USE-CASE OVERVIEW

On-line workshop #2 29 October 2020

Geokom

Carsten Iversen

GO-PEG | Generation Of crossborder PanEuropean Geospatial Datasets and Services

With the support of the European Commission
Funded by the Innovation and Networks Executive Agency (INEA)
under Action No 2018-EU-IA-0093

AGENDA

- 1. USE CASE OVERVIEW AND GOALS
- 2. USE CASE DATASETS
- 3. QUESTIONS

Funded by the Innovation and Networks Executive Agency (INEA) under
Action No 2018-EU-IA-0093

AGENDA

- 1. USE CASE OVERVIEW AND GOALS
- 2. USE CASE DATASETS
- 3. QUESTIONS

Funded by the Innovation and Networks Executive Agency (INEA) under
Action No 2018-EU-IA-0093

Main domaine of 11 use-cases

- Emergency/disaster management and hazards
- Water and soil
- Transport

Funded by the Innovation and Networks Executive Agency (INEA) under
Action No 2018-EU-IA-0093

Expected outcome of the “Emergency/disaster management and Hazards” use cases

Future forest management	**To assist adaption of forest management to climate change by supporting decision making with the help of Artificial Intelligence regarding habitat based forest design.**
Buildings potentially affected by industrial explosions	**To provide an evaluation of types of buildings potentially affected by an industrial explosion and determine its level of exposure.**
Population affected by possible forest wildfire	**Calculation of the vulnerability of the population due to the risk of occurrence of forest fires in specific areas of the participating countries and possible cooperating countries.**
Population, roads and buildings affected by flood events	**To provide an identification of roads and evaluation of population and buildings affected by flood events (T = 10) during emergency preparation phase.**
Geospatial data and technologies in relation to COVID-19	**Provide a living inventory of the outstanding projects and initiatives which are using geospatial data and technologies in relation to COVID-19 pandemic.**

Funded by the Innovation and Networks Executive Agency (INEA) under Action No 2018-EU-IA-0093

Expected outcome of the “Water and soil” use cases

Population affected by coastal flood risk	**The result will be a building information layer with population statistics that will help determine the impact of a coastal flood event on population.**
Drinking water damages and -deficiencies	**To locate vulnerable catchment areas, wells, boreholes etc. potential exposed to drought and to acidification from the industry, agriculture and sea level rise.**
Pollution tracing	**Tracing the flow of contaminated water to define possible affected areas and to try to stop the progress of contamination. Tracing back to identify the source of contamination.**
Management of sub-surface information	**The goal is to provide a methodology to conceptualize, organize and deliver subsurface information answering the needs of stakeholders involved in sustainable and safe use of natural resources from different countries.**

Funded by the Innovation and Networks Executive Agency (INEA) under Action No 2018-EU-IA-0093

Expected outcome of the “Transport” use cases

Population affected by noise	**To provide an overview of the noise phenomenon and its direct impact on the population, unifying the different night noise units (agglomerations, airports, roads, industrial and railway lines), combining them with buildings and population affected.**
Intermodal Container Routing	**To increase the efficiency in European and Worldwide transport systems. Accurate intermodal (rail, road, water) routing tool for container shipping that improves reliability of Estimated Time of Arrival (ETA) and/or reduces CO_2 and other emissions**

