SPOTTED

Satellite oPen data fOr smarT ciTy sErvices Development

Napoli use case

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Organisation:

Comune di Napoli (Napoli)

SPOTTED Kick-Off Meeting

Remote, 22 September 2021

This project has received funding from the European Health and Digital Executive Agency: Grant Agreement under the Connecting Europe Facility (CEF) – Telecommunications Sector – Agreement No INEA/CEF/ICT/A2020/2373501

3d metropolitan city per number of inhabitants in Italy

1st for housing density

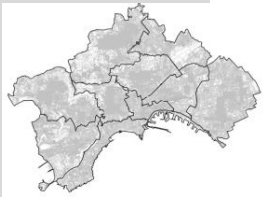
Napoli

The city in numbers

population

The city:

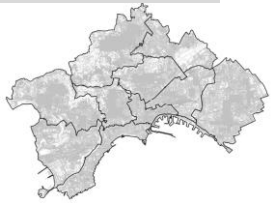
970.185 ab.



area

The city:

117 sq.km



density

The city:

8.292 ab/kmq

metropolitan context

Pop: 3.012.243 ab.

Area: 1.171 sq.km

Density: 2,572 ab/kmq

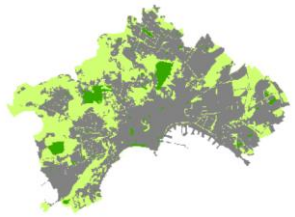
urban/green rate

Urban area 74sqkm 60%

Prevalent green surface 39sqkm

Accessible parks and recreation

5 sqkm (3,9%)

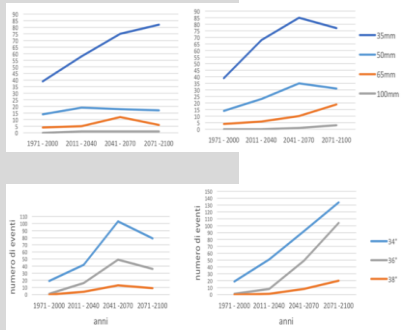


climate indexes

Heat waves &

Extreme precipitation (n. of events)

Euro cordex data



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The city problems

occupation

social strain

school dropout

irregular urban development

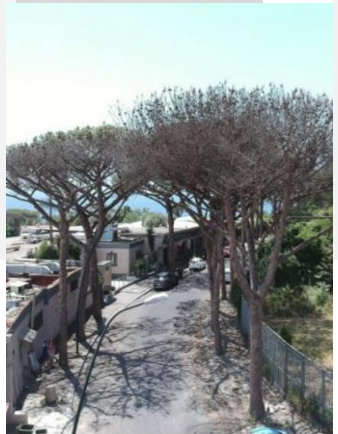
Digital transition

lack of economic resources and political uncertainty

€

green infrastructure

distress factors



Hydrogeological

Earthquake

Climate change

Volcano

RISK

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green asset management issues

Preserve urban agricultural persistence

Prevent diseases, monitor and plan for trees and green space protection

and monitor implementation actions

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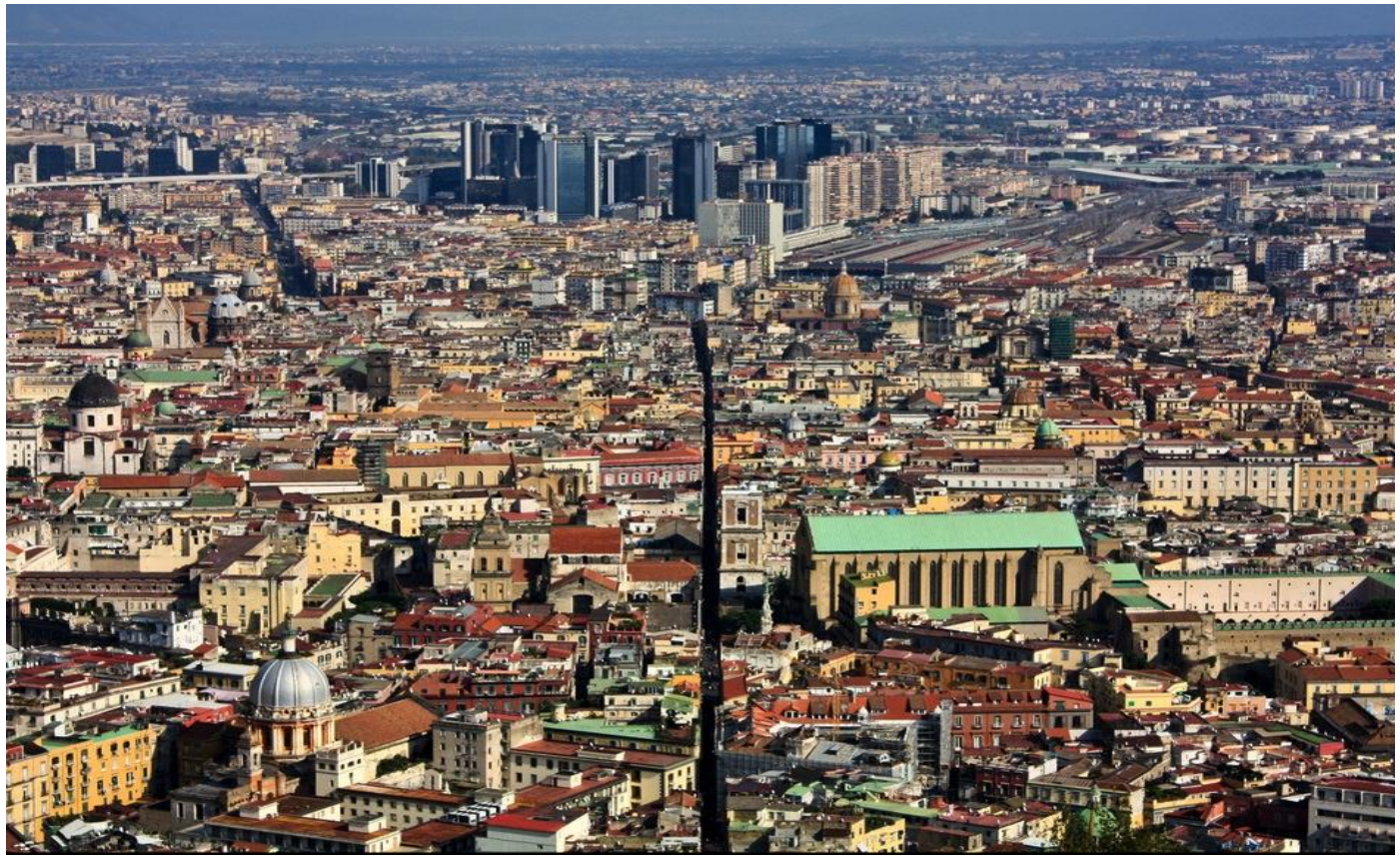
UNESCO city center

