

CityBench

ESPON CityBench for benchmarking European Urban Zones

Annex I: Indicators and Cities

Scientific Platform / Tools 2013/3/10

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This report presents a more detailed overview of the analytical approach to be applied by the project. This Applied Research Project is conducted within the framework of the ESPON 2013 Programme, partly financed by the European Regional Development Fund.

The partnership behind the ESPON Programme consists of the EU Commission and the Member States of the EU27, plus Iceland, Liechtenstein, Norway and Switzerland. Each partner is represented in the ESPON Monitoring Committee.

This report does not necessarily reflect the opinion of the members of the Monitoring Committee.

Information on the ESPON Programme and projects can be found on www.espon.eu

The web site provides the possibility to download and examine the most recent documents produced by finalised and ongoing ESPON projects.

This basic report exists only in an electronic version.

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1. Introduction

Themes	urb_vluz	urb_iluz	urb_vcity	urb_ikej	urb_icity	UA_2012	ESPONdb	data	indic	total	prop. ind.
Connectivity / accessibility	18	24	13	1	15	6	31	37	71	108	18
Economy / Politics	45	38	47	4	43	29	46	121	131	252	23
Environment / air quality	12	13	29	6	31	23	54	64	104	168	16
Knowledge / smartness	16	13	16		18	6	1	38	32	70	8
Quality of life	43	52	25	4	37	15	6	83	99	182	18
Population	59	45	5			11	5	75	50	125	8
Other							7	0	7	7	
total	193	185	135	15	144	90	150	418	494	912	91
LUZ	355	355	378	378	378	695	313				306/150

Table 1. Resume of studied datasets and proposed indicators and LUZ

1.1. Proposed Indicators

The TPG proposes to focus on building indicators from authoritative datasets referring to LUZ areas and/or NUTS 3 convertible areas. The initial datasets considered are urb_vluz (containing variables), urb_iluz (containing indicators), ESPON projects data (containing indicators) and Urban Audit 2012 (containing variables and considered only if different from Eurostat data). Combining all of them, the TPG proposes an initial set of indicators grouped by themes and divided in several sub-indicators.

1.2. Proposed LUZ coverage

Since there is (as yet) hardly any data available for the 695 LUZ areas included in the 2012 Urban Audit, the TPG proposes to use an initial set of LUZ based upon the coverage of the most populated datasets: Eurostat (LUZ 2004) and ESPON projects (NUTS 3, convertible to LUZ 2004). From this resulting 313 LUZ areas, TPG will consider, in a first approach, the top 100-150 most complete LUZ, in order to build a reliable comparison tool. The TPG will use LUZ 2012 delimitations in order to be able to simply add the new LUZ when data is available for 2012.

1.3. Missing gaps

In order to try to overcome the evident gap in the knowledge/smartness theme data, the TPG proposes to use data provided by people through social media as an alternative source of information. To be able to do so, a web 2.0 broker service will be used to retrieve quantities of data, using word filtering or not, related to LUZ areas. As the quality of this data cannot be assessed, TPG will take into account only the quantity of the activity or mentions as an indicator of the LUZ reliability at social media level.

2. Data Sources and Proposed Indicators

2.1. Eurostat

Data published by Eurostat at LUZ level covers 355 LUZ areas in the EU27+4 context over a 20 year timeframe and has an acceptable completeness. LUZ areas covered mostly reflect the LUZ 2004 definition (313), which makes this dataset an essential source of information.

Table 2 presents variables collected for LUZ areas (from urb_vluz dataset) grouped in themes, indicators and sub indicators.

source		Eurostat						
table		urb_vluz	Data collected for larger urban zones					
data		193						
LUZ		355						
coverage		1989-1993	1994-1998	1999-2002	2003-2006	2007-2009	2010-2012	
code	label	indicator	subindicators		normalization		n	
DE1001V	Total Resident Population	total resident population			by area		1	
DE1002V	Male Resident Population		by gender		proportion			
DE1003V	Female Resident Population		by age groups		proportion			
DE1067V	Total Resident Population 0-2		by gender and age group		proportion			
DE1068V	Male Resident Population 0-2		by origin		proportion			
DE1069V	Female Resident Population 0-2		living in households		proportion			
DE1070V	Total Resident Population 3-4							
DE1071V	Male Resident Population 3-4							
DE1072V	Female Resident Population 3-4							
DE1040V	Total Resident Population 0-4							
DE1041V	Male Resident Population 0-4							
DE1042V	Female Resident Population 0-4							
DE1043V	Total Resident Population 5-14							
DE1044V	Male Resident Population 5-14							
DE1045V	Female Resident Population 5-14							
DE1046V	Total Resident Population 15-19							
DE1047V	Male Resident Population 15-19							
DE1048V	Female Resident Population 15-19							
DE1049V	Total Resident Population 20-24							
DE1050V	Male Resident Population 20-24							
DE1051V	Female Resident Population 20-24							
DE1052V	Total Resident Population 25-54							
DE1053V	Male Resident Population 25-54							
DE1054V	Female Resident Population 25-54							
DE1058V	Total Resident Population 25-34							
DE1059V	Male Resident Population 25-34							
DE1060V	Female Resident Population 25-34							
DE1061V	Total Resident Population 35-44							
DE1062V	Male Resident Population 35-44							

DE1063V	Female Resident Population 35-44								
DE1064V	Total Resident Population 45-54								
DE1065V	Male Resident Population 45-54								
DE1066V	Female Resident Population 45-54								
DE1073V	Median population age	median age							2
DE1025V	Total Resident Population 55-64								
DE1026V	Male Resident Population 55-64								
DE1027V	Female Resident Population 55-64								
DE1028V	Total Resident Population 65-74								
DE1029V	Male Resident Population 65-74								
DE1030V	Female Resident Population 65-74								
DE1055V	Total Resident Population 75 and over								
DE1056V	Male Resident Population 75 and over								
DE1057V	Female Resident Population 75 and over								
DE2001V	Residents who are Nationals								
DE2002V	Residents who are Nationals of other EU Member State								
DE2003V	Residents who are not EU Nationals								
DE2005V	Residents who are not EU Nationals and citizens of a country with high HDI								
DE2006V	Residents who are not EU Nationals and citizens of a country with a medium or low HDI								
DE2004V	Nationals born abroad								
DE2007V	Number of residents born abroad (not only nationals)								
DE3001V	Total Number of Households	number of households					by area		3
DE3017V	Total Resident Population living in households (excluding institutional households)					by composition	proportion		
DE3002V	One person households (Total)					living in type of dwelling	proportion		
DE3005V	Lone parent households (Total)					(house/ apartment)			
DE3008V	Lone pensioner (above retirement age) households Total					by relation with dwelling	proportion		
DE3009V	Lone pensioner (above retirement age) households Male					(owned/ social/ rented)			
DE3010V	Lone pensioner (above retirement age) households Female					by income	proportion		
DE3011V	Households with children aged 0 to under 18					(<60% median/ <50% ave/ SS)			
DE3018V	Households with 3 children or more under 18								
SA1001V	Number of dwellings	number of dwellings					by area		4
SA1004V	Number of houses					by type	proportion		
SA1005V	Number of apartments					(house/ apartment)			
SA1007V	Number of households living in houses					lacking basic amenities	proportion		
SA1008V	Number of households living in apartments					non-conventional	proportion		
SA1011V	Households owning their own dwelling								

SA1012V	Households in social housing						
SA1013V	Households in private rented housing						
SA1016V	Average price for an apartment per m2	average price per m2					5
SA1023V	Average price for a house per m2		by type			proportion	
SA1049V	Average annual rent for housing per m2			(house/ apartment)			
SA1018V	Dwellings lacking basic amenities		by relation with dwelling			proportion	
SA1019V	Average occupancy per occupied dwelling			(buy/ rent)			
SA1025V	Empty conventional dwellings	average occupancy					6
SA1026V	Non-conventional dwellings		distribution			proportion	
SA1046V	Number of overcrowded households (>1 persons in 1 room)			(empty/ overcrowded/ 'normal')			
SA1022V	Average area of living accommodation (m2 per person)	average area					7
SA2004V	Infant Mortality per year	infant mortality				by population?	8
SA2005V	Male Infant Mortality per year					by live births?	
SA2006V	Female Infant Mortality per year		by gender			proportion	
SA2007V	Number of live births per year	births				by population?	9
SA2008V	Number of live births per year (Male)		by gender			proportion	
SA2009V	Number of live births per year (Female)						
SA2013V	Number of deaths per year under 65 due to heart diseases and respiratory illness	deaths under 65				by population?	10
SA2014V	Number of deaths per year under 65 due to heart diseases and respiratory illness (Male)					by total deaths?	
SA2015V	Number of deaths per year under 65 due to heart diseases and respiratory illness (Female)		by cause			proportion	
SA2016V	Total deaths under 65 per year			(heart-respiratory/ others)			
SA2017V	Total deaths under 65 per year (Male)		by gender				
SA2018V	Total deaths under 65 per year (Female)		by cause and gender				
SA2019V	Total deaths per year	suicides				by population?	11
SA2020V	Total deaths per year (Male)					by total deaths?	
SA2021V	Total deaths per year (Female)						
SA2022V	Number of hospital beds	hospital beds				by population	12
SA2026V	Number of hospital discharges of in-patients	discharges				by population	13
SA2027V	Number of practising physicians	practitioners				by population	14
SA2028V	Number of practising dentists		by type			proportion	
SA2029V	Number of deaths per year due to suicide			(physicians/ dentists/ general)			
SA2030V	Number of general practitioners						
SA3001V	Total number of recorded crimes within city [country for national data]	crimes				by population	15
SA3005V	Number of murders and violent deaths		by type			proportion	
SA3006V	Number of car thefts			(murders/ car thefts/ burglary/ others)			

SA3007V	Number of domestic burglary					
EC1001V	Total Economically Active Population	active population	by population	proportion		16
EC1002V	Male Economically Active Population					
EC1003V	Female Economically Active Population					
EC1142V	Total Economically Active Population 15-24					
EC1143V	Male Economically Active Population 15-24					
EC1144V	Female Economically Active Population 15-24					
EC1145V	Total Economically Active Population 55-64					
EC1146V	Male Economically Active Population 55-64					
EC1147V	Female Economically Active Population 55-64					
EC1010V	Residents Unemployed					
EC1011V	Male Residents Unemployed					
EC1012V	Female Residents Unemployed					
EC1148V	Residents Unemployed 15-24					
EC1149V	Male Residents Unemployed 15-24					
EC1150V	Female Residents Unemployed 15-24					
EC1151V	Residents Unemployed 55-64					
EC1152V	Male Residents Unemployed 55-64					
EC1153V	Female Residents Unemployed 55-64					
EC1154V	Mehr als sechs Monate ununterbrochen Erwerbslose im Alter von 15 - unter 25 Jahren, insgesamt	long duration unemployed, 15-24	by population?	proportion		18
EC1155V	Male unemployed continuously for more than six months, 15-24					
EC1156V	Female unemployed continuously for more than six months, 15-24					
EC1157V	Unemployed continuously for more than one year, 55-64	long duration unemployed, 55-64	by population?	proportion		19
EC1158V	Male unemployed continuously for more than one year, 55-64					
EC1159V	Female unemployed continuously for more than one year, 55-64					
EC1034V	Total Full-Time Employment					
EC1035V	Male Full-Time Employment					
EC1036V	Female Full-Time Employment					
EC1088V	Total Part-Time Employment	jobless households	by households	proportion		20
EC1089V	Male Part-Time Employment					
EC1090V	Female Part-Time Employment					
EC1172V	Number of jobless households with children	by children	by households	proportion		20
EC1173V	Number of jobless households without children					
EC2001V	Gross Domestic Product of city / region / country	(with/ without)				
EC2030V	Gross Domestic Product of NUTS 3 region in Euros					

