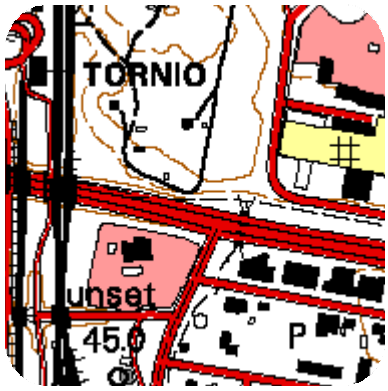
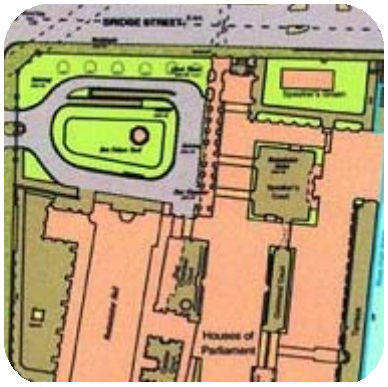
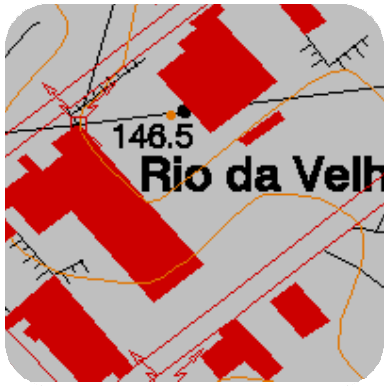
Reference Data Sets and Feature Types in Europe

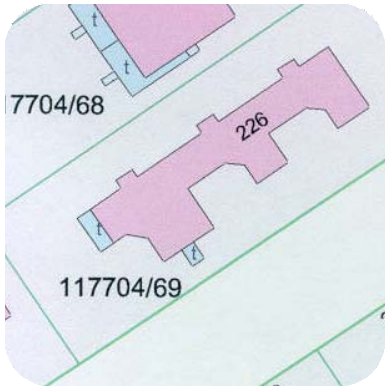
Part B: Tables

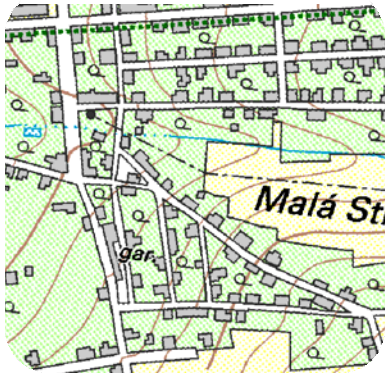
Report of the Eurogeographics Expert Group on Quality











Reference:

Version	Author	Date	Comments
0.1	Antti Jakobsson	Feb 10th 2004	
0.2	Antti Jakobsson	Mar 19th 2004	Added address information
0.3	Antti Jakobsson	May 10th 2004	Draft final version. Executive summary is missing and figures should be checked. The next phase is to ask countries to verify the data.
0.9	Antti Jakobsson	June 3rd 2004	Change of version numbers to 1.0->0.1, 1.1->0.2,1.2->1.3 and some minor changes.
0.95	Antti Jakobsson	Nov 10th 2004	Updated data based on comments from countries. New countries added: Bulgaria, Italy, Turkey, and Iceland. Some answers from countries are not checked. Those are indicated with red colour in the Table A. Croatia has also replied but the details are not yet added.
1.00	Antti Jakobsson	Dec 31st 2004	All comments resolved.
1.01	Antti Jakobsson	Feb 17th 2005	Update and changes in French details.

File name:	ref_data_ver100_part_A.doc		
Keywords	Reference data sets, Topographic, Cadastral, EuroSpec, DEM, Orthoimagery, Address, Road, Interchange, Coastline, Lake, Watercourse, Benchmark, Parcel, Interoperability, Harmonization, Europe,		
Abstract	Report on reference data sets in Europe. It is based on questionnaire sent by Eurogeographics' Expert Group on Quality to the national mapping and cadastral agencies (NMCAs) in 2003. Results were updated in 2004. It covers 33 European countries and represents data sets from 82 organizations producing 236 data sets. The report comprises two parts. Part A introduces results and summaries from the questionnaire and Part B includes the detailed information.		
Distribution:	Public		
Approved by	Eurogeographics Programme Management Team (EPMT)	Date:	15th Feb 2005

1 Table of content

Table A Topographic databases in countries

TOPOGRAPHIC DATABASES							
Name of the country	***Name of the dataset***	***Scale***	***Coverage[1]***	***Structure[2]***	***Standards***	***Source***	***Additional information***
Austria							
Belgium	Top10V-GIS	1:10000	70	P-L	No	Photogrammetry, aerial photography (1:21000)	
Bulgaria							Note: Topographic map 1:50 000
Croatia							
Cyprus							
Czech Republic	ZABAGED	1:10000	100	P->O	DIGEST	digitised from basic map 1:10 000 and updated using ortophotos	
Denmark	TOP10DK	1:10000	100	O	TOP10DK v. 3.2.0 + tillæg	aerial photographs 1:25.000	www.geodata-info.dk