Planning issues



public space management and implementation
in a dense, compact cityscape

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Planning issues

regeneration of ex industrial areas

re-use of natural resources

Fragile coastal landscape and change detection - unused spaces

Redesign a relationship city/coastline

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Climate change issues

contemporary urban landscapes
affected by flood events
when extreme precipitations strike the city

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Climate change issues

public space and
‘irregular’ solutions
to heatwaves events

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Roles/Napoli what we are expected to do in the consortium

*...provide the **requirements** for the services, related to green transition and sustainable urban planning, to be developed during the project execution;*

*…provide **local data** to leverage on (e.g. open data, IoT data, urban plans, cartographies).*

*…support the **validation** of the defined/implemented services in their territory and provide proof of service replicability and cross-border capability.*

Napoli

- User requirements definition & co-creation for research tasks
- involvement of local actors: other offices of the municipality, other local government actors and authorities, the citizens …
- Local data retrieval and organization
- Briefing and reports on Urban and metropolitan planning activities and regeneration projects

…

- Validation for change detection results

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NAPOLI expectations

What we expect to gain from the project?

- Knowledge data and tools to detect **change** in urban and natural environment
- Tools to **monitor the effects of climate adaptation strategi**es
- Strengthening cooperation with other EU end-users, exchange of best practices
- Improved **user-friendliness** of landscape and climate information data
- Information and **guidelines for urban planning and regeneration projects** for the Municipality and metropolitan area planning services and environmental monitoring
- tools to be extended to private planners, designers and consultants involved int urban and **neighboorhood scale projects**

Climate change awareness is growing and the city decision makers need to finalize it and implement actions -Urban regeneration policies and adaptation strategies need a monitoring system and cost-benefit evaluation*

**see* *urban planning strategy integrates results from EU H2020 project Clarity - Integrated Climate Adaptation Service Tools for Improving Resilience Measure Efficiency*

SPOTTED will support planners to produce and use High Value Geospatial Datasets for public decisions

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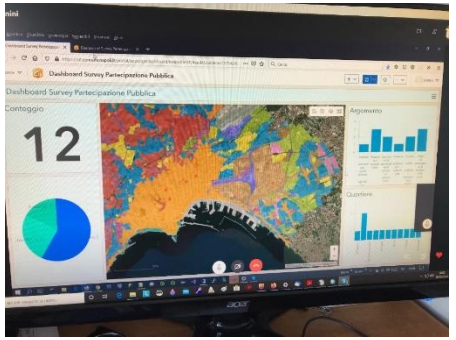
Some detail on objectives

- *define digital geo-datasets for green areas management with dashboards and tools for easy modification/implementation – integrate information*
- *Detect change, produce statistics and maps to monitor strategies in adaptation*
- *Spot episodes of soil consumption 'realtime' and help planners to prevent it*
- *Define criteria and select susceptible areas for urban reforestation*
- *Produce maps to support actions (i.e. green area indexes in neighborhood contexts)*
- *Evaluate impacts on people (climate perception – equity on public space quality)*
- *Use and produce new open datasets, implement new contents in the city administration tools*

Setting up Napoli pilot - data, tools and plans

- Clarity previsional framework and datasets (landuse, tree coverage, climate indexes in a 30 yrs prevision)
- PON Metro projects, digital transition tools (Environment&urban digital geospatial management tools – PPAT) - tool integration
- PUC piano urbanistico comunale – city masterplan – to be approved in a short time
- PUMS urban sustainable mobility plan, recently approved, complex monitoring system
- PAESC sustainable energy &climate adaptation actions - developing



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Expertise required for SPOTTED – people involved

Andrea Ceudech: architect, Chief of the Planning department, City of Naples. He deals with planning issues and urban regeneration strategies

Luigi Volpe: engineer, Digital Transition manager, in charge of the digital services & digital Agenda of the Municipality

Francesca Pignataro: architect, data management and Geographical Information System for the city of Naples

Comune di Napoli - Naples Municipality

Other Local entities involved

Assessorato all'Urbanistica e Area Urbanistica
Assessorato Sviluppo
Sistemi Informativi

other local actors will be involved , following the research activities

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COMUNE DI NAPOLI

Thank you for your attention

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