EC2031V	Gross Domestic Product per inhabitant in PPS of NUTS 3 region					
EC3039V	Median disposable annual household income	median household income			21	
EC3045V	Household Income: Quintile 4 (income with 20% households above, 80% below)		quantile 1			
EC3048V	Household Income: Quintile 3 (income with 40% households above, 60% below)		quantile 2			
EC3051V	Household Income: Quintile 2 (income with 60% households above, 40% below)		quantile 3			
EC3054V	Household Income: Quintile 1 (income with 80% households above, 20% below)		quantile 4			
EC3056V	Total Number of Households (relating to the reported household income)					
EC3055V	Total Number of Households with less than 60% of the national median disposable annual household income					
EC3057V	Total Number of Households with less than half of the national average income					
EC3060V	Total Number of Households reliant on social security benefits (>50%)					
EC3063V	Individuals reliant on social security benefits (>50%)	individuals SS		by population	22	
TE1001V	Number of children 0-4 in day care	day care		by pop under 4?	23	
TE1006V	Number of children 0-2 in day care			by population?		
TE1007V	Number of children 3-4 in day care		by age groups	proportion		
TE1005V	Total students registered for final year of compulsory education	registered in final year		by pop under 16?	24	
TE1030V	Students leaving compulsory education without having a diploma			by population?		
TE1034V	Average number of pupils in a class (primary schools)	early leavers		by pop under 16?	25	
TE1035V	Average number of pupils in a class (secondary schools)			by population?		
TE2025V	Number of residents (aged 15-64) with ISCED level 0, 1 or 2 as the highest level of education	average number of pupils			26	
TE2026V	Number of residents (aged 15-64) with ISCED level 0, 1 or 2 as the highest level of education - male		by level	bars		
TE2027V	Number of residents (aged 15-64) with ISCED level 0, 1 or 2 as the highest level of education - female	aged 15-64 ISCED level		by pop 15-64	27	
TE2028V	Number of residents (aged 15-64) with ISCED level 3 or 4 as the highest level of education		by level	proportion		
TE2029V	Number of residents (aged 15-64) with ISCED level 3 or 4 as the highest level of education - male		by level and gender	proportion		
TE2030V	Number of residents (aged 15-64) with ISCED level 3 or 4 as the highest level of education - female					
TE2031V	Number of residents (aged 15-64) with ISCED level 5 or 6 as the highest level of education					

TE2032V	Number of residents (aged 15-64) with ISCED level 5 or 6 as the highest level of education - male					
TE2033V	Number of residents (aged 15-64) with ISCED level 5 or 6 as the highest level of education - female					
EN2028V	Number of residents exposed to air traffic noise >65 dB(A) at day time	exposed to >55			by population	28
EN2029V	Number of residents exposed to air traffic noise >55 dB(A) at night time	by level			proportion	
EN5003V	Total land area (km2) according to cadastral register		(>55 / >65)			
EN5015V	Water and wetland	land area			by population?	29
EN5012V	Green space area	by use			propotion	
EN5016V	Land used for agricultural purposes					
EN5024V	Land used for commercial activities (industry, trade, offices)					
EN5004V	Land area in housing/residential use					
EN5025V	Land used for transport (road, rail, air, ports)					
EN5011V	Land area in recreational, sports and leisure use					
EN5026V	other land use					
EN5001V	Green space to which the public has access	acesible green space			by population	30
TT1003V	Percentage of journeys to work by car	journeys to work			100%	31
TT1010V	Percentage of journeys to work by public transport (rail, metro, bus, tram)	by transport			proportion	
TT1006V	Percentage of journeys to work by motor cycle					
TT1007V	Percentage of journeys to work by bicycle					
TT1008V	Percentage of journeys to work by foot					
TT1012V	Percentage of journeys to work by car or motor cycle					
TT1019V	Average time of journey to work (minutes)	average time to work				
TT1020V	Average length of journey to work by private car (km)	average lenght to work				33
TT1069V	Number of stops of public transport	number of stops				34
TT1083V	Number of buses (or bus equivalents) operating in the public transport	number of buses				35
TT1057V	Number of private cars registered	number of cars			by population	36
TT1070V	Num of park and ride parking spaces	number of parkings			by number of cars?	37
TT1060V	Number of deaths in road accidents				by population	38
TT1061V	Number of persons seriously injured in road accidents	affected by road accidents			by population?	
TT1071V	Accessibility by air (EU27=100)				by cars+buses?	
TT1072V	Accessibility by rail (EU27=100)	death/ seriously injured				
TT1073V	Accessibility by road (EU27=100)	acesibility			proportion	39
TT1074V	Multimodal accessibility (EU27=100)	by transport			proportion	
CR1015V	Number of public swimmingpools	number of leisure ammenities			by population	40

Table 2. Data and Indicators from urb_vluz

Table 3 presents indicators collected for LUZ areas (from urb_iluz dataset) grouped in themes, indicators and sub indicators, where some of them refer to the ones defined in urb_vluz.

source		Eurostat						
table	urb_iluz	Derived indicators for larger urban zones						
data	185							
LUZ	355							
coverage	1989-1993	1994-1998	1999-2002	2003-2006	2007-2009	2010-2012		
code	label	indicator	subindicators			normalization		n
DE1001I	Total population in Urban Audit cities							
DE1011I	Total Population at working age	pop at working age			by population		41	
DE1067I	Proportion of Total Resident Population aged 0-2	included in					1	
DE1068I	Proportion of Male Resident Population aged 0-2							
DE1069I	Proportion of Female Resident Population aged 0-2							
DE1070I	Proportion of Total Resident Population aged 3-4							
DE1071I	Proportion of Male Resident Population aged 3-4							
DE1072I	Proportion of Female Resident Population aged 3-4							
DE1040I	Proportion of total population aged 0-4							
DE1043I	Proportion of total population aged 5-14							
DE1046I	Proportion of total population aged 15-19							
DE1049I	Proportion of total population aged 20-24							
DE1073I	Proportion of Total Resident Population aged 25-34							
DE1074I	Proportion of Male Resident Population aged 25-34							
DE1075I	Proportion of Female Resident Population aged 25-34							
DE1076I	Proportion of Total Resident Population aged 35-44							
DE1077I	Proportion of Male Resident Population aged 35-44							
DE1078I	Proportion of Female Resident Population aged 35-44							
DE1064I	Proportion of Total Resident Population aged 45-54							
DE1065I	Proportion of Male Resident Population aged 45-54							
DE1066I	Proportion of Female Resident Population aged 45-54							
DE1052I	Proportion of total population aged 25-54							
DE1025I	Proportion of total population aged 55-64							
DE1082I	Proportion of male population aged 55-64							
DE1083I	Proportion of female population aged 55-64							

DE1079I	Proportion of total population aged 15-64								
DE1080I	Proportion of male population aged 15-64								
DE1081I	Proportion of female population aged 15-64								
DE1028I	Proportion of total population aged 65-74								
DE1029I	Proportion of male population aged 65-74								
DE1030I	Proportion of female population aged 65-74								
DE1055I	Proportion of total population aged 75 and over								
DE1003I	Proportion of females to males in total population								
DE1057I	Proportion of females to males in age 75 and over								
DE1061I	Total population change over 1 year	change							42
DE1062I	Total annual population change over approx. 5 years								
DE1058I	Demographic dependency: (<20 + >65) / 20-64 years	dependency							43
DE1059I	Demographic young age Dependency Index: (lt 20 years) / 20-64 years								
DE1060I	Demogr. old age dependency: > 65 / 20-64 years								
DE2001I	Nationals as a proportion of total population	included in							1
DE2002I	EU nationals as a proportion of total population								
DE2003I	Non-EU nationals as a proportion of total population								
DE2004I	Nationals born abroad as a proportion of total population								
DE2005I	Proportion of Residents who are not EU Nationals and citizens of a country with high HDI								
DE2006I	Proportion of Residents who are not EU Nationals and citizens of a country with a medium or low HDI								
DE3003I	Total Number of Households	included in							3
DE3004I	Average household size in Urban Audit cities - number of persons per household								
DE3002I	Proportion of one-person households in Urban Audit cities - %								
DE3005I	Proportion of households that are lone-parent households								
DE3008I	Proportion of households that are lone-pensioner households								
DE3009I	Lone-pensioner households male / lone pensioner households female								
DE3011I	Proportion of households with children aged 0-17 in Urban Audit cities - %								
DE3016I	Lone parent households per 100 households with children aged 0-17								
SA1001I	Number of dwellings	included in							4
SA1005I	Number of apartments								
SA1004I	Number of houses								

SA1051I	Number of houses per 100 apartments	to be included in								4
SA1016I	Average price per m2 for an apartment	included in								5
SA1023I	Average price for a house per m2									
SA1036I	Average price per m2 for an apartment to median annual household income									
SA1049I	Average annual rent for housing per m2	to be included in								5
SA1018I	Proportion of dwellings lacking basic amenities	included in								4
SA1026I	Proportion of non-conventional dwellings									
SA1019I	Average occupancy per occupied dwelling	included in								6
SA1022I	Average living area in Urban Audit cities - m ² per person	included in								7
SA1050I	Percentage of overcrowded households (>1 persons in 1 room)	included in								6
SA1025I	Empty conventional dwellings per total No. of dwellings									
SA1011I	Proportion of households living in owned dwellings in Urban Audit cities - %	included in								3
SA1012I	Proportion of households living in social housing									
SA1013I	Proportion of households living in private rented housing									
SA1007I	Proportion of households living in houses									
SA1008I	Proportion of households living in apartments									
SA2029I	Crude death rate per 1000 residents	deaths						by population		44
SA2030I	Crude death rate of male residents per 1000 male residents							by gender	proportion	
SA2031I	Crude death rate of female residents per 1000 female residents									
SA2019I	Total deaths per year									
SA2020I	Total deaths per year (Male)									
SA2021I	Total deaths per year (Female)									
SA2016I	Mortality rate for <65 per year	included in								10
SA2017I	Mortality rate for <65 per year (Male)									
SA2018I	Mortality rate for <65 per year (Female)									
SA2013I	Mortality rate for persons aged 64 or less from heart diseases and respiratory illnesses living in Urban Audit cities - number of deaths per 1000 i...									
SA2014I	Mortality rate for males under 65 from heart diseases and respiratory illness									
SA2015I	Mortality rate for females under 65 from heart diseases and respiratory illness.									
SA2007I	Live births per 1000 residents	included in								9
SA2004I	Infant Mortality rate per year (per 1000 live births)	included in								8

SA2005I	Male Infant Mortality rate per year (per 1000 live births)								
SA2006I	Female Infant Mortality rate per year (per 1000 live births)								
SA2022I	Available hospital beds in Urban Audit cities - per 1000 inhabitants	included in							12
SA2032I	Number of hospital discharges of in-patients per hospital bed	to be included in							13
SA2026I	Number of hospital discharges of in-patients per 1000 residents	included in							13
SA2027I	Number of practising physicians per 1000 residents	included in							14
SA2028I	Number of practising dentists per 1000 residents								
SA3001I	Total number of recorded crimes per 1000 population	included in							15
SA3005I	Number of murders and violent deaths per 1000 population								
SA3006I	Car thefts in Urban Audit cities - number per 1000 inhabitants								
SA3007I	Number of domestic burglary per 1000 population								
EC1201I	Annual average change in employment over approx. 5 years	change							45
EC1010I	Number of unemployed	included in							17
EC1020I	Unemployment rate in Urban Audit cities - %								
EC1011I	Unemployment rate Male								
EC1012I	Unemployment rate Female								
EC1148I	Proportion of residents unemployed 15-24								
EC1149I	Proportion of male residents Unemployed 15-24								
EC1150I	Proportion of female residents Unemployed 15-24								
EC1151I	Proportion of residents Unemployed 55-64								
EC1152I	Proportion of male residents Unemployed 55-64								
EC1153I	Proportion of female residents Unemployed 55-64								
EC1154I	Proportion of unemployed aged 15-24 unemployed for more than six months	included in							18
EC1155I	Proportion of long term young unemployed males								
EC1156I	Proportion of long term young unemployed females								
EC1157I	Proportion of unemployed aged 55-64 unemployed for more than one year	included in							19
EC1158I	Proportion of long term old unemployed males								
EC1159I	Proportion of long term old unemployed females								
EC1202I	Proportion of unemployed who are under 25	to be included in							18
EC1001I	Economic activity rate in Urban Audit cities - %	included in							16
EC1002I	Male Activity Rate								
EC1003I	Female Activity Rate								