[1] ***In percentage of the country***
[2] P-L (Point and Line) P->O (Planned to convert to object-based in 2 years)O (Object-based)

TOPOGRAPHIC DATABASES							
Name of the country	**Name of the dataset**	**Scale**	**Coverage[1]**	**Structure[2]**	**Standards**	**Source**	**Additional information**
Estonia	Põhikaart	1:10000	100	P->O	Põhikaardi juhend (Product specification) http://www.maaamet.ee/kaardid/download.php	Stereophotogrammetry, 1:25000 aerial photos	(except an area of 650 km² bordering on the Russian Federation)
Finland	Maastotietokanta	1:5000-1:10000	90	O	Product specification	digital workstations, aerial photographs 1:16000, and 1:31000, partly digitised from basic map 1:20 000	
France	BDCARTO	1:50 000	100	O	EDIGéO	Digitalisation of paper map	BD CARTO goes beyond the French border, but there is no agreement with foreign DB. BDCART0 features have unique identifiers. BDCARTO is seamless.

TOPOGRAPHIC DATABASES							
Name of the country	**Name of the dataset**	**Scale**	**Coverage[1]**	**Structure[2]**	**Standards**	**Source**	**Additional information**
	BDTOPO	1:10 000	62	O	EDIGéO	stereo plotting	100% coverage planned in 2006. BDTOPO is not seamless at the moment and has no identifiers, but the "BD UNI" (unification of BDTOPO and other vector databases of IGN, coverage now 50 %) currently under development is to be seamless and to have unique identifiers. Departments have different dates of elaboration, and thus neighbouring departments have not been acquired at the same time. So if a new transboundary item crops up ina department, it is not necessarily updated in the neighbouring one. Note: Identifier managemen in BD UNI is performed but ultimately one will rely on "numerical imprinting" alias "electronic signature" (not in the authentification meaning!) to identifying objects.
Germany	ATKIS Basis-DLM	1:10000	100	O	ATKIS specification Dataset will be adapted to ISO 191xx, specification is almost completed.	Topographic base maps 1: 5000, 1:10.000 or 1; 25.000, aerial photographs	www.atkis.de - Amtliches Topographisch-Kartographisches Informationssystem, Digitales Landschaftsmodell, Basis
Great Britain	OS Mastermap	1:1250	100	O	Topo96 Spec	Digitised from original graphic products and then converted from OS93 specification to TOPO96 specification. OS Mastermap is then sourced from an enhanced version of the TOPO96 large-scale data.	Positional Accuracy Programme
Greece							

TOPOGRAPHIC DATABASES							
Name of the country	**Name of the dataset**	**Scale**	**Coverage[1]**	**Structure[2]**	**Standards**	**Source**	**Additional information**
Hungary	DTA-100	1:100 000	100	P-L	DITAB (Draft)	digitised maps in scale 1:100000	http://fish.fomi.hu
Iceland	IS 50V	1:50 000	100	O	LUflokkun Icelandic standard	Digitised map films 1:50 000	www.lmi.is/landlysing
Ireland	Discovery	1:10 000	100	P->O	No	photogrammetry - photoscale 1:30000 - 1:40000	
Italy	DB25	1:25 000	20	-	DIGEST - FACC	Proviene da restituzione fotogrammetrica e digitalizzazione da cartografia preesistente	
Latvia							
Lithuania	KDB10LT-mikro	1:10 000	100	P-L		Digital workstations, interpreted orthophoto maps 1:10000 (aerial photographs 1:30000)	100% by the end of 2003. Arc/info database. Geographic features are part of KDB10LT data set
Malta	BaseMap	1:2500	100	O	No	Photogrammetry, photoscales 1:15000 – 1:4000	
Netherlands	TOP10NL	1:10 000	100	P->O	NEN1878 (Dutch geo- standard) OpenGIS in the future	aerial photographs 1:18.000	
Northern Ireland	OSNI Large-scale	1:1250 and 1:2500	100	P->O	No	Originally digitized from 1:1250 and 1:2500 field survey maps. Now updated by graphic survey and photogrammetry.	

TOPOGRAPHIC DATABASES							
Name of the country	**Name of the dataset**	**Scale**	**Coverage[1]**	**Structure[2]**	**Standards**	**Source**	**Additional information**
Norway	FKB	1:5000	60	O	Product specification for FKB - SOSI	FKB-B: 1: 5000 - 1:8000 FKB-C: 1: 15 000 - 1_: 18 000 Digitised from old maps	Scale FKB-B: 1:1000 FKB-C: 1:5000
Poland							
Portugal	SCN10K	1:10000	50	P-L	igds -integraph with user data linkage	aerial photographs 1:22 500	
Romania							
Slovak Republic	SVM 50	1:50 000	100	P-L		digitised from basic maps 1:50 000	www.gku.sk , SVM 50 is located in 12 layers
	ZB GIS	1:10 000	Planned	P->O		digital workstation, aerial photographs 1:27000, starts in 2003, ending planned in 2007	
Slovenia	TOPO 25 TOPO 5	1:25 000 1:5 000	100 20	P->O		aerial photographs, maps	
Spain	BCN25	1:10 000	95	O		aerial photographs	

