MID-TERM PILOT STATUS REPORT

Description of deliverable: D.T2.1.2 Mid - term pilot status report on implementation of the green register methodology in Zadar

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1. Brief summary

During the March 2017 a public procurement for Green cadastre was made. The deadline for the implementation of the cadastre was 31st December 2017 and it was respected by the chosen company Nasadi d.o.o. The Green cadastre is done and is visible on the following link: http://ugis-nasadizadar.azurewebsites.net/

In accordance with Contract, payments were supposed to be done in 2 phases after delivered reports and finished works. First payment was made in December 2017 and second one in February 2018.
Our goal with the implementation of the Green cadastre was to get a platform for the intelligent management of urban green areas. In order to organize more efficient managing of urban green areas, there had to be done a clear and systematic overview of the green area status which has been achieved by establishing this cadastre.

2. Activities performed
Implementation of Green cadastre

The development of the Cadastre took place in several phases:
- preparation,
- field work,
- data entry and
- analysis.

Preparatory work was related to database preparation, exploration of existing documentation, definition of spatial objects, and elaboration of work plan. After carrying out inventory and

assessments, it is possible to manage all public green areas more responsible and to have a continuous insight into the condition that will be available to everyone. The Green cadastre created in the GIS overlaps with other infrastructure layers, which will help in future urban development planning and all green operations.

The Green Cadastre Service contained:
- Creation of a GIS system
- Mapping green areas at couple locations within the Zadar County area

The following locations were mapped:
- Antun Gustav Matoš street - area of approximately 700 m² and about 110 trees
- Part of the Prince's Trpimir shore next to the Uskok Sailing Society- a surface of approximately 4,200 m² and about 170 trees
- Green triangle at the bottom of Dražanica bay - surface of approximately 500 m² and about 10 trees
- Sphinx Garden - approximately 7,100 sqm and about 170 trees
- Perivoj in Maestral bay with a surface of approximately 5.500 m² and with about 140 trees

There are, in total, about 18,000 m² of green areas with about 600 trees.
- Preparation for setting up a green cadastre has been done
- An interactive web based green cadastre version fully accessible to the public has been created

The following activities had been done

1.Implementation of GIS for public green areas maintenance *1.1 Establishing IS - importing and customizing vector backgrounds, IS installation* *1 GIS Implementation Total:*	*15 days* *final deadline for the whole Cadastre is 31.12.2017.*	*External expert Nasadi d.o.o*	*UGBteam/ Nasadi d.o.o*	*Zadar*	*Total 25.000,00 EUR for the whole Cadaster*
2 Mapping of default green areas	*90 days* *15 days*				

2.1 Mapping - A.G.Matoša street, Prince Trpimir shore, Maestral bay, Perivoj Sphinx *2.2 Data entry and attribution of appropriate attributes* *2 Mapping of default green areas total:*	*105 days*	*External expert Nasadi d.o.o*	*UGB team/ Nasadi d.o.o*	*Zadar*	*Total 25.000,00 EUR for the whole Cadaster*
3 Data processing and verification of all items to establish a green cadastre *3.1. Data processing and fulfillment of appropriate attributes* *3.2. Checking all items to set up a green cadastre* *3 Data processing and preparation for the establishment of a cadastre total:*	*60 days* *5 days* *65 days*	*External expert Nasadi d.o.o*	*UGB team/ Nasadi d.o.o*	*Zadar*	*Total 25.000,00 EUR for the whole Cadaster*
4 Implementing a Web GIS Application to View Data over the Internet *4.1 Setting up and configuring the application and adjusting the visual elements;* *Rental and maintenance on a SaaS model for 24 months* *Implementing the Web GIS Application for a Total Review:*	*60 days*	*External expert Nasadi d.o.o*	*UGB team/ Nasadi d.o.o*	*Zadar*	*Total 25.000,00 EUR for the whole Cadaster*
6. Adaptation of GIS Model	*10 days*			*Zadar*	

2. Status and Prospect

Evaluation indicators

Green cadastre gave us a platform for the intelligent management of urban green areas. In order to organize more efficient managing of urban green areas, there must be a clear and systematic overview of the green area status which has been achieved by establishing this cadastre. By generating specific indicators from the cadastre and taking special directions and indicators from the Model it will bring stakeholders to an easier decision making process. Our goal is to ensure the best quality decisions, as soon as possible, when managing green areas, taking all key criteria and parameters into account.

Due to the fact that Zadar County is mostly touristic and agricultural region down mentioned indicators have been chosen. By setting these indicators we wanted to see what is our "status quo" regarding this two sectors and how do we stand in comparison with our partners from other Central European countries. Besides that, our goal is to determine where we are in order we could decide which way we want to take in future urban green planning. Due to tourism, people are moving out from Zadar s city centre. Hopefully we could stop this, among other things, with smart planning of content for children such as green playgrounds etc.

Chosen indicators:

1. Basic *(basic figures mainly needed for inventory aspects or derivation of composite and key indicators)*:
- Elements with positive influence on the sojourn quality (benches, playgrounds, sports facilities, etc.) [n]
- Distance to public transport (efficient stops) [m]
- Existence of water bodies within parks [y/n]
- Protection status of a single green space [y/n]

2. Maintenance *(inventory of UGS types, effort and costs for conservation)*:
- Density of public trees per grid cell [n/ha]

- Share of all public green areas per grid cell [%]
- Age of objects within {plant class|species} [years/plant class | years/species]
- Costs for cutting and watering per {plant class/ species} [€/m² | €/plant class | €/species]
- Sustainability (supply of natural UGS functions):
- Green space per capita [m²/person]
- Soil conditions [categories]

3. Attractiveness *(accessibility, usage and satisfaction with UGS, contribution to liveability and quality of life)*:
- Mean distance to the three closest public transport stops [m]
- Number of children in walking distance of playgrounds [n/playground]
- Share of residents within walking distance (500 m)/biking distance (2 km) of recreation grounds [%]

4. Profitability *(economic potential of agricultural, recreational, and touristic use of UGS)*:
- Share of agricultural and forestry areas with good soil conditions [%]
- Share of residential area within walking distance of 1 km from recreation grounds [%]

Our future steps refer to collecting as much information regarding chosen indicators as possible in order to get the most out of the existing model.

Budget
As defined in Contract made with utility company Nasadi d.o.o, payments were supposed to be done in 2 phases after delivered reports and finished works. First payment was made in December 2017 and second one in February 2018.

Costs description	Budget line (external/equipment/infrastructure)	Status (procurement in progress/contracted/paid)	Amount of the costs
Green Cadastre	External expertise cost related to the pilot action (preparation of a Green Register) including conceptual design, data collection, import of data collected, visualisation	PAID	12.500 EUR

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SP Meetings x3	External (Organisation of 6 FUA level Stakeholder Platform meetings for approx. 25 participants each (catering, venue etc.)	PAID	1500 EUR

Assessment

Implementation of the Green Cadastre went smoothly and was done by the set deadline which was December 31st 2017. As agreed Green Cadastre has been put online in order to be accessible to wider general public.

Challenges and amendments

Luckily there was no challenges while implementing the Cadastre because during the procurement phase we have chosen the company that already had experience with such work. The benefits of the Cadastre are yet to come.

Potential future risks

As implementation went smoothly so far, we do not expect any future delays. Hopefully we will get all information needed regarding indicators in time, so we could test our model.