EC1005I	Net activity rate residents aged 15-64							
EC1142I	Activity Rate 15-24							
EC1143I	Activity Rate 15-24 male							
EC1144I	Activity Rate 15-24 female							
EC1006I	Net activity rate residents aged 15-24							
EC1145I	Activity Rate 55-64							
EC1146I	Activity Rate 55-64 male							
EC1147I	Activity Rate 55-64 female							
EC1007I	Net activity rate residents aged 55-64							
EC3039I	Median disposable annual household income	included in						21
EC3054I	Ratio of first to fourth quintile earnings	to be included in						21
EC3051I	Household Income: Quintile 2 (income with 60% households above, 40% below)	included in						21
EC3048I	Household Income: Quintile 3 (income with 40% households above, 60% below)							
EC3057I	Percentage of the households receiving less than half of the national average household income	included in						3
EC3055I	Percent. households with less than 60% of the national median annual disposable income							
EC3060I	Proportion of households reliant upon social security							
EC3063I	Proportion of individuals reliant on social security	included in						22
TE1006I	Children 0-2 in day care (publ.&priv) per 1000 children	included in						23
TE1007I	Children 3-4 in day care (publ.&priv) per 1000 children							
TE1001I	Number of children 0-4 in day care (public and private provision) per 1000 children 0-4							
TE1030I	Proportion of students not completing their compulsory education	included in						25
TE2025I	Prop. of working age population qualified at level 1 or 2 ISCED	included in						27
TE2026I	Prop. of working age population qualified at level 1 or 2 ISCED - male							
TE2027I	Prop. of working age population at level 1 or 2 ISCED - female							
TE2028I	Prop. of working age population qualified at level 3 or 4 ISCED							
TE2029I	Prop. of working age population qualified at level 3 or 4 ISCED - male							
TE2030I	Prop. of working age population qualif. at level 3 or 4 ISCED - female							
TE2031I	Proportion of population aged 15-64 qualified at tertiary level (ISCED 5-6) living in Urban Audit cities - %							
TE2032I	Prop. of working age population qualified at level 5 or 6 ISCED - male							
TE2033I	Prop. of working age population qualif. at level 5 or 6 ISCED - female							
EN5003I	Total land area (km2) according to	included in						29

	cadastral register				
EN5001I	Green space (in m2) to which the public has access, per capita	included in			30
EN5012I	Proportion of the area in green space	included in			29
EN5016I	Proportion of the area used for agricultural purposes				
EN5024I	Proportion of the area used for commercial activities (industry, trade, offices)				
EN5025I	Proportion of the area used for transport (road, rail, air, ports)				
EN5015I	Water and wetland				
EN5011I	Proportion of the area in recreational sports and leisure use				
EN5027I	Land area (in m2) in recreational, sports and leisure use per capita	to be included in			30
EN5004I	Proportion of the area in housing/residential use	included in			29
EN5026I	Proportion of the area use for other purposes				
EN5101I	Population density in Urban Audit cities	included in			1
EN5102I	Net residential density - pop. per land area in housing	population density		by residential use area	46
TT1003I	Share of journeys to work by car in Urban Audit cities - %	included in			31
TT1012I	Proportion of journeys to work by car or motor cycle				
TT1006I	Proportion of journeys to work by motor cycle				
TT1007I	Proportion of journeys to work by bicycle				
TT1008I	Proportion of journeys to work by foot				
TT1010I	Proportion of journeys to work by public transport (rail, metro, bus, tram)				
TT1057I	Registered cars in Urban Audit cities - number of cars per 1000 inhabitants	included in			36
TT1013I	Number of registered motor cycles per 1000 population	to be included in			36
TT1060I	Number of deaths in road accidents per 10000 population	total vehicles		by population	
TT1061I	Number of persons seriously injured in road accidents per 10000 population	by type			
TT1019I	Average time of journey to work		(car/ motorcycle)		
TT1020I	Average length of journey to work by private car (km)	included in			32,33,38
TT1066I	Length of public transport network / land area	length of public transport		by area	47
TT1076I	Length of public transport network per inhabitant			by population	
TT1087I	Number of buses (or bus equivalents) operating in the public transport per 1000 pop	included in			35
TT1082I	Number of stops of public transport per 1000 pop.	included in			34
TT1069I	Number of stops of public transport per km2	to be included in			34

TT1091I	Number of stops per 1 km of public transport network								
TT1070I	Number of park and ride parking spaces per 1000 pop.	included in							37
TT1083I	Number of park and ride parking spaces per 1000 cars								
TT1071I	Accessibility by air (EU27=100)	included in							40
TT1072I	Accessibility by rail (EU27=100)								
TT1073I	Accessibility by road (EU27=100)								
TT1074I	Multimodal accessibility (EU27=100)								

Table 3. Data and Indicators from urb_iluz

Variables and indicators from other datasets studied such as urb_vcity, urb_icity or urb_ikey are not considered here, due to the fact that they do not refer to LUZ areas. There is a small difference between data collected and cities covered at both geographical levels.

2.2. Urban Audit

The Urban Audit is a joint effort by the Directorate-General for Regional Policy (DG REGIO) and Eurostat to provide reliable and comparative information on selected urban areas in Member States of the European Union and the candidate countries. LUZ areas covered reflect the LUZ 2004 definition (313) for the period 1989 – 2009; data is derived from urb_iluz and urb_vluz datasets. LUZ areas for the period 2010-2012 reflect the LUZ 2012 definition; this data is still being collected.

Table 4 presents variables collected for LUZ areas grouped in themes, indicators and sub indicators, where some of them refer to the ones defined in urb_vluz and urb_iluz.

source	UA						
table	UA 2012						
data	187	(overlapping with urb_vluz, showing the 86 different ones)					
LUZ	695						
cities	915						
coverage	2010-2012						
code	label	indicator	subindicators		normalization		n
DE1074V	Population on the 1st of January, 5-9 years, total	to be included in					1
DE1075V	Population on the 1st of January, 5-9 years, male						
DE1076V	Population on the 1st of January, 5-9 years, female						
DE1077V	Population on the 1st of January, 10-14 years, total						
DE1078V	Population on the 1st of January, 10-14 years, male						
DE1079V	Population on the 1st of January, 10-14 years, female						
DE2008V	Native-born		included in				
DE2009V	Foreign-born						
DE2010V	Foreign-born in a EU country						
DE2011V	Foreign-born in a non-EU country						
DE2012V	Foreigners						
SA1029V	Number of people in accommodation for the homeless	to be included in					3
SA1050V	Average price for buying a house	included in					5

SA1051V	Average price for buying an apartment																																																																																
EC1174V	Economically active population, 20-64, total	to be included in					16																																																																										
EC1175V	Economically active population, 20-64, male																																																																																
EC1176V	Economically active population, 20-64, female																																																																																
EC1177V	Persons employed, 20-64, total	person employed					48																																																																										
EC1178V	Persons employed, 20-64, male							by population? by active population?	by dedicated time (from 16) (full/ part)	proportion																																																																							
EC1179V	Persons employed, 20-64, female												by gender	proportion																																																																			
EC1180V	Persons employed, 55-64, total																by age	proportion																																																															
EC1181V	Persons employed, 55-64, male							by gender and age	proportion																																																																								
EC1182V	Persons employed, 55-64, female											by sector	proportion																																																																				
EC2020V	Total employment / jobs (work place based)							by population?																																																																									
EC2008V	Employment (jobs) in agriculture, fishery (NACE Rev. 2: A)																by active population?																																																																
EC2009V	Employment (jobs) in mining, manufacturing, energy (NACE Rev. 2: B-E)																					proportion																																																											
EC2022V	Employment (jobs) in construction (NACE Rev. 2: F)																										by population?																																																						
EC2032V	Employment (jobs) in trade, transport, hotels, restaurants (NACE Rev. 2: G to I)																															by active population?																																																	
EC2033V	Employment (jobs) in information and communication (NACE Rev. 2: J)																																				proportion																																												
EC2034V	Employment (jobs) in financial and insurance activities (NACE Rev. 2: K)																																									by population?																																							
EC2035V	Employment (jobs) in real estate activities (NACE Rev. 2: L)																																														by active population?																																		
EC2036V	Employment (jobs) in professional, scientific and technical activities; administrative and support service activities (NACE Rev. 2: M and N)																																																			proportion																													
EC2037V	Employment (jobs) in public administration, defence, education, human health and social work activities (NACE Rev. 2: O to Q)																																																								by population?																								
EC2038V	Employment (jobs) in arts, entertainment and recreation; other service activities; activities of household and extra-territorial organizations and bodies (NACE Rev. 2: R to U)																																																													by active population?																			
EC2021V	All companies	by population?																																																																															
EC3040V	Average disposable annual household income						companies																																																																										
EC3064V	Persons living in households with very low work intensity																																																																						to be included in										
EC3065V	Persons at risk of poverty after social transfers																																																																											persons in risk of poverty					
EC3066V	Severely materially deprived persons																																																																																by levels
EC3067V	Persons at risk of poverty or social exclusion											proportion																																																																					
TE1039V	Early leavers from education and training, total							to be included in																																																																									
TE1040V	Early leavers from education and training, male																				25																																																												

TE1041V	Early leavers from education and training, female							
TE1026V	Students in higher education (ISCED level 5-6), total	to complete					24	
TE1027V	Students in higher education (ISCED level 5-6), male							
TE1028V	Students in higher education (ISCED level 5-6), female							
EN1003V	Average temperature of warmest month	climate conditions					51	
EN1004V	Average temperature of coldest month			coldest/ warmest/ rainfall/ sun		bars?		
EN1005V	Rainfall (litre/m2)							
EN1002V	Total number of hours of sunshine per day							
EN2002V	Number of days ozone O3 concentrations exceed 120 µg/m3	days GHG				highest?	52	
EN2003V	Number of days nitrogen dioxide NO2 concentrations exceed 200 µg/m3			number of days		bars		
EN2005V	Number of days particulate matter PM10 concentrations exceed 50 µg/m3				(O3, NO2, PM10, PM2.5)			
EN2030V	Number of days particulate matter PM2.5 concentrations exceed 50 µg/m3							
EN2025V	Accumulated ozone concentration in excess 70 µg/m3	concentration GHG				highest?	53	
EN2026V	Annual average concentration of NO2 (µg/m3)			concentration		bars		
EN2027V	Annual average concentration of PM10 (µg/m3)				(O3, NO2, PM10)			
EN2033V	Number of residents exposed to road traffic noise >65 dB(A) at day time	to complete					28	
EN2035V	Number of residents exposed to road traffic noise >55 dB(A) at night time			by type of traffic		proportion		
EN2032V	Number of residents exposed to rail traffic (incl. tram) noise >65dB(A) at daytime				(air/ road/ train)			
EN2036V	Number of residents exposed to rail traffic (incl. tram) noise >55dB(A) at night-time							
EN3003V	Total use of water	use of water				by population	54	
EN3010V	Price of a m3 of domestic water (Euro)	price					55	
EN3011V	Percentage of the urban waste water load (in population equivalents) treated according to the applicable standard	waste water treated				by population	56	
EN3012V	Share of population connected to potable drinking water system	potable water				by population	57	
EN3013V	Share of population connected to sewerage treatment system	sewerage				by population	58	
EN4008V	Municipal waste generated (domestic and commercial), total	waste generated				by population	59	
EN5109V	Overbound - underbound based on population (qualitative indicator)	over-under				by population	60	
EN5110V	Overbound - underbound based on area (qualitative indicator)					by area		
TT1064V	People commuting into the city	commuting					61	
TT1065V	People commuting out of the city			in/ out		commuter		

TT1079V	Length of bicycle network (dedicated cycle paths and lanes)	bicycle network		by area/ pop	62
TT1080V	Cost of a combined monthly ticket (all modes of public transport) for 5-10 km in the central zone	cost of public transport			63
TT1081V	Cost of a taxi ride of 5 km to the centre at day time		combined/ taxi	commuter	
CR1003V	Number of cinema seats (total capacity)	to complete			40
CR1005V	Cinema attendance (per year)		by type	proportion	
CR1007V	Number of museum visitors (per year)		(swim/ cinema/ theater/ library/ h)		
CR1008V	Number of theatres	visitors			64
CR1010V	Number of public libraries (all distribution points)		by type	proportion	
CR2001V	Total nights spent in tourist accommodation establishments		(cinema/ museum/ hotel)		
CR2009V	Number of bed-places in tourist accommodation establishments				
CR2004V	Number of air passengers using nearest airport	air passengers			65
CR2005V	Number of air passengers using nearest airport: Total arrivals		by direction	proportion	
CR2006V	Number of air passengers using nearest airport: Domestic arrivals		(arrival/ departure)		
CR2007V	Number of air passengers using nearest airport: Total departures		by length	proportion	
CR2008V	Number of air passengers using nearest airport: Domestic departures		(domestic/ not)		

Table 4. Data and Indicators from Urban Audit 2012

2.3. ESPON projects

There is an extensive range of ESPON projects, each covering a different theme regarding European Regions. Data for these projects was mainly collected at NUTS 2 level. However, several projects do contain data at NUTS 3 (convertible to LUZ 2004) and/or even at LUZ level.