TOPOGRAPHIC DATABASES							
Name of the country	**Name of the dataset**	**Scale**	**Coverage[1]**	**Structure[2]**	**Standards**	**Source**	**Additional information**
Sweden	Grund-läggande geografiska data (GGD	1:10 000	90	P->O		Aerial photographs 1:30 000, 1:60 000	GGD: Data corresponding to the information used in official mapping at the scales of 1:10 000 - 1:50 000 Parts of the mountain area are not produced yet. That area is now covered with data for maps in smaller scale Metadata: http://www.geolex.lm.se/ http://www.lm.se/kartplan
Switzerland	VECTOR25	1:25 000	100	O		digitised map	http://www.swisstopo.ch/en/digital/VECTOR25/index.htm www.geocat.ch
	MD.01-MO-CH	1:1000	60	O	INTERLIS	Terrestrial measurement	MD.01-MO-CH => Data Model of Official Cadastral Surveying Cadastral Database: 100% coverage planed in 2008.
Turkey							
Ukraine							

Table B Cadastral datasets

CADASTRAL DATABASES							
Name of the country	***Name of the dataset***	***Scale***	***Coverage[3]***	***Structure[4]***	***Standards***	***Source***	***Additional information***
Austria	Digitale Katastralmappe DKM	1:1000	90	P->O	National defined Format: DKM-Format and AutoCAD DXF-Format	digitised from the Cadastral map 1:1000 or 1:2000 with additional quality corrections by surveying and orthoimagery	www.bev.gv.at/
Belgium							
Bulgaria							Note: Cadastral Large scale map 1:5000
Croatia							
Cyprus	Cadastral plans	1:500-1:5000	100	O		Cadastral plans vary in scale between 1:500 up to 1:5000 depending on the area (urban or rural).	
Czech Republic	NVF ISKN	1:2000	85	O			Graphic part of the system only for 15% of the Czech territory.
Denmark	Matrikelkort	1:5000	100	O	Matrikelkortet, brugervejledning 2002	papermap 1:200/1:4.000	www.geodata-info.dk
Estonia	Kataster	1:10000	100	O	Estonian legislation	Mostly geodetic surveys, also digitised	Public interface from www.maaamet.ee
Finland	Kiinteistörekisterikartta/JAKO	1:5000	98	O		land surveys, partly digitised from the boundary map 1:10 000	http://www.maanmittauslaitos.fi/default.asp?id=106&docid=1019 rest 2 % available from municipalities. UKTJ will have this information in 2005.

[3] ***In percentage of the country***
[4] P-L (Point and Line) P->O (Planned to convert to object-based in 2 years)O (Object-based)

CADASTRAL DATABASES							
Name of the country	**Name of the dataset**	**Scale**	**Coverage[3]**	**Structure[4]**	**Standards**	**Source**	**Additional information**
France	PCI "Plan cadastral informatisé" (= digitised cadaster	1:500-1:8000	100 (25-30 % vector)	Other	Edigéo	Field survey and aerial photographs.	Scale varies from 1:500 to 1:8000. Data structure of the DB : In most towns, PCI ("PCI image") has a raster structure, and in other towns, PCI ("PCI vecteur") has an object structure. Then PCI will be divided in: vector : 25 – 30% vector (30% by 2007 and 100% later) raster : 70 – 75% Parcel features have unique identifiers. On unique identifiers for parcel features, that is made as follows: the number of the parcel (managed by the tax bureau) is accompanied by the x y coordinates of the parcel center of gravity, numerically calculated PCI is not seamless.

CADASTRAL DATABASES							
Name of the country	**Name of the dataset**	**Scale**	**Coverage[3]**	**Structure[4]**	**Standards**	**Source**	**Additional information**
	BD Parcellaire	1:500-1:5000	started in 2004-about 10% by the end of 2004	O	Edigéo	PCI (= digitised cadaster produced by the Taxes administration).	Scale varies from 1:500 to 1:5000. Parcel features have unique identifiers. (See explanation for unique identifiers above) BD Parcellaire will be seamless and continuous, except that: publicly owned parcels are not depicted in cadastral maps, hence not in BD Parcellaire- there will be one database for each administrative department.Production has started as for the image BD Parcellaire.Production of the vector coverage as for conversion of image data into vector data is to start later (end of 2005)
Germany	ALK (Automated Real Estate Cadastre), ALB (Automated property register)	1:1000	80	O	National defined format, object structured, defined interface	surveying, digitised cadastral maps	Both information system ALK and ALB define the basic Land Information System.
	ALKIS - Amtliches Liegenschaftskataster-Informationssystem	1:1000	Planned	O	dataset will be adapted to ISO 191xx, specification is almost completed. data interface is compliant to OGC GML 3.0 specification	surveying, digitised cadastral maps	ALKIS will replace ALK and ALB and store all information in one object-oriented data base system; dataset is under construction. The specification including data interface is available at www.adv-online.de/veröffentlichungen