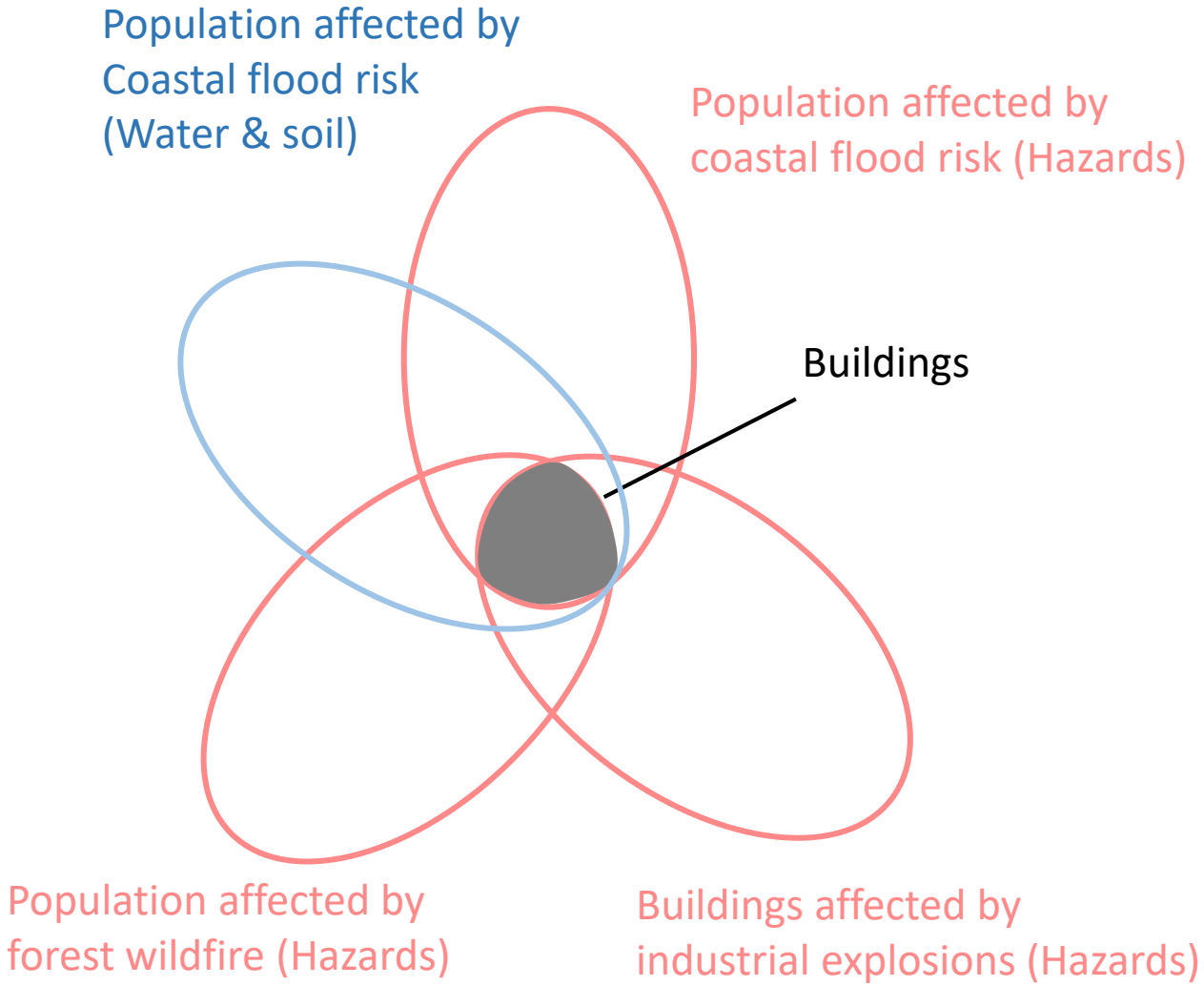
Funded by the Innovation and Networks Executive Agency (INEA) under Action No 2018-EU-IA-0093

AGENDA

- 1. USE CASE OVERVIEW AND GOALS
- 2. USE CASE DATASETS
- 3. QUESTIONS

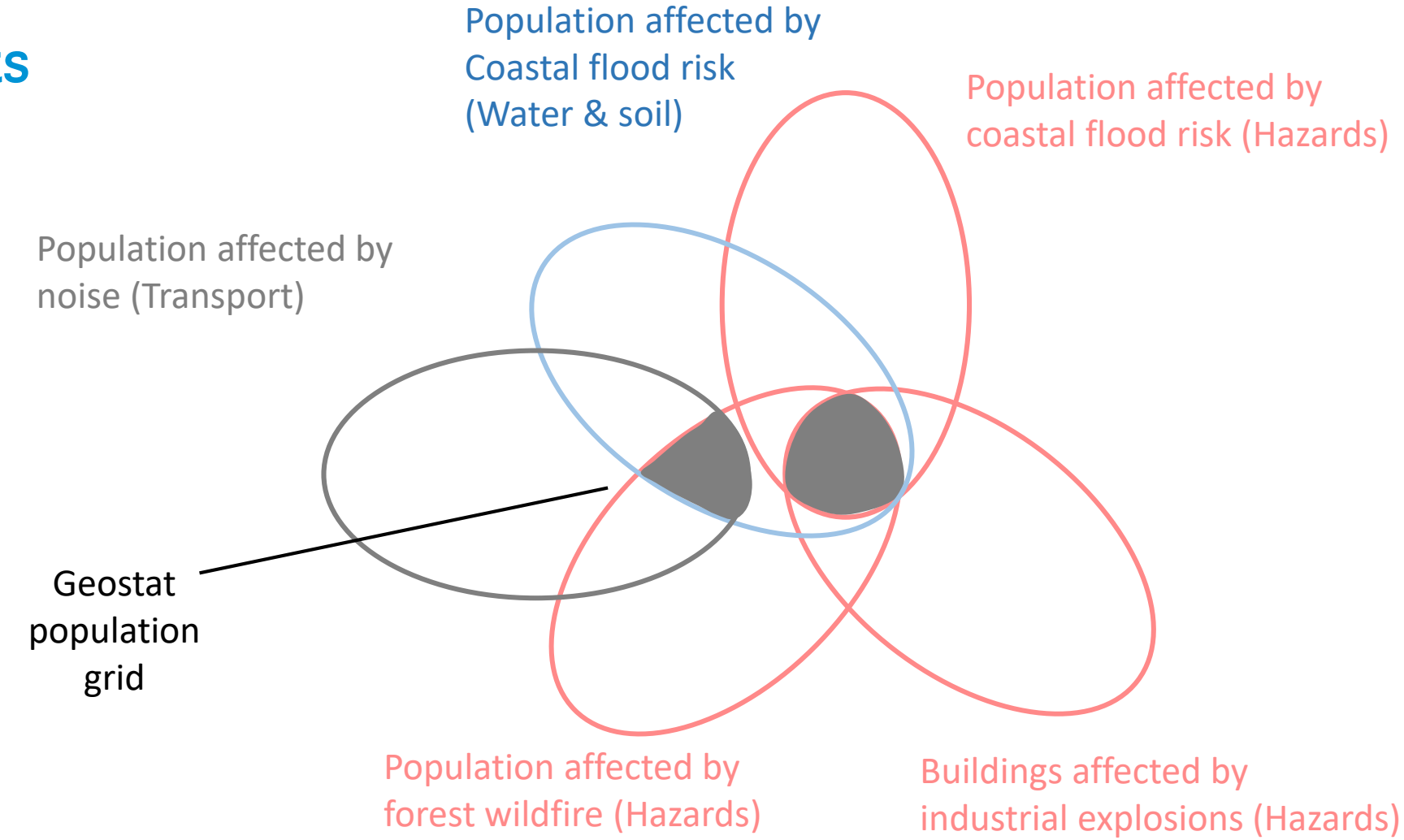
Funded by the Innovation and Networks Executive Agency (INEA) under
Action No 2018-EU-IA-0093

