# Copernicus User Forum on 6th February 2018

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# Plan

- **CorineLandCover 2nd generation** and Reference Data
- Evaluation for the Evolution of the **Copernicus DEM**
- Study on integration of **aerial data** into Copernicus Emergency Management service workflow

# **CorineLandCover 2nd Generation**
and Reference Data

# CorineLandCover 2nd generation and Reference Data

- CLC-Backbone Component
  - 1 ha resolution
  - → More and more detailed, relevant for national users
  - → Impact on NMCAs
- "Hard Bones": roads, railways, rivers
  - Roads & railways: OSM or Member States Reference Data?
  - Incompatibility ODBL / Copernicus Full, free and open data policy?
- Important for NMCAs: contribute to the **"Core Reference Data"** new EuroGeographics product

# Evaluation for the Evolution of the **Copernicus DEM**

Evaluation for the Evolution of the Copernicus DEM

# 1) Context

- ESA is performing a study to provide recommendations for the **evolution of the DEM**
  - To be used for the generation of Copernicus Space Component products and for Copernicus services
  - To collect the DEM requirements
  - To identify the different candidate DEMs available
  - To provide final conclusions and recommendations for the choice of the DEMs (by April 2018)

Evaluation for the Evolution of the Copernicus DEM

# 2) Current ESA view

- From the study, two type of needs are identified
  - For Sentinel-2 ortho-images:
    - a 30m horizontal sampling DEM with global coverage
  - For VHR ortho-images:
    - a 5-10m horizontal sampling DEM with EEA39 coverage
- ESA view
  - Global and EEA39 DEMs shall be spatially consistent over common geographical regions
  - **Only global DEMs derived from space data** allow to meet the requirements above

→ **Consistency with MS DEMs not considered**

Study on integration of **aerial data** into Copernicus **Emergency Management** service

# Study on integration of aerial data into Copernicus Emergency Management service workflow

# 1) Context

- Copernicus ordered
  - Pilot and study on **integration of aerial data** into Copernicus Emergency Management service workflow
    - Contracted with CGR SPA
  - Pilot and study project on **integration of drone aerial data** into Copernicus Emergency Management
    - Contracted with Delair-tech
- Both studies were presented
  - to the Copernicus User Forum on 6th February 2018

# Study on integration of aerial data into Copernicus Emergency Management service workflow

# 2) Analysis

- Good rationale: **More complementarity between Space data and In-Situ data**
  - Space data and In-Situ data complement and enrich one another
    - » Temporal monitoring easier with space data / In-situ more accurate
  - In-Situ data should have their place in Copernicus
- But in these two studies:
  - Complementarity between Copernicus activities and Member States is not considered
    - **However at this stage, these are just studies, not yet Copernicus operational activities**
  - The question of respective advantages of different vectors is not addressed
    - No matrix indicating respective advantages depending on parameters:
      - » nature of the crisis, surface area, cloud ceiling, flight altitude, wind

# Conclusion

- Issue of **Complementarity vs. Duplication** between Copernicus and NMCAs

- Important for NMCAs:
  - Mobilising national representatives in Copernicus Committee and Copernicus user Forum
  - Contributing to the EuroGeographics "Core Reference Data"

Thank you for your attention