Table 5 presents variables and indicators collected by some of the ESPON projects and available from the ESPON database, grouped in themes, indicators and sub indicators, where some of them refer to the ones defined in urb_vluz, urb_iluz and Urban Audit.

source	ESPON database				
projects	NUTS 2	KIT - Knowledge, Innovation, Territory			
	NUT2/3	TEL Update - Telecommunication and IT-Rollout Update			
	non urban	EDORA - European Development Opportunities in Rural Areas			
	NUTS0/1/2	DEMO Update - Demography and Migration Update			
	NUTS 3	ESPON Climate - Climate Change and Territorial Effects on Regions and Local Economies in Europe			
	NUTS0/2	ReRisk - Regions at Risk of Energy Poverty			
	NUTS0/2/3	DEMIFER - Demographic and Migratory Flows affecting European Regions and Cities			
	NUTS 2	CREA Update - Creative Workforce Update			
	NUTS 2/3	TIPTAP - Territorial Impact Package for Transport and Agricultural Policies			
	NUTS 3	ACC Update - Accessibility (Air and Multimodal) Update (includes TRACC data?)			
	NUTS0/3	ESPON M4D - ESPON Database 2013 Phase II - M4D Project			

		LUZ	FOCI					
		NUTS 3/LUZ	SIESTA					
data		150						
LUZ		254						
NUTS 3		EU27+4						
project	label	period	geo	coverage	indicator	sub	norm.	n
TEL	IP addresses	2009	NUTS 2006	97	IP		by pop	66
CLIMATE	Combined adaptive capacity to climate change	2005-2011	NUTS 2006	96	capacity			67
CLIMATE	Mitigative capacity	2005-2011	NUTS 2006	93				
CLIMATE	Typology on the response capacity	2005-2011	NUTS 2006	93				
CLIMATE	European climate change regions	2071-2100	NUTS 2006	98				?
CLIMATE	Potential impact of changes in inundation heights of a sea level rise	2100	NUTS 2006	97				
CLIMATE	Change in annual mean number of days with heavy rainfall	2071-2100	NUTS 2006	97			not sure about these ones (2071-2100)	
CLIMATE	Change in annual mean number of frost days	2071-2100	NUTS 2006	97				
CLIMATE	Change in annual mean number of summer days	2071-2100	NUTS 2006	97				
CLIMATE	Change in annual mean temperature	2071-2100	NUTS 2006	97				
CLIMATE	Change in exposure to coastal storm surge events	2071-2100	NUTS 2006	97				
CLIMATE	Change in exposure to river flooding	2071-2100	NUTS 2006	97				
CLIMATE	Combined economic sensitivity to climate change	2071-2100	NUTS 2006	97				
CLIMATE	Cultural sensitivity to climate change	2071-2100	NUTS 2006	97				
CLIMATE	Potential cultural impact of climate change	2071-2100	NUTS 2006	97				
CLIMATE	Potential economic impact of climate change	2071-2100	NUTS 2006	97				
CLIMATE	Potential impact of changes in inundation heights of a sea level rise	2071-2100	NUTS 2006	97				
CLIMATE	Potential impact of climate change on museums	2071-2100	NUTS 2006	97				
CLIMATE	Potential impact of climate change on the energy sector	2071-2100	NUTS 2006	97				
CLIMATE	Potential impact of climate change on thermal power stations and refineries	2071-2100	NUTS 2006	97				
CLIMATE	Potential impact of climate change on tourism	2071-2100	NUTS 2006	97				
CLIMATE	Potential impact of climate change on World Heritage Sites	2071-2100	NUTS 2006	97				
CLIMATE	Relative change in annual mean evaporation	2071-2100	NUTS 2006	97				
CLIMATE	Relative change in annual mean precipitation in summer months	2071-2100	NUTS 2006	97				
CLIMATE	Relative change in annual mean precipitation in winter months	2071-2100	NUTS 2006	97				
CLIMATE	Potential impact of climate change on soil organic carbon content	2071-2100	NUTS 2006	96				
CLIMATE	Potential impact of changes in river flooding on population	2100	NUTS 2006	95				
CLIMATE	Potential impacts of changes in summer heat on population	2100	NUTS 2006	95				
CLIMATE	Change in annual mean number of days with snow cover	2071-2100	NUTS 2006	95				

CLIMATE	Potential impact of changes in river flooding on population	2071-2100	NUTS 2006	95				
CLIMATE	Potential impact of climate change on forest fires	2071-2100	NUTS 2006	95				
CLIMATE	Potential impacts of changes in summer heat on population	2071-2100	NUTS 2006	95				
CLIMATE	Environmental impact of climate change	2071-2100	NUTS 2006	94				
CLIMATE	Potential impact of changes in flash floods on population	2100	NUTS 2006	94				
CLIMATE	Potential social impact of climate change	2100	NUTS 2006	94				
CLIMATE	Aggregate impact of climate change on Europe's regions	2071-2100	NUTS 2006	94				
CLIMATE	Environmental sensitivity to climate change	2071-2100	NUTS 2006	94				
CLIMATE	Physical sensitivity to climate change	2071-2100	NUTS 2006	94				
CLIMATE	Potential impact of changes in flash floods on population	2071-2100	NUTS 2006	94				
CLIMATE	Potential impact of changes in heavy rainfall on soil erosion	2071-2100	NUTS 2006	94				
CLIMATE	Potential impact of climate change on agriculture and forestry	2071-2100	NUTS 2006	94				
CLIMATE	Potential impact of climate change on airports and harbours	2071-2100	NUTS 2006	94				
CLIMATE	Potential impact of climate change on railways and major roads	2071-2100	NUTS 2006	94				
CLIMATE	Potential impact of climate change on settlements	2071-2100	NUTS 2006	94				
CLIMATE	Potential physical impact of climate change	2071-2100	NUTS 2006	94				
CLIMATE	Potential social impact of climate change	2071-2100	NUTS 2006	94				
CLIMATE	Potential vulnerability to climate change	2071-2100	NUTS 2006	94				
CLIMATE	Social sensitivity to climate change	2071-2100	NUTS 2006	94				
CLIMATE	Potential impact of climate change on NATURA 2000 protected areas	2071-2100	NUTS 2006	93				
DEMIFER	Migratory population change	2000-2006	NUTS 2006	98				68
		2000-2007	NUTS 2006	98				
TIPTAP	General territorial impact (transport policy, baseline scenario)	2005-2030	NUTS 2006	97				69
TIPTAP	General territorial impact (transport policy, infrastructure scenario)	2005-2030	NUTS 2006	97				
TIPTAP	General territorial impact (transport policy, pricing scenario)	2005-2030	NUTS 2006	97				
TIPTAP	Territorial impact on congestion costs (single dimension, transport policy, baseline scenario)	2005-2030	NUTS 2006	97				70
TIPTAP	Territorial impact on congestion costs (single dimension, transport policy, infrastructure scenario)	2005-2030	NUTS 2006	97				
TIPTAP	Territorial impact on congestion costs (single dimension, transport policy, pricing scenario)	2005-2030	NUTS 2006	97				
TIPTAP	Territorial impact on economic growth (single dimension, transport policy, baseline scenario)	2005-2030	NUTS 2006	97				71
TIPTAP	Territorial impact on economic growth (single dimension, transport policy, infrastructure scenario)	2005-2030	NUTS 2006	97				

TIPTAP	Territorial impact on economic growth (single dimension, transport policy, pricing scenario)	2005-2030	NUTS 2006	97				
TIPTAP	Territorial impact on emissions (single dimension, transport policy, baseline scenario)	2005-2030	NUTS 2006	97				72
TIPTAP	Territorial impact on emissions (single dimension, transport policy, infrastructure scenario)	2005-2030	NUTS 2006	97				
TIPTAP	Territorial impact on emissions (single dimension, transport policy, pricing scenario)	2005-2030	NUTS 2006	97				
TIPTAP	Territorial impact on exposure to external visitors (single dimension, transport policy, baseline scenario)	2005-2030	NUTS 2006	97				73
TIPTAP	Territorial impact on exposure to external visitors (single dimension, transport policy, infrastructure scenario)	2005-2030	NUTS 2006	97				
TIPTAP	Territorial impact on exposure to external visitors (single dimension, transport policy, pricing scenario)	2005-2030	NUTS 2006	97				
TIPTAP	Territorial impact on exposure to regional integration (single dimension, transport policy, baseline scenario)	2005-2030	NUTS 2006	97				74
TIPTAP	Territorial impact on exposure to regional integration (single dimension, transport policy, infrastructure scenario)	2005-2030	NUTS 2006	97				
TIPTAP	Territorial impact on exposure to regional integration (single dimension, transport policy, pricing scenario)	2005-2030	NUTS 2006	97				
TIPTAP	Territorial impact on landscape fragmentation (single dimension, transport policy, baseline scenario)	2005-2030	NUTS 2006	97				75
TIPTAP	Territorial impact on landscape fragmentation (single dimension, transport policy, infrastructure scenario)	2005-2030	NUTS 2006	97				
TIPTAP	Territorial impact on landscape fragmentation (single dimension, transport policy, pricing scenario)	2005-2030	NUTS 2006	97				
TIPTAP	Territorial impact on market opportunities (single dimension, transport policy, baseline scenario)	2005-2030	NUTS 2006	97				76
TIPTAP	Territorial impact on market opportunities (single dimension, transport policy, infrastructure scenario)	2005-2030	NUTS 2006	97				
TIPTAP	Territorial impact on market opportunities (single dimension, transport policy, pricing scenario)	2005-2030	NUTS 2006	97				
TIPTAP	Territorial impact on productivity of airports (single dimension, transport policy, baseline scenario)	2005-2030	NUTS 2006	97				77
TIPTAP	Territorial impact on productivity of airports (single dimension, transport policy, infrastructure scenario)	2005-2030	NUTS 2006	97				
TIPTAP	Territorial impact on productivity of airports (single dimension, transport policy, pricing scenario)	2005-2030	NUTS 2006	97				

ACC	Multimodal potential accessibility, standardised	2006	NUTS 2006	97				
		2001	NUTS 2006	97				
ACC	Potential accessibility by air	2006	NUTS 2006	97				
		2001	NUTS 2006	97				
ACC	Potential accessibility by air, standardised	2006	NUTS 2006	97				
		2001	NUTS 2006	97				
ACC	Potential accessibility, rail, absolute level	2006	NUTS 2006	97				
		2001	NUTS 2006	97				
ACC	Potential accessibility, rail, ESPON average	2006	NUTS 2006	97				
		2001	NUTS 2006	97				
ACC	Potential accessibility, rail, EU27 average	2006	NUTS 2006	97				
		2001	NUTS 2006	97				
ACC	Potential accessibility, road, absolute level	2006	NUTS 2006	97				
		2001	NUTS 2006	97				
ACC	Potential accessibility, road, ESPON average	2006	NUTS 2006	97				
		2001	NUTS 2006	97				
ACC	Potential accessibility, road, EU27 average	2006	NUTS 2006	97				
		2001	NUTS 2006	97				
ACC	Multimodal potential accessibility, absolute change	2001-2006	NUTS 2006	97				85
ACC	Multimodal potential accessibility, change of standardised	2001-2006	NUTS 2006	97				
ACC	Multimodal potential accessibility, relative change	2001-2006	NUTS 2006	97				
ACC	Potential accessibility by air, absolute change	2001-2006	NUTS 2006	97				
ACC	Potential accessibility by air, change of standardised	2001-2006	NUTS 2006	97				
ACC	Potential accessibility by air, relative change	2001-2006	NUTS 2006	97				
ACC	Potential accessibility, rail, absolute change	2001-2006	NUTS 2006	97				
ACC	Potential accessibility, rail, change of standardised	2001-2006	NUTS 2006	97				
ACC	Potential accessibility, rail, relative change	2001-2006	NUTS 2006	97				
ACC	Potential accessibility, road, absolute change	2001-2006	NUTS 2006	97				
ACC	Potential accessibility, road, change of standardised	2001-2006	NUTS 2006	97				
ACC	Potential accessibility, road, relative change	2001-2006	NUTS 2006	97				
M4D	Birth, total	2010	NUTS 2006	100				
		2009	NUTS 2006	100				
		2008	NUTS 2006	100				
		2007	NUTS 2006	100				
		2006	NUTS 2006	100				
		2005	NUTS 2006	100	included in			9
		2004	NUTS 2006	100				