CADASTRAL DATABASES							
Name of the country	**Name of the dataset**	**Scale**	**Coverage[3]**	**Structure[4]**	**Standards**	**Source**	**Additional information**
Great Britain	OS Mastermap	1:1250	100	O		Digitised from original graphic products and then converted from OS93 specification to TOPO96 specification. OS Mastermap is then sourced from an enhanced version of the TOPO96 large-scale data.	*** NOTE: In the United Kingdom legal rights (title) are recorded by the various land registries; in England and Wales HMLR, and in Scotland RoS. Northern Ireland also has its own LR. Both of the GB organisations record this land "parcel" information on OS mapping, but this can be a variety of types: vector or scanned "Land-Line" and object based OS Mastermap (not explicit polygon based data) ***
Greece	ktimatologikos chartis	1:1000	10	O		Land surveys, partly digitised from the boundary map 1:10 000 Urban areas (1:1000) derived from photogrammetric mapping with field collection	Note: Cadastral orthophotomaps 1:5000 with field completion for rural areas.
Hungary	DAT	1:2000	10	O	DAT standard	land survey, digitalised cadastral maps	The digital cadastral maps are integrated with land registry data in the Database of the Land Office IT system called TAKAROS
	TAKARNET	other	100	O			National Land Registry Network based on local cadastral maps in different scales between 1:1000 and 1:4000 http://www.takarnet.hu

CADASTRAL DATABASES							
Name of the country	**Name of the dataset**	**Scale**	**Coverage[3]**	**Structure[4]**	**Standards**	**Source**	**Additional information**
Iceland							
Ireland	Discovery[5]	1:1000-1:10000	100	P->O			OSI (Org A) capture all topographic information, incl land parcels at a range of scales from 1:1000 - 1:10000. Land Registry (Org B) is reponsible for registry of all land folios, identifying ownership of parcels
Italy							
Latvia		1:10000	100	P->O			
Lithuania	-	1:10000	100	-			
Malta							
Netherlands	Kadastrale kaart	1:1000	100	O	NEN1878 (Dutch geo standard)	land surveying digitised	www.ncgi.nl
Northern Ireland	OSNI Large-scale	1:1250 and 1:2500	100	P->O		Originally digitized from 1:1250 and 1:2500 field survey maps. Now updated by graphic survey and photogrammetry.	In Northern Ireland legal rights (title) are recorded by Land Registry
Norway	(FKB-) DEK	1:5000	80	O			
Poland							
Portugal	CADASTRO	1:1000-1:5000	10	P-L	IGDS -Integraph	Digitised and aerial photographs	1:1000,1:2000 or 1:5000. 50% of the country in paper sheets
Romania							

[5] Information is interpreted from the answer

CADASTRAL DATABASES							
Name of the country	**Name of the dataset**	**Scale**	**Coverage[3]**	**Structure[4]**	**Standards**	**Source**	**Additional information**
Slovak Republic	subor geodetických informácií	1:1000	50	P-L	National	Digitised, partly land surveys	
Slovenia	Parcele	Other	100	P-L		Land surveys and digitsed from cadastral maps.	metadata: http://www.gu.gov.si/
Spain	SIGCA2	1:5000	60	O		Aerial photographs or digitised from ortophoto	
Sweden	Nationell digital registerkarta (NDRK) Fastighetsregistret	1:10000	80	P->O		Property map (1:10 000) and maps in larger scale. Updating by surveying.	Information is lacking in some municipalities http://www.geolex.lm.se/ http://www.lm.se/kartplan
Switzerland	MD.01-MO-CH	1:1000	60	O	INTERLIS	Terrestrial measurement	Cadastral database: 100% coverage planed in 2008
Turkey							Note: Land Registry & Cadastre
Ukraine							

Table C Digital Elevation models

DEMs						
Name of the country	***Name of the dataset***	***Resolution (m)***	***Coverage[6]***	***Standards***	***Source***	***Additional information***
Austria	Digitales Höhenmodell DHM	10	100		1:30.000 1:15.000	
Belgium	DTM 1:10 000	20-40	60		photogrammetry, contour lines, field survey, laserscanning	Grid and Tin
Bulgaria						Note: contour lines of the map 1:50 000
Croatia	digitalni model visina DMV	25	60	ISO TC 211	aerial photographs 1:20 000	
Cyprus	Aerial photos and topo map 1:50000	25	100			
Czech Republic						
Denmark	TOP10DK	25	100		papermap 1:25.000	www.geodata-info.dk
Estonia						
Finland	Korkeusmalli	25	100		contour lines of the basic map 1:20 000	
France	BD ALTI	50	100		Contour lines from ILevers at scale 20k, from maps at scale 25k: 75% of territory Stereoplotting from 1:60k aerial pictures: about 25% of the country	Available for 20 years
	Couche altimétrique du Référentiel à grande échelle (RGE)	Specification not yet approved. Spacing 25m, Z rms = 2.5m	planned		BD ALTI + other sources, stero aerial pictures pairs in the first place	Specification and production process to be in place by the end of 2005

