

Improving the local governance processes through exchange of good practices, pilots and training in geospatial technologies “LOCAL – SATS”

D4.3.1 **Part A: Verifiable Indicators design report**
Part B: Indicator performance – An exemplary case study
Part C: Participating countries results



Part C: Participating countries results

The following table evaluates the Indicators for all participating countries at the date of 31-12-2014 (M12)

A similar evaluation will be performed at the end of the project (M24) for comparison reasons as part of the Task T5.3 and the Deliverable D. 5.3.1

APPENDIX A
Indicator forms

Information	Indicator Form
Code	UPL-1
Title	Population density
Category	Basic Urban planning Indicator/parameter
Definition	The number of inhabitants per square kilometer of urban space
Methodology	The indicators is calculated as the ratio of number of inhabitants over the total urban area
Measurement units	Inhabitants/km ²
Frequency of measurement	10 years (census frequency)
Collection level	City
Data types	<ul style="list-style-type: none"> ▪ Population data (alphanumeric) ▪ Urban areas (vector)
Data sources	<ul style="list-style-type: none"> ▪ Population data from census departments ▪ Urban areas from Local/Regional GIS office
Precautions	

Information	Indicator Form
Code	UPL-2
Title	Built-up density
Category	Basic Urban planning Indicator/parameter
Definition	The proportion of built-up areas within the political community boundaries
Methodology	The indicator is calculated as the ratio of built-up area over the total urban area. This data can be extracted also via automatic classification of satellite orthoimagery
Measurement units	%
Frequency of measurement	5 years
Collection level	City
Data types	<ul style="list-style-type: none"> ▪ Built-up area (vector) ▪ Total Urban area (vector)
Data sources	Local/Regional GIS office
Precautions	

Information	Indicator Form
Code	UPL-3
Title	Open space density
Category	Basic Urban planning Indicator/parameter
Definition	The proportion of built-up areas within the political community boundaries
Methodology	<p>The indicator is calculated as the ratio of open space area over the total urban area.</p> <p>This data can be extracted also via automatic classification of satellite orthoimagery</p>
Measurement units	%
Frequency of measurement	5 years
Collection level	City
Data types	<ul style="list-style-type: none"> ▪ Open space area (vector) ▪ Total Urban area (vector)
Data sources	Local/Regional GIS office
Precautions	

Information	Indicator Form
Code	UPL-4
Title	Green space density
Category	Basic Urban planning Indicator/parameter
Definition	The proportion of urban green areas within the political community boundaries
Methodology	<p>The indicator is calculated as the ratio of urban green area over the total urban area.</p> <p>The calculation of the urban green areas can only be extracted via automatic classification of satellite orthoimagery, preferably of high resolution</p>
Measurement units	%
Frequency of measurement	5 years
Collection level	City
Data types	<ul style="list-style-type: none"> ▪ Green space area (vector) ▪ Total Urban area (vector)
Data sources	Local/Regional GIS office
Precautions	

Information	Indicator Form
Code	UPL-5
Title	Land Use changes
Category	Basic Urban planning Indicator/parameter
Definition	<p>The Land use changes:</p> <ul style="list-style-type: none"> ▪ UPL-5a: Difference in Built-up space areas between times t1 and t2 ▪ UPL-5b: Difference in Open space areas between times t1 and t2 ▪ UPL-5c: Difference in Green space areas between times t1 and t2
Methodology	<p>The indicator is also visualized as the relevant land changes maps</p> <p>This data can be extracted also via automatic classification of satellite orthoimagery.</p> <p>Many algorithms have been developed in order to address change detection problems. Some of them include image overlay, image differencing, principal component analysis, vegetation index differencing and change vector analysis.</p>
Measurement units	Km ² , Thematic maps
Frequency of measurement	5 years
Collection level	City
Data types	<ul style="list-style-type: none"> ▪ Built-up spaces (vector) ▪ Green spaces (vector) ▪ Open spaces (vector)
Data sources	Local/Regional GIS office
Precautions	