		2003	NUTS 2006	100				
		2002	NUTS 2006	100				
		2001	NUTS 2006	100				
		2000	NUTS 2006	100	included in			44
M4D	Death, total	2010	NUTS 2006	100				
		2009	NUTS 2006	100				
		2008	NUTS 2006	100				
		2007	NUTS 2006	100				
		2006	NUTS 2006	100				
		2005	NUTS 2006	100				
		2004	NUTS 2006	100				
		2003	NUTS 2006	100				
		2002	NUTS 2006	100				
		2001	NUTS 2006	100				
		2000	NUTS 2006	100				
M4D	Gross Domestic Product	2008	NUTS 2006	98				86
		2007	NUTS 2006	98				
		2006	NUTS 2006	98				
		2005	NUTS 2006	98				
		2004	NUTS 2006	98				
		2003	NUTS 2006	98				
		2002	NUTS 2006	98				
		2001	NUTS 2006	98				
		2000	NUTS 2006	98				
		1999	NUTS 2006	98				
M4D	Gross Domestic Product in Purchasing Power Standards	2008	NUTS 2006	98				87
		2007	NUTS 2006	98				
		2006	NUTS 2006	98				
		2005	NUTS 2006	98				
		2004	NUTS 2006	98				
		2003	NUTS 2006	98				
		2002	NUTS 2006	98				
		2001	NUTS 2006	98				
		2000	NUTS 2006	98				
		1999	NUTS 2006	98				
M4D	Population, total	2011	NUTS 2006	98				
		2010	NUTS 2006	98				
		2009	NUTS 2006	98				
		2008	NUTS 2006	98				
		2007	NUTS 2006	98				
		2006	NUTS 2006	98				
		2005	NUTS 2006	98				
		2004	NUTS 2006	98				
		2003	NUTS 2006	98				
		2002	NUTS 2006	98				

		2001	NUTS 2006	98				
		2000	NUTS 2006	98				
		1999	NUTS 2006	98	included in			1
		1998	NUTS 2006	98				
		1997	NUTS 2006	98				
		1996	NUTS 2006	98				
		1995	NUTS 2006	98				
		1994	NUTS 2006	98				
		1993	NUTS 2006	98				
		1992	NUTS 2006	98				
		1991	NUTS 2006	98				
		1990	NUTS 2006	98				
M4D	Area, total	2011	NUTS 2006	98				
		2010	NUTS 2006	98				
		2009	NUTS 2006	98				
		2008	NUTS 2006	98				
		2007	NUTS 2006	98				
		2006	NUTS 2006	98				
		2005	NUTS 2006	98				
		2004	NUTS 2006	98				
		2003	NUTS 2006	98				
		2002	NUTS 2006	98				
		2001	NUTS 2006	98				
		2000	NUTS 2006	98				
		1999	NUTS 2006	98				
		1998	NUTS 2006	98				
		1997	NUTS 2006	98				
		1996	NUTS 2006	98				
		1995	NUTS 2006	98				
		1994	NUTS 2006	98				
		1993	NUTS 2006	98				
		1992	NUTS 2006	98				
		1991	NUTS 2006	98				
		1990	NUTS 2006	98				
FOCI	Population of the LUZ	1995-2007						1
FOCI	GDP in PPS of the LUZ 1995	1995-2006						86
FOCI	Total Added value of the LUZ in 2006	2006						88
FOCI	Added value of Agriculture and Fishery (NACE AB) in 2006	2006						
FOCI	Added value of , extraction, energy , manufacturing in 2006 (Nace C to E)	2006						
FOCI	Added value of construction (Nace F) in 2006	2006						
FOCI	Added value of trade, hotel-rest and transport in (2006) NACE G to I)	2006						
FOCI	Added value of business and financial services in 2006 (NACE J and K)	2006						

FOCI	Added value of administration, education health and other services (NACE L to P) in 2006	2006						
FOCI	GDP per inhabitant in PPS 1995 in the LUZ	1995-2006						86
FOCI	GDP per inhabitant in PPS according to EU average for the LUZ in 1995	1995-2006						
FOCI	Difference between GDP per inhab. In PPS according to EU average between 2006 and 1995	1995-2006						
FOCI	Difference between GDP per inhab. In PPS according to EU average between 2001 and 1995	1995-2001						
FOCI	Difference between GDP per inhab. In PPS according to EU average between 2006 and 2001	2001-2006						
FOCI	GDP per inhabitant in PPS 1995 in the LUZ according to national average in 1995	1995-2006						
FOCI	Difference between GDP per inhab. In PPS according to EU average between 2006 and 1995	1995-2006						
FOCI	Difference between GDP per inhab. In PPS according to EU average between 2001 and 1995	1995-2001						
FOCI	Difference between GDP per inhab. In PPS according to EU average between 2006 and 2001	2001-2006						
FOCI	Number of Headquarters of Transnational firms in the 2000 biggest world firms whose headquarters is in the LUZ in 2005	2005						89
FOCI	sales of Transnational firms in the 2000 biggest world firms whose headquarters is in the LUZ in 2005	2005						
FOCI	Employees of Transnational firms in the 2000 biggest world firms whose headquarters is in the LUZ in 2005	2005						
SIESTA	Map46_NUTS 3 (Y2009)							?
SIESTA	Map45_NUTS 3 (Y2009)							
SIESTA	Map36_NUTS 3 (total_pat_per_1000_pop)							
SIESTA	Map310_LUZ (data)							
SIESTA	Map22_NUTS 3 (class)							
SIESTA	Map214_NUTS 3 (GHG)							
SIESTA	Map21_NUTS 3 (Y2008, Y2009)							

Table 5. Data and Indicators from ESPON projects

2.4. Social Media

Nowadays, ordinary citizens are willing to share geospatial information using the friendly and easy-to-use functionality provided by the web 2.0 platforms. These kinds of social networks reflect events with a large social impact, for example forest fires, particularly when they occur close to urban areas. For the time being, in order to discover and access this Volunteered Geographic Information (VGI), it is necessary to deal with the different search mechanisms provided by each web 2.0 service. W2.0B has the ability to search different Web 2.0 Services.

Table 6 presents some proposed indicators for the smartness/knowledge theme.

source	web 2.0 broker				
data from	twitter				
	flickr				
	youtube				
	wikipedia				
	LinkedIn				
data	4				
LUZ	695				
cities	915				
coverage	real-time				
code	label	indicator	subindicator	normalized	n
	Number of data inside a LUZ delimitation	activity		by population/area?	90
	Number of data containing other words inside a LUZ delimitation (TBD)		words	proportion	
	Number of data containing the name of a LUZ	mentions		by population?	91
	Number of data containing the name of a LUZ AND other words (TBD)		words	proportion	
	others...?				

Table 6. Data and Indicators from social media

3. Geographical Data and Proposed LUZ

Both Eurostat (for a 20 year period) and Urban Audit data (until 2009) use LUZ and core cities 2004 delimitations. For Urban Audit, the number of LUZ areas and cities for its 2010 - 2012 data collection round has increased considerably. However, this data has yet to become available. On the other hand, most ESPON projects are based upon the geographical nomenclatura of NUTS 2006 (at levels 0/1/2/3). Using a correspondence table, NUTS 3 can be converted to LUZ 2004. **Table 7** presents an overview of the geographical coverages for the various datasets.

Data completeness between LUZ 2004 areas varies. Therefore, the TPG proposes to start with a selection of 100 – 150 LUZ areas (to be derived after data import and validated with Steering Committee), for which coverage is most complete, with which to initially populate the webtool. LUZ 2012 delimitations will be used, to ensure that new LUZ (2012) areas can be added seamlessly, as data for them becomes available.

Eurostat LUZs (355)		UA LUZs 2004 (313+267 cities)		UA LUZs 2012 (695+915 cities)		ESPON NUTS 3
code	LUZ	code	LUZ	code	LUZ	code NUTS 3
BE	Belgium					
BE001L	Bruxelles / Brussel	BE001L	Bruxelles / Brussel	BE001L2	Bruxelles / Brussel	The correspondence table between LUZ and NUTS 3 (proxy_NUTS_32006_luz_checked, found as part of data_FOCI.rar) uses the 2004 LUZ version. However, this table does not seem to present all LUZ areas, as it contains only 254 unique LUZ ids.
BE002L	Antwerpen	BE002L	Antwerpen	BE002L2	Antwerpen	
BE003L	Gent	BE003L	Gent	BE003L2	Gent	
BE004L	Charleroi	BE004L	Charleroi	BE004L2	Charleroi	
BE005L	Liège	BE005L	Liège	BE005L2	Liège	
BE006L	Brugge	BE006L	Brugge	BE006L2	Brugge	
BE007L	Namur	BE007L	Namur	BE007L2	Namur	
				BE008L1	Leuven	
				BE009L1	Mons	

				BE010L1	Kortrijk	
				BE011L1	Oostende	
BG	Bulgaria					
BG001L	Sofia	BG001L	Sofia	BG001L2	Sofia	
BG002L	Plovdiv	BG002L	Plovdiv	BG002L2	Plovdiv	
BG003L	Varna	BG003L	Varna	BG003L2	Varna	
BG004L	Burgas	BG004L	Burgas	BG004L2	Burgas	
BG005L	Pleven	BG005L	Pleven	BG005L1	Pleven	
BG006L	Ruse	BG006L	Ruse	BG006L2	Ruse	
BG007L	Vidin	BG007L	Vidin	BG007L2	Vidin	
BG008L	Stara Zagora	BG008L	Stara Zagora	BG008L2	Stara Zagora	
				BG009L1	Sliven	
				BG010L1	Plovdiv	
				BG011L1	Shumen	
				BG013L1	Yambol	
				BG014L1	Haskovo	
				BG015L1	Pazardzhik	
				BG016L1	Blagoevgrad	
				BG017L1	Veliko Tarnovo	
				BG018L1	Vratsa	
CZ	Czech Republic					
CZ001L	Praha	CZ001L	Praha	CZ001L1	Praha	
CZ002L	Brno	CZ002L	Brno	CZ002L1	Brno	
CZ003L	Ostrava	CZ003L	Ostrava	CZ003L1	Ostrava	
CZ004L	Plzen	CZ004L	Plzen	CZ004L1	Plzeň	
CZ005L	Usti nad Labem	CZ005L	Usti nad Labem	CZ005L1	Ústí nad Labem	
CZ006L	Olomouc	CZ006L	Olomouc	CZ006L1	Olomouc	
CZ007L	Liberec	CZ007L	Liberec	CZ007L1	Liberec	
CZ008L	Ceske Budejovice	CZ008L	Ceske Budejovice	CZ008L1	České Budějovice	
CZ009L	Hradec Kralove	CZ009L	Hradec Kralove	CZ009L1	Hradec Králové	
CZ010L	Pardubice	CZ010L	Pardubice	CZ010L1	Pardubice	
CZ011L	Zlin	CZ011L	Zlin	CZ011L1	Zlín	
CZ013L	Karlovy Vary	CZ013L	Karlovy Vary	CZ013L1	Karlovy Vary	
CZ014L	Jihlava	CZ014L	Jihlava	CZ014L1	Jihlava	
				CZ016L1	Most	
				CZ018L1	Chomutov	
DK	Denmark					
DK001L	København	DK001L	København	DK001L2	København	
DK002L	Aarhus	DK002L	Aarhus	DK002L1	Århus	
DK003L	Odense	DK003L	Odense	DK003L1	Odense	
DK004L	Aalborg	DK004L	Aalborg	DK004L1	Aalborg	
DE	Germany					
DE001L	Berlin	DE001L	Berlin	DE001L1	Berlin	
DE002L	Hamburg	DE002L	Hamburg	DE002L1	Hamburg	
DE003L	München	DE003L	München	DE003L1	München	