[6] ***In percentage of the country***

DEMs						
Name of the country	**Name of the dataset**	**Resolution (m)**	**Coverage[6]**	**Standards**	**Source**	**Additional information**
Germany	ATKIS DGM25	50 (1-3 m height accuracy)	100		harmonised from contributions of the State Mapping Agencies. Sources are laserscanning, photogrammetry and digitized contour lines.	
Great Britain	Land-Form PROFILE	10	100		Contours surveyed and digitised from aerial photography (1:24,000 photo scale)	
Greece	Psifiako Modelo Edafous	30	100		contour lines of topographic maps 1:5000	
Hungary	DTA-100 – DEM	100	100		digitised maps in scale 1:100000	This dataset is a layer of the database 1:100000 Digital Topographic Map See: http://fish.fomi.hu
Iceland	Dted level 1	90	100		unknown	
Ireland	-	10	90		Digital Photgrammetry - 1:40,000 photo scale	
Italy	Modello digitale del terreno	20	-			
Latvia	DTM	20 (h=1.5)	90			
Lithuania	-	50	100		Contour lines of the map 1:50 000	
Malta	DEM	25	100		Interpolated from 2.5m contour lines and spot heights obtained from photogrammetric capture	

DEMs						
Name of the country	**Name of the dataset**	**Resolution (m)**	**Coverage[6]**	**Standards**	**Source**	**Additional information**
Netherlands	Digitaal Hoogte Model and AHN	25	100		from levelling points of producer D	Also available: AHN: Actueel Hoogtebestand Nederland Resolution 4x4m Producer D
Northern Ireland	OSNI DTM	50/10	100		Derived from the 1:50,000 scale digital contours	Enhanced 10m DTM is currently being produced
Norway	DTM	25/50/100	100		1:50 000	-
Poland	-	-	-		-	-
Portugal	MDT5	5	30	GRD - Intergraph	contour lines and spot heights of a 10 000 scale, obtained from aerial photographs	25 m resolution obtained from a 50 000 scale, covering whole the country
Romania						
Slovak Republic						
Slovenia	Digitalni model višin (DMV)	25	100		Aerial photographs at the scale of 1:17.500, satellite radar imagery.	metadata: http://www.gu.gov.si/
Spain	MDT25	25 z accuracy: 3 m	100		Contour lines & spot heights from BCN25	
Sweden	GSD-Höjddata	50	100		Digitised profile plates, profile measuring in stereo models, digitised contour lines from the Topographic map	http://www.geolex.lm.se/ http://www.lm.se/kartplan
Switzerland	DHM25	25	100		interpolated grid from contour lines of basic map 1:25'000	http://www.swisstopo.ch/en/digital/dhm25.htm http://www.geocat.ch

DEMs						
Name of the country	**Name of the dataset**	**Resolution (m)**	**Coverage[6]**	**Standards**	**Source**	**Additional information**
	MNT-MO	2	50	INTERLIS	Laserscan	mnt-mo = Digital Surface Model of Official cadastral surveying. Cadastral database: 100% coverage planed in 2008. Accuracy 2 m
Turkey	DTED	30	100		Digital Countour Maps	
Ukraine		20-40	100			

Table D Orthoimagery

ORTHOIMAGERY						
Name of the country	***Name of the dataset***	***Resolution (m)***	***Coverage[7]***	***Standards***	***Source***	***Additional information***
Austria	Orthophoto	0.25	100		1:15.000	
Belgium	Digital orthophotos	0.5 and 1	100		aerial photography 1:21 000, 1:29 000, 1:50 000	Tiff + georef, metadata
Bulgaria		1	70		aerial photographs 1:16 000, 1:18 000	
Croatia	digitalna ortofoto karta	0.5	60	No	aerial photographs in the scale 1:20000	available in digital form, but not organised as database
Cyprus	Ortho photo maps based on aerial photography	0.5	Planned		Ortho photomap production already started based on aerial photos having source scales 1:8000 (urban areas) and 1:15000 (rural areas).	
Czech Republic	Ortofoto	0.5-0.6	100		aerial photographs 1:23 000	Black and white until 2001, since 2002 color ortophotos.
Denmark	DDO	0.4/0.1	100		Aerial photographs 1:25.000 / laserscanning from airplane	www.geodata-info.dk
Estonia	Põhikaart	1	100		1:25000 aerial photos, soft photogrammetry	50%+ is colour Resolution varies 0.75-1.0m Public interface from www.maaamet.ee
Finland	Ortokuvat	1	100		aerial photographs 1:60 000	0.5 m resolution also available on part of the country