Information	Indicator Form
Code	UPL-6
Title	Distance to critical services
Category	Basic Urban planning Indicator/parameter
Definition	<p>The average distance between specific points of critical infrastructure (Police Stations, Fire brigade Stations, Hospitals/Health Centres) is considered to assess the vulnerability of each area</p> <ul style="list-style-type: none"> ▪ UPL-6a: Average nearest neighbor distance between Police Stations ▪ UPL-6b: Average nearest neighbor distance between Fire brigade Stations ▪ UPL-6c: Average nearest neighbor distance between Hospitals/Health Centres
Methodology	The average closest distances between specific POIs (Police Stations, Fire brigade stations, Hospitals/health centres) are calculated
Measurement units	Km, Thematic maps
Frequency of measurement	5 years
Collection level	City
Data types	<ul style="list-style-type: none"> ▪ Road network (vector) ▪ Critical Infrastructure POIs (vector)
Data sources	Local/Regional GIS office
Precautions	

Information	Indicator Form
Code	IMP-1
Title	Use of spatial data
Category	Impact Indicator
Definition	Percentage of regional authorities in the country that use spatial data in urban planning processes
Methodology	Ratio of regional authorities that use spatial data in urban planning processes over the total number of regional authorities in the country. This data can be collected with Qs.
Measurement units	%
Frequency of measurement	5 years
Collection level	Region
Data types	<ul style="list-style-type: none"> ▪ Number of regional authorities (alphanumeric)
Data sources	Regional planning authorities
Precautions	

Information	Indicator Form
Code	IMP-2
Title	Dissemination of results
Category	Impact Indicator
Definition	Number of dissemination activities in the country
Methodology	Number of dissemination activities in the country over the project life time. This data will be available within LocalSats.
Measurement units	Integer number
Frequency of measurement	2 years
Collection level	Region
Data types	<ul style="list-style-type: none"> ▪ Number of dissemination activities (alphanumeric)
Data sources	Regional planning authorities
Precautions	

Information	Indicator Form
Code	OCM-1.1
Title	Budget allocation
Category	Outcome Indicator
Definition	Budget allocation for software purchase and “smart tools” development per year
Methodology	Budget allocation per regional authority per year. The data can be collected with Qs.
Measurement units	M€
Frequency of measurement	2 years
Collection level	Country
Data types	<ul style="list-style-type: none"> ▪ Budget per regional authority (alphanumeric)
Data sources	Regional planning authorities
Precautions	

Information	Indicator Form
Code	OCM-1.2
Title	Policy evaluation
Category	Outcome Indicator
Definition	Number of spatial data layers used for scenarios assessment
Methodology	Maximum Number of spatial data layers used for scenarios assessment per country. This data will be available within LocalSats.
Measurement units	Integer
Frequency of measurement	2 years
Collection level	Country
Data types	<ul style="list-style-type: none"> ▪ Number of GIS layers (alphanumeric)
Data sources	Regional planning authorities
Precautions	

Information	Indicator Form
Code	OCM-1.3
Title	Data standardization
Category	Outcome Indicator
Definition	Degree of effective use of NSDI/INSPIRE infrastructure
Methodology	This data will be available within LocalSats through National Reports. It is an estimation by the National Partner
Measurement units	%
Frequency of measurement	2 years
Collection level	Country
Data types	<ul style="list-style-type: none"> ▪ Use of NSDI/INSPIRE infrastructure
Data sources	Regional planning authorities
Precautions	

Information	Indicator Form
Code	OCM-2.1
Title	Authorities' on-line facilities
Category	Outcome Indicator
Definition	Extent to which key government bodies have on-line facilities for citizen engagement.
Methodology	<p>This is measured by composite indicator totaling 100 points:</p> <ol style="list-style-type: none"> 1. Key government bodies have websites established (0-20) 2. Websites contain functional contact information (0-20) 3. Websites provide functional access to major policy documents (0-20) 4. Websites provide links to other major government departments (0-20) 5. Websites facilitate online payment for important government services (0-20)
Measurement units	Integer (0-100)
Frequency of measurement	2 years
Collection level	Country
Data types	<ul style="list-style-type: none"> ▪ Web site evaluation
Data sources	Regional planning authorities
Precautions	