DE004L	Köln	DE004L	Köln	DE004L1	Köln	
DE005L	Frankfurt am Main	DE005L	Frankfurt am Main	DE005L1	Frankfurt am Main	
DE007L	Stuttgart	DE007L	Stuttgart	DE007L1	Stuttgart	
DE008L	Leipzig	DE008L	Leipzig	DE008L2	Leipzig	
DE009L	Dresden	DE009L	Dresden	DE009L2	Dresden	
DE011L	Düsseldorf	DE011L	Düsseldorf	DE011L1	Düsseldorf	
DE012L	Bremen	DE012L	Bremen	DE012L1	Bremen	
DE013L	Hannover	DE013L	Hannover	DE013L1	Hannover	
DE014L	Nürnberg	DE014L	Nürnberg	DE014L1	Nürnberg	
		DE016L	Wuppertal			
DE017L	Bielefeld	DE017L	Bielefeld	DE017L0	Bielefeld	
DE018L	Halle an der Saale	DE018L	Halle an der Saale	DE018L1	Halle an der Saale	
DE019L	Magdeburg	DE019L	Magdeburg	DE019L2	Magdeburg	
DE020L	Wiesbaden	DE020L	Wiesbaden	DE020L1	Wiesbaden	
DE021L	Göttingen	DE021L	Göttingen	DE021L1	Göttingen	
DE025L	Darmstadt	DE025L	Darmstadt	DE025L1	Darmstadt	
DE026L	Trier	DE026L	Trier	DE026L1	Trier	
DE027L	Freiburg im Breisgau	DE027L	Freiburg im Breisgau	DE027L1	Freiburg im Breisgau	
DE028L	Regensburg	DE028L	Regensburg	DE028L1	Regensburg	
DE029L	Frankfurt (Oder)	DE029L	Frankfurt (Oder)	DE029L0	Frankfurt (Oder)	
DE030L	Weimar	DE030L	Weimar	DE030L1	Weimar	
DE031L	Schwerin	DE031L	Schwerin	DE031L1	Schwerin	
DE032L	Erfurt	DE032L	Erfurt	DE032L1	Erfurt	
DE033L	Augsburg	DE033L	Augsburg	DE033L1	Augsburg	
DE034L	Bonn	DE034L	Bonn	DE034L1	Bonn	
DE035L	Karlsruhe	DE035L	Karlsruhe	DE035L1	Karlsruhe	
DE036L	Mönchengladbach	DE036L	Mönchengladbach	DE036L0	Mönchengladbach	
DE037L	Mainz	DE037L	Mainz	DE037L1	Mainz	
DE038L	Ruhrgebiet	DE038L	Ruhrgebiet	DE038L1	Ruhrgebiet	
DE039L	Kiel	DE039L	Kiel	DE039L1	Kiel	
DE040L	Saarbrücken	DE040L	Saarbrücken	DE040L1	Saarbrücken	
DE042L	Koblenz	DE042L	Koblenz	DE042L1	Koblenz	
DE043L	Rostock			DE043L2	Rostock	
				DE044L1	Kaiserslautern	
				DE045L1	Iserlohn	
				DE048L1	Wilhelmshaven	
				DE050L1	Tübingen	
				Villingen-		
				DE051L1	Schwenningen	
				DE052L1	Flensburg	

DE053L1 Marburg
DE054L1 Konstanz
DE055L0 Neumünster
DE056L0 Brandenburg an
der Havel
DE057L1 Gießen
DE058L1 Lüneburg
DE059L1 Bayreuth
DE060L1 Celle
DE061L1 Aschaffenburg
DE062L1 Bamberg
DE063L1 Plauen
DE064L1 Neubrandenburg
DE065L1 Fulda
DE066L1 Kempten (Allgäu)
DE067L1 Landshut
DE069L1 Rosenheim
DE071L1 Stralsund
DE072L1 Friedrichshafen
DE073L1 Offenburg
DE074L1 Görlitz
DE077L1 Schweinfurt
DE078L1 Greifswald
DE079L1 Wetzlar
DE081L1 Passau
DE082L0 Dessau-Roßlau
Braunschweig-
Salzgitter-
DE083L1 Wolfsburg
Mannheim-
DE084L1 Ludwigshafen
DE504L1 Münster
DE505L0 Chemnitz
DE507L1 Aachen
DE508L0 Krefeld
DE510L1 Lübeck
DE513L1 Kassel
DE516L0 Solingen
DE517L1 Osnabrück
Oldenburg
DE520L1 (Oldenburg)
DE522L1 Heidelberg
DE523L1 Paderborn
DE524L2 Würzburg
DE527L1 Bremerhaven
DE529L1 Heilbronn
DE530L0 Remscheid
DE532L1 Ulm

				DE533L1	Pforzheim	
				DE534L1	Ingolstadt	
				DE535L1	Gera	
				DE537L1	Reutlingen	
				DE539L1	Cottbus	
				DE540L2	Siegen	
				DE542L1	Hildesheim	
				DE544L1	Zwickau	
				DE546L0	Wuppertal	
				DE547L2	Jena	
EE	Estonia					
EE001L	Tallinn	EE001L	Tallinn	EE001L1	Tallinn	
EE002L	Tartu	EE002L	Tartu	EE002L1	Tartu	
				EE003L0	Narva	
IE	Ireland					
IE001L	Dublin	IE001L	Dublin	IE001L1	Dublin	
IE002L	Cork	IE002L	Cork	IE002L1	Cork	
IE003L	Limerick	IE003L	Limerick	IE003L1	Limerick	
IE004L	Galway	IE004L	Galway	IE004L1	Galway	
IE005L	Waterford	IE005L	Waterford	IE005L1	Waterford	
EL	Greece					
EL001L	Athina	GR001L	Athina	EL001L1	Athina	
EL002L	Thessaloniki	GR002L	Thessaloniki	EL002L1	Thessaloniki	
EL003L	Patra	GR003L	Patra	EL003L1	Patra	
EL004L	Irakleio	GR004L	Irakleio	EL004L1	Irakleio	
EL005L	Larisa	GR005L	Larisa	EL005L1	Larisa	
EL006L	Volos	GR006L	Volos	EL006L1	Volos	
EL007L	Ioannina	GR007L	Ioannina	EL007L1	Ioannina	
EL008L	Kavala	GR008L	Kavala	EL008L1	Kavala	
EL009L	Kalamata	GR009L	Kalamata	EL009L1	Kalamata	
ES	Spain					
ES001L	Madrid	ES001L	Madrid	ES001L1	Madrid	
ES002L	Barcelona	ES002L	Barcelona	ES002L1	Barcelona	
ES003L	Valencia	ES003L	Valencia	ES003L1	Valencia	
ES004L	Sevilla	ES004L	Sevilla	ES004L1	Sevilla	
ES005L	Zaragoza	ES005L	Zaragoza	ES005L1	Zaragoza	
ES006L	Málaga	ES009L	Valladolid	ES006L1	Málaga	
ES007L	Murcia	ES006L	Málaga	ES007L1	Murcia	
ES008L	Las Palmas	ES007L	Murcia	ES008L1	Las Palmas	
ES009L	Valladolid	ES008L	Las Palmas	ES009L1	Valladolid	
ES010L	Palma de Mallorca	ES010L	Palma de Mallorca	ES010L1	Palma de Mallorca	
ES011L	Santiago de Compostela	ES011L	Santiago de Compostela	ES011L1	Santiago de Compostela	
ES012L	Vitoria/Gasteiz	ES012L	Vitoria/Gasteiz	ES012L1	Vitoria/Gasteiz	
ES013L	Oviedo	ES013L	Oviedo	ES013L1	Oviedo	
ES014L	Pamplona/Iruña	ES014L	Pamplona/Iruña	ES014L1	Pamplona/Iruña	
ES015L	Santander	ES015L	Santander	ES015L1	Santander	

ES016L	Toledo	ES016L	Toledo	ES016L1	Toledo
ES017L	Badajoz	ES017L	Badajoz	ES017L1	Badajoz
ES018L	Logrono	ES018L	Logrono	ES018L1	Logroño
ES019L	Bilbao	ES019L	Bilbao	ES019L1	Bilbao
ES020L	Córdoba	ES020L	Córdoba	ES020L1	Córdoba
ES021L	Alicante/Alacant	ES021L	Alicante/Alacant	ES021L1	Alicante/Alacant
ES022L	Vigo	ES022L	Vigo	ES022L1	Vigo
ES023L	Gijón	ES023L	Gijón	ES023L1	Gijón
ES025L	Sta. Cruz de Tenerife	ES025L	Santa Cruz de Tenerife	ES025L1	Santa Cruz de Tenerife
ES026L	Coruña, A			ES026L1	Coruña (A)
				ES028L1	Reus
				ES031L1	Lugo
				ES033L1	Girona
				ES034L1	Cáceres
				ES035L1	Torre Vieja
				ES039L1	Avilés
				ES040L1	Talavera de la Reina
				ES041L1	Palencia
				ES043L1	Ferrol
				ES044L1	Pontevedra
				ES045L1	Ceuta
				ES046L1	Gandia
				ES048L1	Guadalajara
				ES050L1	Manresa
				ES053L1	Ciudad Real
				ES054L1	Benidorm
				ES055L1	Melilla
				ES057L1	Ponferrada
				ES059L1	Zamora
				ES062L1	Sanlúcar de Barrameda
				ES070L1	Irun
				ES071L1	Granollers
				ES072L1	Arrecife
				ES073L1	Elda
				ES074L1	Santa Lucía de Tirajana
				ES075L0	Mollet del Vallès
				ES501L1	Granada
				ES505L1	Elche/Elx
				ES506L1	Cartagena
				ES510L1	Donostia-San Sebastián
				ES514L1	Almería
				ES515L1	Burgos
				ES516L1	Salamanca

				ES519L1	Albacete	
					Castellón de la Plana/Castelló de la Plana	
				ES520L1	la Plana	
				ES521L1	Huelva	
				ES522L1	Cádiz	
				ES523L1	León	
				ES525L1	Tarragona	
				ES527L1	Jaén	
				ES528L1	Lleida	
				ES529L1	Ourense	
				ES532L1	Algeciras	
				ES533L1	Marbella	
FR	France					
FR001L	Paris	FR001L	Paris	FR001L1	Paris	
FR003L	Lyon	FR003L	Lyon	FR003L2	Lyon	
FR004L	Toulouse	FR004L	Toulouse	FR004L2	Toulouse	
FR006L	Strasbourg	FR006L	Strasbourg	FR006L2	Strasbourg	
FR007L	Bordeaux	FR007L	Bordeaux	FR007L2	Bordeaux	
FR008L	Nantes	FR008L	Nantes	FR008L2	Nantes	
FR009L	Lille			FR009L2	Lille	
FR010L	Montpellier			FR010L2	Montpellier	
				FR011L2	Saint-Etienne	
FR012L	Le Havre	FR012L	Le Havre	FR012L2	Le Havre	
FR013L	Rennes	FR013L	Rennes	FR013L2	Rennes	
FR014L	Amiens	FR014L	Amiens	FR014L2	Amiens	
FR015L	Rouen	FR015L	Rouen	FR215L2	Rouen	
FR016L	Nancy	FR016L	Nancy	FR016L2	Nancy	
FR017L	Metz	FR017L	Metz	FR017L2	Metz	
FR018L	Reims	FR018L	Reims	FR018L2	Reims	
FR019L	Orléans	FR019L	Orléans	FR019L2	Orléans	
FR020L	Dijon	FR020L	Dijon	FR020L2	Dijon	
FR021L	Poitiers	FR021L	Poitiers	FR021L2	Poitiers	
FR022L	Clermont-Ferrand	FR022L	Clermont-Ferrand	FR022L2	Clermont-Ferrand	
FR023L	Caen	FR023L	Caen	FR023L2	Caen	
FR024L	Limoges	FR024L	Limoges	FR024L2	Limoges	
FR025L	Besançon	FR025L	Besançon	FR025L2	Besançon	
FR026L	Grenoble	FR026L	Grenoble	FR026L2	Grenoble	
FR027L	Ajaccio	FR027L	Ajaccio	FR027L2	Ajaccio	
				FR028L1	Saint Denis	
				FR030L1	Fort-de-France	
FR032L	Toulon	FR032L	Toulon	FR032L2	Toulon	
				FR034L2	Valenciennes	
FR035L	Tours	FR035L	Tours	FR035L2	Tours	