Common datasets



Funded by the Innovation and Networks Executive Agency (INEA) under
Action No 2018-EU-IA-0093

Common datasets



Funded by the Innovation and Networks Executive Agency (INEA) under
Action No 2018-EU-IA-0093

Identified datasets in the use-cases

Use case short name	Geostat 1km 2 population grid.	Global Human Settlement (GHSL) 250m population GRID.	Buildings	Orthoimagery, Orthophotography (PNOA)	Protected sites	DTM	SIOSE, Spain	Natural risk zones	Geology	Forest map and data (specific sources)	Atmospheric Conditions	Soil	Elevation	Transport Network	Hydrography / Hydrology	Agricultural and aquacultural facilities	Administrative boundaries and units	EPTR	Forest data on vegetation, decieces, tree healt status	Energy resources	Ground vegetation	Bio-geographical Regions	Digital terrain model in areas of significant potential flood risk (ARPSIs)	LIDAR data	Corine Land Cover	Hibitats and biotopes	Species destribution	National Plan for Aerial	Map of areas of environmental risk due to river flooding (T = 10 years)	Map of river flood risk affecting population (T = 10 years)	Economic river flood risk map (T = 10 years)	Flood areas with high probability (T = 10 years)	Significant Flood Potential Risk Areas (ARPSIs)	Map of points of environmental risk river flood T = 10 years)	National Inventory of Soil Erosion (2002-2019). Potential for mass movements	National Inventory of Soil Erosion (2002-2019). Laminar and trick erosion	National Inventory of Soil Erosion (2002-2019). Potential erosion	National Inventory of Soil Erosion (2002-2019). Erosion in channels	River Basin Districts (land and marine environment)	Coastal flood risk map affecting population	Coastal flood extension	Urban Atlas Copernicus	Land Use	Statistical Units	Hydrography, fresh- and groundwater facilities and reservoires	Hydrography, Geospatial data on surface waters	Map and data of points of environmental risk for droughts	Map and data of points of environmental risk for heat waves	Map and data of point and areas of water over exploitation	Map and data of points and areas of water scarcity	Production and industrial facilities	Utility and goventmental services	Strategic Noise Maps (MER)	Addresses	Environmental monitoring facilities (Air quality)	Covid-19statistical data
Population, Roads and Buildings affected by flood	x	x	x			x	x																x					x	x	x	x	x	x	x	x	x	x	x	x															
Population affected by forest wildfire	x	x	x	x	x	x		x		x	x			x	x	x									x	x	x																													
Forest management				x	x			x	x	x	x	x	x						x		x	x																																		
Buildings affected by industrial explosions			x				x											x																																						
Geospatial data and technologies in relation to COVID-19																																																								x
Intermodal Container Routing				x									x	x			x																																							
Population affected by noise	x	x					x																																																		
Drinking water damages and -deficiency									x			x					x	x																																						
Population affected by coastal flood risk	x	x	x			x																		x																																
Pollution tracing					x										x	x				x																																					
Management of subsurface information								x	x																																																

Funded by the Innovation and Networks Executive Agency (INEA) under Action No 2018-EU-IA-0093

AGENDA

- 1. USE CASE OVERVIEW AND GOALS
- 2. USE CASE DATASETS
- 3. QUESTIONS

Funded by the Innovation and Networks Executive Agency (INEA) under
Action No 2018-EU-IA-0093

3. QUESTIONS

- Are you working with use cases related to these domains, if so which ones?
  - Emergency/disaster management and Hazards
  - Water and Soil
  - Transport

- Please describe in one sentence a use case you are involved in

Funded by the Innovation and Networks Executive Agency (INEA) under Action No 2018-EU-IA-0093

THANK YOU

WWW.GO-PEG.EU

GO-PEG | Generation Of crossborder PanEuropean Geospatial Datasets and Services

With the support of the European Commission
Funded by the Innovation and Networks Executive Agency (INEA)
under Action No 2018-EU-IA-0093