Information	Indicator Form
Code	OCM-3.1
Title	Authorities' on-line facilities exposure
Category	Outcome Indicator
Definition	Number of visits to website for urban planning per year
Methodology	The data can be collected with Qs.
Measurement units	Integer
Frequency of measurement	2 years
Collection level	Country
Data types	<ul style="list-style-type: none"> ▪ Web site evaluation
Data sources	Regional planning authorities
Precautions	

Information	Indicator Form
Code	OPT-1.1
Title	Trained officials
Category	Output Indicator
Definition	Number of participants in training workshops per country
Methodology	Number of participants in training workshops per country. The data will be collected through participants' lists in each LocalSats event.
Measurement units	Integer number
Frequency of measurement	2 years
Collection level	Country
Data types	<ul style="list-style-type: none"> ▪ Number of participants (alphanumeric)
Data sources	LocalSats events
Precautions	

Information	Indicator Form
Code	OPT-1.2
Title	Free “smart tools”
Category	Output Indicator
Definition	Number of “smart tools” offered for free to regional/local authorities
Methodology	Number of “smart tools” downloaded from LocalSats website
Measurement units	Integer number
Frequency of measurement	2 years
Collection level	Country
Data types	<ul style="list-style-type: none"> ▪ Number of downloads (alphanumeric)
Data sources	LocalSats website
Precautions	

Information	Indicator Form
Code	OPT-2.1
Title	Disseminated Reports
Category	Output Indicator
Definition	Number of hard copies of Reports disseminated
Methodology	Number of hard copies of Reports disseminated per country. The data will be collected through LocalSats.
Measurement units	Integer number
Frequency of measurement	2 years
Collection level	Country
Data types	<ul style="list-style-type: none"> ▪ Number of participants (alphanumeric)
Data sources	LocalSats reports
Precautions	

Information	Indicator Form
Code	OPT-2.2
Title	Benefited stakeholders
Category	Output Indicator
Definition	Percentage of regional/local authorities per country that received a copy of the dissemination report
Methodology	Ratio of regional/local authorities that received hard copies of the dissemination Reports over the total number of regional/local authorities at each country. The data will be collected through LocalSats.
Measurement units	%
Frequency of measurement	2 years
Collection level	Country
Data types	<ul style="list-style-type: none"> ▪ Number of benefited regional authorities (alphanumeric)
Data sources	LocalSats reports
Precautions	

Information	Indicator Form
Code	OPT-2.3
Title	Increased transparency
Category	Output Indicator
Definition	Number of hits through LocalSats website to other linked websites
Methodology	Number of hits through from LocalSats website per country The data will be collected through LocalSats website.
Measurement units	Integer number
Frequency of measurement	2 years
Collection level	Country
Data types	<ul style="list-style-type: none"> ▪ Number of hits (alphanumeric)
Data sources	LocalSats website
Precautions	

Information	Indicator Form
Code	OPT-3.1
Title	Info-days dissemination
Category	Output Indicator
Definition	Number of participants in Info-days per country
Methodology	Number of participants in Info-days per country. The data will be collected through participants' lists in each LocalSats event.
Measurement units	Integer number
Frequency of measurement	2 years
Collection level	Country
Data types	<ul style="list-style-type: none"> ▪ Number of hits (alphanumeric)
Data sources	LocalSats events
Precautions	

Information	Indicator Form
Code	OPT-3.2
Title	Internet dissemination
Category	Output Indicator
Definition	Number of visits to LocalSats website
Methodology	Number of hits to LocalSats website per country The data will be collected through LocalSats website.
Measurement units	Integer number
Frequency of measurement	2 years
Collection level	Country
Data types	<ul style="list-style-type: none"> ▪ Number of visits (alphanumeric)
Data sources	LocalSats website
Precautions	