[7] ***In percentage of the country***

ORTHOIMAGERY						
Name of the country	**Name of the dataset**	**Resolution (m)**	**Coverage[7]**	**Standards**	**Source**	**Additional information**
France	BD ORTHO	0.5	100	TIFF or ECW + metadata	Colour aerial photographs, 1:25 000	
	BD ORTHO	0.25	0.8	TIFF or ECW + metadata	Colour aerial photographs	Only in some urban areas such as Paris
Germany	DOP Digitales Orthophoto	0.4 to 2	100		Data access is compliant with OGC Web Map Server Specification	
Great Britain	OS Mastermap Imagery Layer	0.25	100		Sourced from aerial photography (photo scale between 1:5,000 and 1:12,000)	
Greece	Orthofotoxartes	1	100		Aerial photographs	
Hungary	Ortofotó program	0.5	30		Aerial photographs (year 2000)	See: http://fish.fomi.hu
Iceland						
Ireland	-	1	100		Produced from 1:40000 scale colour photography	Meta Data files created and linked to each ortho tile
Italy						
Latvia	Orto-foto	1	100			
Lithuania	ORT10LT	0.5	100		Aerial photographs 1:30000	
Malta	Orthophotos	0.25	100		Aerial photographs 1:10 000	

ORTHOIMAGERY						
Name of the country	**Name of the dataset**	**Resolution (m)**	**Coverage[7]**	**Standards**	**Source**	**Additional information**
Netherlands	Orthfoto's	0.40	100		aerial photographs 1:18.000	Also available: AHN: Actueel Hoogtebestand Nederland Resolution 4x4m Producer D
Northern Ireland	OSNI orthophoto	0.25	45		Created from 1:10,000 scale photography	100% coverage planned for summer 2005
Norway	-	0.2-0.4	30	Planned	Aerial photographs 1: 15 000	-
Poland	-	-	-		-	-
Portugal	SOFT10K	0.5	30	TIFF	Aerial photographs 1:30 000	
Romania	ortofotopla ns	-	-	-	-	-
Slovak Republic	ortofotopla ns	1	100		aerial photographs 1:27000	
Slovenia	Digitalni ortofoto (DOF)	0.5	100		Aerial photographs at the scale of 1:17.500.	http://www.gu.gov.si/
Spain	PNO Ortofoto	0.5	60		Aerial photographs	
Sweden	GSD-Ortofoto	1	100		Aerial photographs 1:30 000, 1:60 000	http://www.geolex.lm.se/ http://www.lm.se/kartplan
Switzerland	SWISSIMAGE	0.5	100	TIFF (tiled or lined) 16.7 million RGB	Aerial photographs at the scale of 1:30 000	http://www.swisstopo.ch/en/image/swissimage.htm http://www.geocat.ch

ORTHOIMAGERY						
Name of the country	**Name of the dataset**	**Resolution (m)**	**Coverage[7]**	**Standards**	**Source**	**Additional information**
Turkey	EMASYA	0.50	10	No	digitized, 1:16 000 scale colour aerial photographs, DEM	
Ukraine						


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Table E Address datasets

ADDRESS DATASETS						
Name of the country	***Name of the dataset***	***Scale***	***Coverage[8]***	***Standards***	***Source***	***Additional information (responsible organization)***
Austria	Geocodierte Adressen	1:1000	90			NMA
Belgium						
Bulgaria						Note: addresses in a large scale cadastral map 1:1000. Coverage 10 % of the country
Croatia						
Cyprus	Cadastral plans, city street maps.	other	100			NMA Street maps exist for major cities at scale 1:7500. Street centerlines will be digitised from cadastral plans at scales between 1:500 and 1:5000 depending on the area. GIS and RDBMS data model has already been designed.
Czech Republic						
Denmark	Adresser	1:10000	100		register data, parcel and building	NMA www.geodata-info.dk
Estonia						Standard is under development

[8] ***In percentage of the country***

ADDRESS DATASETS						
Name of the country	**Name of the dataset**	**Scale**	**Coverage[8]**	**Standards**	**Source**	**Additional information (responsible organization)**
Finland	Väestörekisterikeskus rakennustiedot	Other	100		From municipalities	Population register Contains coordinates of the centre of the buildings, part of the population register. Plan to incorporate a link to the parcel register
France	GEOROUTE	1:25 000	100		IGN Topographic Database ('BD TOPO' where available) + digitalisation of IGN topographic paper maps + Cadaster + Field surveys	NMA Currently, GEOROUTE contains address ranges as attributes of roads segments. It is to be upgraded into a point address data base in the next years: A new BD ADRESSE will be constituted, which will contain address points (see below).
	BD ADRESSE	1:10000	19		The sources of the address DB are: 1) BD TOPO 2) GEOROUTE 3) FPB (text file of properties of the Taxes administration) 4) PCI (= digitised cadaster produced by the Taxes administration) 5) Parcel DB	First version of BD Adresse: address points will be interpolated in street segments. Production planned from 2004 to 2007. Second version of BD Adresse: address points will be geocoded on the centres of the parcels. Production planned from 2005 to 2008. Current coverage is 23 departments, 39% of population and 19% of territory