FR203L2 Marseille
FR205L2 Nice
FR207L2 Lens - Liévin
FR036L2 Angers
FR037L2 Brest
FR038L2 Le Mans
FR039L1 Avignon
FR040L2 Mulhouse
FR042L2 Dunkerque
FR043L2 Perpignan
FR044L2 Nimes
FR045L2 Pau
FR046L2 Bayonne
FR047L0 Annemasse
FR048L2 Annecy
FR049L2 Lorient
FR050L2 Montbelliard
FR051L2 Troyes
FR052L2 Saint-Nazaire
FR053L2 La Rochelle
FR056L2 Angoulême
FR057L2 Boulogne-sur-mer
FR058L2 Chambéry
FR059L2 Chalon-sur-Saône
FR060L2 Chartres
FR061L2 Niort
FR062L2 Calais
FR063L2 Béziers
FR064L2 Arras
FR065L2 Bourges
FR066L2 Saint-Brieuc
FR067L2 Quimper
FR068L2 Vannes
FR069L2 Cherbourg
FR073L2 Tarbes
FR074L2 Compiègne
FR076L2 Belfort
FR077L2 Roanne
FR079L2 Saint-Quentin
FR082L2 Beauvais
FR084L2 Creil
FR086L2 Evreux
FR090L2 Châteauroux
FR093L2 Brive-la-Gaillarde
FR096L2 Albi
FR099L2 Fréjus

					Châlons-en-Champagne	
					FR104L2	
					FR208L1	Hénin - Carvin
					FR209L2	Douai
					FR214L1	Valence
					FR304L1	Melun
					FR324L1	Martignes Charleville-
					FR505L1	Mézières
					FR506L1	Colmar
	IT Italy					
IT001L	Roma	IT001L	Roma	IT001L2	Roma	
IT002L	Milano	IT002L	Milano	IT002L2	Milano	
IT003L	Napoli	IT003L	Napoli	IT003L2	Napoli	
IT004L	Torino	IT004L	Torino	IT004L2	Torino	
IT005L	Palermo	IT005L	Palermo	IT005L2	Palermo	
IT006L	Genova	IT006L	Genova	IT006L2	Genova	
IT007L	Firenze	IT007L	Firenze	IT007L2	Firenze	
IT008L	Bari	IT008L	Bari	IT008L2	Bari	
IT009L	Bologna	IT009L	Bologna	IT009L1	Bologna	
IT010L	Catania	IT010L	Catania	IT010L2	Catania	
IT011L	Venezia	IT011L	Venezia	IT011L2	Venezia	
IT012L	Verona	IT012L	Verona	IT012L2	Verona	
IT013L	Cremona	IT013L	Cremona	IT013L2	Cremona	
IT014L	Trento	IT014L	Trento	IT014L2	Trento	
IT015L	Trieste	IT015L	Trieste	IT015L1	Trieste	
IT016L	Perugia	IT016L	Perugia	IT016L2	Perugia	
IT017L	Ancona	IT017L	Ancona	IT017L2	Ancona	
IT018L	L'Aquila	IT018L	L'Aquila			
IT019L	Pescara	IT019L	Pescara	IT019L2	Pescara	
IT020L	Campobasso	IT020L	Campobasso	IT020L2	Campobasso	
IT021L	Caserta	IT021L	Caserta	IT021L2	Caserta	
IT022L	Taranto	IT022L	Taranto	IT022L2	Taranto	
IT023L	Potenza	IT023L	Potenza	IT023L2	Potenza	
IT024L	Catanzaro	IT024L	Catanzaro	IT024L2	Catanzaro	
IT025L	Reggio di Calabria	IT025L	Reggio di Calabria	IT025L2	Reggio di Calabria	
IT026L	Sassari	IT026L	Sassari	IT026L2	Sassari	
IT027L	Cagliari	IT027L	Cagliari	IT027L1	Cagliari	
IT028L	Padova	IT028L	Padova	IT028L2	Padova	
IT029L	Brescia	IT029L	Brescia	IT029L2	Brescia	
IT030L	Modena	IT030L	Modena	IT030L2	Modena	
IT031L	Foggia	IT031L	Foggia	IT031L2	Foggia	
IT032L	Salerno	IT032L	Salerno	IT032L2	Salerno	
				IT033L1	Piacenza	
				IT034L1	Bolzano	
				IT035L1	Udine	

				LV003L1	Jelgava	
				LV501L1	Daugavpils	
LT	Lithuania					
LT001L	Vilnius	LT001L	Vilnius	LT001L1	Vilnius	
LT002L	Kaunas	LT002L	Kaunas	LT002L1	Kaunas	
LT003L	Panevezys	LT003L	Panevezys	LT003L1	Panevėžys	
				LT004L0	Alytus	
				LT501L0	Klaipėda	
				LT502L0	Šiauliai	
LU	Luxembourg (Grand Duchy)					
LU001L	Luxembourg (Grand Duchy)	LU001L	Luxembourg	LU001L1	Luxembourg	
HU	Hungary					
HU001L	Budapest	HU001L	Budapest	HU001L2	Budapest	
HU002L	Miskolc	HU002L	Miskolc	HU002L2	Miskolc	
HU003L	Nyíregyháza	HU003L	Nyíregyháza	HU003L2	Nyíregyháza	
HU004L	Pécs	HU004L	Pécs	HU004L2	Pécs	
HU005L	Debrecen	HU005L	Debrecen	HU005L2	Debrecen	
HU006L	Szeged	HU006L	Szeged	HU006L2	Szeged	
HU007L	Gyor	HU007L	Gyor	HU007L2	Győr	
HU008L	Kecskemét	HU008L	Kecskemét	HU008L2	Kecskemét	
HU009L	Székesfehérvár	HU009L	Székesfehérvár	HU009L2	Székesfehérvár	
				HU010L1	Szombathely	
MT	Malta					
MT001L	Valletta	MT001L	Valletta	MT001L1	Valletta	
		MT002L	Gozo			
NL	Netherlands					
NL001L	's-Gravenhage	NL001L	s' Gravenhage	NL001L2	s' Gravenhage	
NL002L	Amsterdam	NL002L	Amsterdam	NL002L2	Amsterdam	
NL003L	Rotterdam	NL003L	Rotterdam	NL003L2	Rotterdam	
NL004L	Utrecht	NL004L	Utrecht	NL004L2	Utrecht	
NL005L	Eindhoven	NL005L	Eindhoven	NL005L2	Eindhoven	
NL006L	Tilburg	NL006L	Tilburg	NL006L2	Tilburg	
NL007L	Groningen	NL007L	Groningen	NL007L2	Groningen	
NL008L	Enschede	NL008L	Enschede	NL008L2	Enschede	
NL009L	Arnhem	NL009L	Arnhem	NL009L2	Arnhem	
NL010L	Heerlen	NL010L	Heerlen	NL010L2	Heerlen	
NL012L	Breda	NL012L	Breda	NL012L2	Breda	
NL013L	Nijmegen	NL013L	Nijmegen	NL013L2	Nijmegen	
NL014L	Apeldoorn	NL014L	Apeldoorn	NL014L2	Apeldoorn	
NL015L	Leeuwarden	NL015L	Leeuwarden	NL015L2	Leeuwarden	
				NL016L1	Sittard-Geleen	
				NL017L1	Delft	
				NL018L1	Hilversum	
				NL020L1	Roosendaal	

				Alphen aan den Rijn	
				NL026L1 Rijn	
				NL028L1 Bergen op Zoom	
				NL029L1 Katwijk	
				NL030L1 Gouda	
				NL032L1 Middelburg	
				NL503L2 s-Hertogenbosch	
				NL504L2 Amersfoort	
				NL505L1 Maastricht	
				NL506L2 Dordrecht	
				NL507L2 Leiden	
				NL511L2 Zwolle	
				NL512L1 Ede	
				NL513L2 Deventer	
				NL514L2 Alkmaar	
				NL515L2 Venlo	
				NL519L2 Almelo	
AT	Austria			AT	Austria
AT001L	Wien	AT001L	Wien	AT001L2	Wien
AT002L	Graz	AT002L	Graz	AT002L2	Graz
AT003L	Linz	AT003L	Linz	AT003L2	Linz
AT004L	Salzburg	AT004L	Salzburg	AT004L2	Salzburg
AT005L	Innsbruck	AT005L	Innsbruck	AT005L2	Innsbruck
				AT006L1	Klagenfurt
PL	Poland				
PL001L	Warszawa	PL001L	Warszawa	PL001L2	Warszawa
PL002L	Lodz	PL002L	Lodz	PL002L2	Łódź
PL003L	Krakow	PL003L	Krakow	PL003L2	Kraków
PL004L	Wroclaw	PL004L	Wroclaw	PL004L2	Wrocław
PL005L	Poznan	PL005L	Poznan	PL005L2	Poznań
PL006L	Gdansk	PL006L	Gdansk	PL006L2	Gdańsk
PL007L	Szczecin	PL007L	Szczecin	PL007L2	Szczecin
PL008L	Bydgoszcz	PL008L	Bydgoszcz	PL008L2	Bydgoszcz
PL009L	Lublin	PL009L	Lublin	PL009L2	Lublin
		PL010L	Katowice-Zory	PL010L2	Katowice
PL011L	Bialystok	PL011L	Bialystok	PL011L2	Białystok
PL012L	Kielce	PL012L	Kielce	PL012L2	Kielce
PL013L	Torun	PL013L	Torun	PL013L2	Toruń
PL014L	Olsztyn	PL014L	Olsztyn	PL014L2	Olsztyn
PL015L	Rzeszow	PL015L	Rzeszow	PL015L2	Rzeszów
PL016L	Opole	PL016L	Opole	PL016L2	Opole Gorzów
PL017L	Gorzow Wielkopolski	PL017L	Gorzow Wielkopolski	PL017L2	Wielkopolski
PL018L	Zielona Gora	PL018L	Zielona Gora	PL018L2	Zielona Góra
PL019L	Jelenia Gora	PL019L	Jelenia Gora	PL019L2	Jelenia Góra
PL020L	Nowy Sacz	PL020L	Nowy Sacz	PL020L2	Nowy Sącz
PL021L	Suwalki	PL021L	Suwalki	PL021L2	Suwałki

PL022L	Konin	PL022L	Konin	PL022L2	Konin	
PL024L	Czestochowa	PL024L	Czestochowa	PL024L2	Częstochowa	
PL025L	Radom	PL025L	Radom	PL025L2	Radom	
PL026L	Plock	PL026L	Plock	PL026L2	Płock	
PL027L	Kalisz	PL027L	Kalisz	PL027L2	Kalisz	
PL028L	Koszalin	PL028L	Koszalin	PL028L2	Koszalin	
				PL029L1	Słupsk	
				PL030L1	Jastrzębie-Zdrój	
				PL031L1	Siedlce Piotrków	
				PL032L1	Trybunalski	
				PL033L1	Lubin	
				PL034L1	Piła	
				PL035L1	Inowrocław Ostrowiec	
				PL036L1	Świętokrzyski	
				PL037L1	Gniezno Stargard	
				PL038L1	Szczeciński Ostrów	
				PL039L1	Wielkopolski	
				PL040L1	Przemyśl	
				PL041L1	Zamość	
				PL042L1	Chełm	
				PL043L1	Pabianice	
				PL044L1	Głogów	
				PL045L1	Stalowa Wola Tomaszów	
				PL046L1	Mazowiecki	
				PL047L1	Łomża	
				PL048L1	Leszno	
				PL049L1	Świdnica	
				PL051L1	Tczew	
				PL052L1	Ełk	
				PL506L2	Bielsko-Biała	
				PL508L1	Rybnik	
				PL511L2	Wałbrzych	
				PL512L2	Elbląg	
				PL513L2	Włocławek	
				PL514L2	Tarnów	
				PL516L2	Legnica	
				PL517L2	Grudziądz	
PT	Portugal					
PT001L	Lisboa	PT001L	Lisboa	PT001L2	Lisboa	
PT002L	Porto	PT002L	Porto	PT002L2	Porto	
PT003L	Braga	PT003L	Braga	PT003L1	Braga	
PT004L	Funchal	PT004L	Funchal	PT004L2	Funchal	
PT005L	Coimbra	PT005L	Coimbra	PT005L2	Coimbra	

