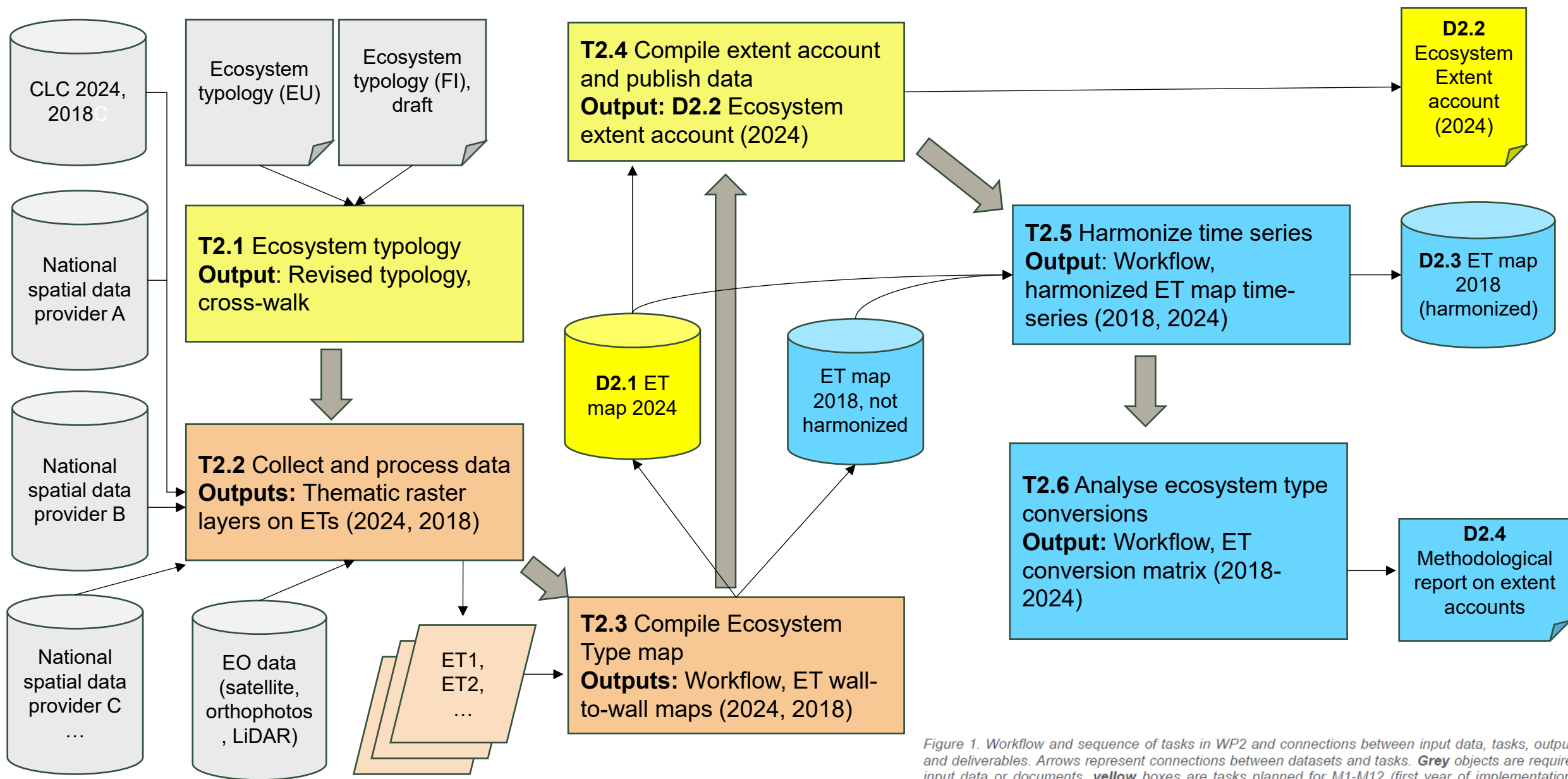
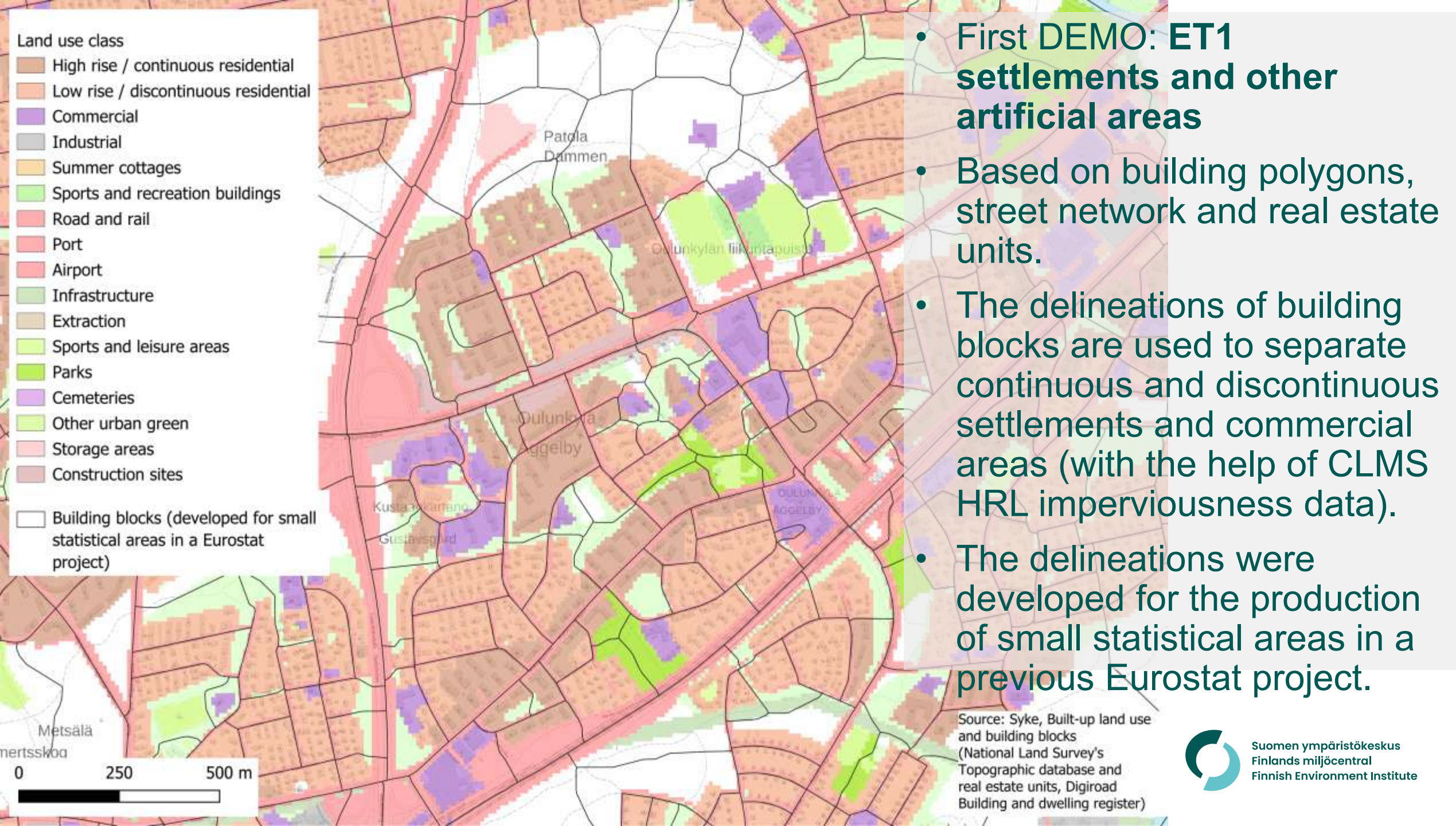


Figure 1. Workflow and sequence of tasks in WP2 and connections between input data, tasks, outputs and deliverables. Arrows represent connections between datasets and tasks. Grey objects are required input data or documents, yellow boxes are tasks planned for M1-M12 (first year of implementation), blue boxes are tasks for M13-M24 (2<sup>nd</sup> year), while orange boxes are tasks planned to run both years (first for 2024 data, then for 2018). Deliverables are distinguished from other outputs with D, using the same color coding.



- **First DEMO: ET1 settlements and other artificial areas**
- Based on building polygons, street network and real estate units.
- The delineations of building blocks are used to separate continuous and discontinuous settlements and commercial areas (with the help of CLMS HRL imperviousness data).
- The delineations were developed for the production of small statistical areas in a previous Eurostat project.

**Project website:**  
**[https://www.syke.fi/en/projects/2025-  
fi-sustainability](https://www.syke.fi/en/projects/2025-fi-sustainability)**

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