ADDRESS DATASETS						
Name of the country	**Name of the dataset**	**Scale**	**Coverage[8]**	**Standards**	**Source**	**Additional information (responsible organization)**
Germany	Hauskoordinaten Deutschland	1:1000	60		Cadastral Information	NMA of the German Länder Central ordering by NMA of NRW (www.lverma.nrw.de)
Great Britain	OS Mastermap Address Layer	1:1250	100			NMA Originates from Royal Mail's Postcode Address File and co-ordinates for each address are verified using ground GPS and aerial imagery
Greece						
Hungary		1:2000	10		land survey, digitalised cadastral maps	NMA The digital cadastral maps are integrated with land registry data in the Database of the Land Office IT system called TAKAROS. In this register the postal address of the parcels are included
Iceland						
Ireland	GeoDirectory	other	100		Three sources are used, OSI Large Scale Maps OSI Orthophotography, and temporary positioning by An Post staff where neither of the above are available.	NMA and post Producer Organisations A and C Scale is based on the Largest scale available for the relevant geographic area, e.g. 1000, 2500 or 5000

ADDRESS DATASETS						
Name of the country	**Name of the dataset**	**Scale**	**Coverage[8]**	**Standards**	**Source**	**Additional information (responsible organization)**
Italy						
Latvia		other	50			NMA
Lithuania		1:10000	100		Best available sources	State enterprise
Malta			Planned			
Netherlands						
Northern Ireland	Pointer	N/A	100	BS 7666	Joint venture between Ordnance Survey of Northern Ireland (OSNI), the Valuation & Lands Agency (VLA) and Royal Mail , in conjunction with local councils	The standard common address file for Northern Ireland. Managed by OSNI
Norway	FKB-ADR		100		GAB-register	
Poland						
Portugal						
Romania						
Slovak Republic						
Slovenia	Naslovi	1:5000	100		Aerial photographs at the scale of 1:17.500.	NMA metadata: http://www.gu.gov.si/

ADDRESS DATASETS						
Name of the country	**Name of the dataset**	**Scale**	**Coverage[8]**	**Standards**	**Source**	**Additional information (responsible organization)**
Spain	SIGCA2	1:1000	60		aerial photographs	
Sweden	Fastighets-registrets adressdel		80	Yes SS 61 34 01	From municipalities	Relation to real property unit and building unit. Geographical relation are coordinates. The extent of addresses can vary. http://www.geolex.lm.se/ http://www.lm.se/kartplan
Switzerland	GEOPOST	1:10000	100	INTERLIS		Post http://www.geopost.ch/
	GEOPOST MD.01-MO-CH	1:1000	100	INTERLIS		Post Cadastral database: 100% coverage planed in 2008
Turkey						
Ukraine						

Table F Road and interchange information

ROADS AND INTERCHANGES											
Name of the country Road / Interchange	**Availability measure**	**Coverage** [9]	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Address numbers**	**Positional accuracy (m)**	**Reference data set**	**Additional Information**
Austria	Yes	100	1100	DLM-Objektbereich Verkehr, Objektgruppe "Straßen"	Highways, roads, streets, ...	continual	CLASS - highways (2 classes), roads (4 classes) NAME NUMBER STATUS - below the surface, on the surface and above the surface. CARTOGRAPHIC - Signature in scale 1:50000 DATE OF ACTUALLITY METHOD OF ACQUISITION		3		
	-	-	-	-	-		-		-	-	-
Belgium	Yes	70	RO111	Weg		Not planned	**BRC-BRIDGE CATEGORY: INDICATES TYPE OF BRIDGELEV - LEVEL:TUNNEL, SURFACE LEVEL, BRIDGERST-ROAD SURFACE TYPE:DIRT ROAD, GRAVEL ROAD, SOLID PAVEMENTUSE: TYPE OF ROAD WID - ROAD WIDTH**			Top10V-GIS	
	Derivable	70				Not planned				Top10V-GIS	

[9] *In percentage of the country*

ROADS AND INTERCHANGES											
Name of the country *Road* *Interchange*	**Availability measure**	**Coverage**[9]	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Address numbers**	**Positional accuracy (m)**	**Reference data set**	**Additional Information**
Bulgaria											
Croatia	Yes	60	4101	cesta	Road is a traffic route having finished road-surface of any type (asphalt, concrete, finished elements or macadam) wider than 3 meter. It is any built-up surface used for traffic of motor vehicles with exactly defined road-surface edges.	5-10 years	Feature class, belongs to group "road traffic" and category "transportation"		2	Prometnica	aerial photographs in the scale 1:20000, field decryption, road classification data published in Official Gazzette

ROADS AND INTERCHANGES											
Name of the country *Road* *Interchange*	**Availability measure**	**Coverage** [9]	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Address numbers**	**Positional accuracy (m)**	**Reference data set**	**Additional Information**
Cyprus	Yes	100	N/A	Odiko diktyo	Road Network	As needed	The road network is divided into the following categories: (1) 4-lane highway,(2) 2-lane road - hard surface,(3) 1-lane road - hard surface,(4) Loose surface all weather road,(5) Loose surface fair weather road,(6) Track,(7) Footpath	Yes			The road network is available at scales 1:500000, 1:250000, 1:100000, 1:50000 for the whole island. Data at scale 1:7500 is available for main cities. In addition to the above, street centrelines will be derived from cadastral plans at scales 1:500 - 1:5000. Address numbers will be added at a later stage.
	Yes	Planned	N/A	Odikos komvos		As needed					
Czech Republic	Yes	100		Silnice, dalnice (road, highway)Ulice (Street)	A road or street, which is maintained for motor traffic.	Continual	NAMS (for road, highway) Official codes of roads, from which is possible to recognize the class of road (highway, motorway, 1,2 and 3 class). EXS road under construction/OK NAMUL (for street, but untill now not filled in). EXS street not runnable or steps. MAPNO		5	ZABAGED	