PT006L	Setúbal	PT006L	Set-bal	PT006L0	Setúbal	
PT007L	Ponta Delgada	PT007L	Ponta Delgada	PT007L1	Ponta Delgada	
PT008L	Aveiro	PT008L	Aveiro	PT008L2	Aveiro	
PT009L	Faro	PT009L	Faro	PT009L1	Faro	
				PT014L0	Viseu	
				PT016L0	Viana do Castelo	
				PT019L0	Póvoa de Varzim	
				PT505L1	Guimarães	
RO	Romania					
RO001L	Bucuresti	RO001L	Bucuresti	RO001L1	București	
RO002L	Cluj-Napoca	RO002L	Cluj-Napoca	RO002L1	Cluj-Napoca	
RO003L	Timisoara	RO003L	Timisoara	RO003L1	Timișoara	
RO004L	Craiova	RO004L	Craiova	RO004L1	Craiova	
RO005L	Braila	RO005L	Braila	RO005L1	Brăila	
RO006L	Oradea	RO006L	Oradea	RO006L1	Oradea	
RO007L	Bacau	RO007L	Bacau	RO007L1	Bacău	
RO008L	Arad	RO008L	Arad	RO008L1	Arad	
RO009L	Sibiu	RO009L	Sibiu	RO009L1	Sibiu	
RO010L	Targu Mures	RO010L	TÔrgu Mures	RO010L1	Târgu Mureș	
RO011L	Piatra Neamt	RO011L	Piatra Neamt	RO011L1	Piatra Neamț	
RO012L	Calarasi	RO012L	Calarasi	RO012L1	Călărași	
RO013L	Giurgiu	RO013L	Giurgiu	RO013L1	Giurgiu	
RO014L	Alba Iulia	RO014L	Alba Iulia	RO014L1	Alba Iulia	
				RO015L0	Focșani	
				RO016L0	Târgu Jiu	
				RO017L0	Tulcea	
				RO018L0	Târgoviște	
				RO019L0	Slatina	
				RO020L0	Bârlad	
				RO021L0	Roman	
				RO501L1	Constanta	
				RO502L1	Iasi	
				RO503L1	Galati	
				RO504L1	Brasov	
				RO505L1	Ploiesti	
				RO506L1	Pitesti	
				RO507L1	Baia Mare	
				RO508L1	Buzau	
				RO509L1	Satu Mare	
				RO510L1	Botosani	
				RO511L1	Ramnicu Valcea	
				RO512L1	Suceava Drobeta-Turnu	
				RO513L1	Severin	
SI	Slovenia					
SI001L	Ljubljana	SI001L	Ljubljana	SI001L1	Ljubljana	
SI002L	Maribor	SI002L	Maribor	SI002L1	Maribor	

SK	Slovakia				
SK001L	Bratislava	SK001L	Bratislava	SK001L1	Bratislava
SK002L	Kosice	SK002L	Kosice	SK002L1	Košice
SK003L	Banska Bystrica	SK003L	Banska Bystrica	SK003L1	Banská Bystrica
SK004L	Nitra	SK004L	Nitra	SK004L1	Nitra
SK005L	PRESOV	SK005L	PreSov	SK005L1	Prešov
SK006L	Zilina	SK006L	Zilina	SK006L1	Žilina
SK007L	TRNAVA	SK007L	Trnava	SK007L1	Trnava
SK008L	Trencín	SK008L	Trencín	SK008L1	Trenčín
FI	Finland				
FI001L	Helsinki	FI001L	Helsinki	FI001L2	Helsinki
FI002L	Tampere	FI002L	Tampere	FI002L2	Tampere
FI003L	Turku	FI003L	Turku	FI003L2	Turku
FI004L	Oulu	FI004L	Oulu	FI004L2	Oulu
				FI007L1	Lahti
				FI008L1	Kuopio
				FI009L1	Jyväskylä
SE	Sweden				
SE001L	Stockholm	SE001L	Stockholm	SE001L1	Stockholm
SE002L	Göteborg	SE002L	Göteborg	SE002L1	Göteborg
SE003L	Malmö	SE003L	Malmö	SE003L1	Malmö
SE004L	Jönköping	SE004L	Jönköping	SE004L1	Jönköping
SE005L	Umeå	SE005L	Umeå	SE005L1	Umeå
SE006L	Uppsala	SE006L	Uppsala	SE006L1	Uppsala
SE007L	Linköping	SE007L	Linköping	SE007L1	Linköping
SE008L	Örebro	SE008L	Örebro	SE008L1	Örebro
				SE501L1	Västerås
				SE502L1	Norrköping
				SE503L1	Helsingborg
				SE505L1	Borås
UK	United Kingdom				
UK001L	London	UK001L	London	UK001L2	London
				UK002L1	West Midlands urban area
UK002L	Birmingham	UK002L	Birmingham	UK003L1	Leeds
UK004L	Glasgow	UK004L	Glasgow	UK004L1	Glasgow
				UK005L0	Bradford
UK006L	Liverpool	UK006L	Liverpool	UK006L2	Liverpool
UK007L	Edinburgh	UK007L	Edinburgh	UK007L1	Edinburgh
UK008L	Manchester	UK008L	Manchester	UK008L2	Manchester
UK009L	Cardiff	UK009L	Cardiff	UK009L1	Cardiff
UK010L	Sheffield	UK010L	Sheffield	UK010L2	Sheffield
UK011L	Bristol	UK011L	Bristol	UK011L2	Bristol
UK012L	Belfast	UK012L	Belfast	UK012L1	Belfast
UK013L	Newcastle upon Tyne	UK013L	Newcastle upon Tyne	UK013L2	Newcastle upon Tyne

UK014L	Leicester	UK014L	Leicester	UK014L1	Leicester
UK015L	Derry	UK015L	Derry	UK015L0	Derry
UK016L	Aberdeen	UK016L	Aberdeen	UK016L1	Aberdeen
UK017L	Cambridge	UK017L	Cambridge	UK017L1	Cambridge
UK018L	Exeter	UK018L	Exeter	UK018L2	Exeter
UK019L	Lincoln	UK019L	Lincoln	UK019L2	Lincoln
				UK021L0	Stevenage
UK022L	Wrexham	UK022L	Wrexham	UK022L0	Wrexham
UK023L	Portsmouth	UK023L	Portsmouth	UK023L1	Portsmouth
UK024L	Worcester	UK024L	Worcester	UK024L0	Worcester
UK025L	Coventry	UK025L	Coventry	UK025L2	Coventry
UK026L	Kingston-upon-Hull	UK026L	Kingston-upon-Hull	UK026L1	Kingston upon Hull
UK027L	Stoke-on-trent	UK027L	Stoke-on-Trent	UK027L1	Stoke-on-Trent
UK028L	Wolverhampton	UK028L	Wolverhampton		
UK029L	Nottingham	UK029L	Nottingham	UK029L1	Nottingham
UK201L	Leeds - Bradford	UK201L	Bradford-Leeds		
					Bath and North
				UK031L0	East Somerset
				UK033L0	Guildford
				UK034L0	Thanet
				UK038L0	Waveney
				UK040L0	Tunbridge Wells
				UK041L0	Ashford
				UK043L0	East Staffordshire
				UK044L0	Darlington
				UK045L0	Worthing
				UK046L0	Mansfield
				UK047L0	Chesterfield
				UK050L1	Burnley
				UK051L0	Great Yarmouth
				UK053L0	Hartlepool
				UK054L0	Cannock Chase
				UK055L0	Eastbourne
				UK056L1	Hastings
				UK059L0	Redditch
				UK501L0	Kirklees
				UK506L0	Doncaster
				UK510L0	Sunderland
				UK513L0	Medway
				UK515L1	Brighton and Hove
				UK516L0	Plymouth
				UK517L1	Swansea
				UK518L1	Derby
				UK519L0	Barnsley
				UK520L1	Southampton

				UK525L0	Milton Keynes
				UK528L0	Northampton
				UK531L0	Warrington
				UK532L0	Luton
				UK533L0	York
				UK535L0	Swindon
				UK539L1	Bournemouth
				UK540L0	Wycombe
				UK542L0	Telford and Wrekin North East
				UK543L0	Lincolnshire
				UK545L0	Peterborough
				UK546L0	Colchester
				UK548L0	Basingstoke and Deane
				UK549L0	Bedford
				UK550L0	Dundee City
				UK551L0	Falkirk
				UK552L0	Reading
				UK553L2	Blackpool
				UK554L0	Maidstone
				UK556L0	Dacorum
				UK557L2	Blackburn with Darwen
				UK558L1	Newport
				UK559L1	Middlesbrough
				UK560L0	Oxford
				UK561L0	Torbay
				UK562L2	Preston
				UK564L0	Warwick
				UK566L1	Norwich
				UK568L2	Cheshire West and Chester
				UK569L1	Ipswich
				UK571L1	Cheltenham
				UK572L0	Gloucester
				UK573L0	Bracknell Forest
				UK575L0	Carlisle
				UK576L0	Crawley
HR	Hrvatska				
HR001L	Zagreb	HR001L	Zagreb	HR001L2	Grad Zagreb
HR002L	Rijeka	HR002L	Rijeka	HR002L2	Rijeka
HR003L	Slavonski Brod	HR003L	Slavonski Brod	HR003L2	Slavonski Brod
HR004L	Osijek	HR004L	Osijek	HR004L2	Osijek
HR005L	Split	HR005L	Split	HR005L2	Split
TR	Turkey				
TR001L	Ankara				
TR002L	Adana				

TR003L	Antalya				
TR004L	Balikesir				
TR005L	Bursa				
TR006L	Denizli				
TR007L	Diyarbakir				
TR008L	Edirne				
TR009L	Erzurum				
TR010L	Gaziantep				
TR011L	Hatay				
TR012L	Istanbul				
TR013L	Izmir				
TR014L	Kars				
TR015L	Kastamonu				
TR016L	Kayseri				
TR017L	Kocaeli				
TR018L	Konya				
TR019L	Malatya				
TR020L	Manisa				
TR021L	Nevsehir				
TR022L	Samsun				
TR023L	Siirt				
TR024L	Trabzon				
TR025L	Van				
TR026L	Zonguldak				
NO	Norge				
NO001L	Oslo	NO001L	Oslo	NO001L1	Oslo
NO002L	Bergen	NO002L	Bergen	NO002L1	Bergen
NO003L	Trondheim	NO003L	Trondheim	NO003L1	Trondheim
NO004L	Stavanger	NO004L	Stavanger	NO004L1	Stavanger
NO005L	Kristiansand	NO005L	Kristiansand	NO005L1	Kristiansand
NO006L	Tromsø	NO006L	Tromsø	NO006L1	Tromsø
CH	Schweiz/Suisse				
CH001L	Zurich	CH001L	Zurich	CH001L1	Zürich
CH002L	Genève	CH002L	Genève	CH002L1	Genève
CH004L	Bern	CH004L	Bern	CH004L1	Bern
CH005L	Lausanne	CH005L	Lausanne	CH005L1	Lausanne
CH003L	Basel			CH003L1	Basel
CH006L	Winterthur			CH006L1	Winterthur
CH007L	St. Gallen			CH007L1	St. Gallen
CH008L	Luzern			CH008L1	Luzern
CH009L	Lugano			CH009L1	Lugano
CH010L	Biel/Bienne			CH010L1	Biel/Bienne
				IS001L1	Reykjavík

Table 7. LUZ coverages and NUTS 3 correspondence

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