ROADS AND INTERCHANGES											
Name of the country *Road* *Interchange*	**Availability measure**	**Coverage** [9]	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Address numbers**	**Positional accuracy (m)**	**Reference data set**	**Additional Information**
	Yes	100	AP020AQ62	Krizovatka mimourovnova (bridge road node)Krizovatka urovnova (level road node - crossing)	Unlevel or level road nodes (crossings).	Continual	NAMUB Official codes for road nodes. NAME (only for bridge road node) EXIT number from highway (not filled in untill now) NAMS1 - NAMS5 Official codes of roads in node (crossing). MAPNO		5-15	ZABAGED	
Denmark	Yes	100	2111 / 2112 / 2115 / 2122 /2123	motorvej (motorway) / motortrafikvej (expressway) / vej over 6 m (road over 6 m) / vej 3-6 m (road 3-6 m) / anden vej (other road)	Centre line between the other traffic lane edges of a road which is maintained for motor traffic and > 50 m.	continual	Unique-ID, date of creation, producer, accuracy. A road segment from one connection to the next can have as attributes municipality-number, road-number, street-name and traffic-restrictions. Roads with names is a class of its own. No direct link to adresses, but adresses can be derived.	Yes	1	TOP10DK	
	Derivable	100		vejkryds (road crossing)	Connection between two or more road centre lines with same x, y, z.	Continual	Traffic-restrictions can be derived. Traffic-restriction is a link from the road-segment, no direct link to the connection.		1	TOP10DK	

ROADS AND INTERCHANGES											
Name of the country *Road* *Interchange*	**Availability measure**	**Coverage** [9]	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Address numbers**	**Positional accuracy (m)**	**Reference data set**	**Additional Information**
Estonia	Derivable	100	707 708 709 711 712 717	Kiirtee Põhi- või tugimaantee Kõrvalmaantee Kohalik tee Pinnastee Tänav, plats	Highway 707 Main and county road 708 Secondary road 709 Local paved road 711 Unpaved 712 City street, square 717	Unknown	col 178 (edges) col 17 (centerline, 707 and 708 main) col 18 (centerline, 708 county) col 19 (centerline, 709) col 204 (centerline, 711, 8m and wider) col 137 (centerline, 711, 8m and narrower) col 138 (712) col 179 (centerline, 717)text col 171 (surface)text col 250 (road number)		4	Põhikaart	attribute 'col' means DGN colour 'Version 1' available (except an area of 650 km² bordering on the Russian Federation), maintenance interval not decided yet
	Derivable	100	709a	Rambid ja ühendusteed	Ramps and interchanges	Unknown	col 178 (edges) col 13 (centerline)		4	Põhikaart	See above

ROADS AND INTERCHANGES											
Name of the country *Road* *Interchange*	**Availability measure**	**Coverage** [9]	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Address numbers**	**Positional accuracy (m)**	**Reference data set**	**Additional Information**
Finland	Yes	100	12111-12141	Tieviiva	A road or street, which is maintained for motor traffic.	Annually	ROAD CLASS Roads are divided into the following classes: Ia, Ib, IIa, IIb, IIIa, IIIb, roadway, ferry, cable ferry. For classes Ia-IIIb and roadway, the class of the road is determined on the basis of its trafficability. The class is determined by the average condition; thus sections better or worse than the average are not distinguished. Definitions of classes:Roads in sparsely populated areas:Ia: motorway carriageway with two or more lanesIb: carriageway with two or more lanes other than a motorway, or a single carriageway with two or more lanes, width of carriageway over 8 m.IIa: single carriageway with two lanes, width of carriageway 6.5-8 m.IIb: single carriageway with two lanes, width of carriageway 5-6.5 m.IIIa: single carriageway with one lane, width of carriageway 4-5 m.IIIb: single carriageway with one lane, width of carriageway 3-4 m.Roadway: single carriageway with one lane, width of carriageway under 3 m.Ferry: route used by a vessel which conveys road traffic by transporting vehicles and people, and which is not steered with a cable.Cable ferry: route used by a vessel which conveys road traffic by transporting vehicles and people, and which is steered with a cable. VERTICAL STATUS OF ROAD the classes of vertical status are: on the surface, above the surface and under the surface (see formation).	Yes	Level A: 3 m, Level B: 12,5 m	Maastotietokanta	A new national road database is planned (Digiroad) and will be available 2004

ROADS AND INTERCHANGES											
Name of the country *Road* *Interchange*	**Availability measure**	**Coverage**[9]	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Address numbers**	**Positional accuracy (m)**	**Reference data set**	**Additional Information**
							ROAD NUMBER Numbers of roads maintained by the Finnish National Road Administration are recorded in accordance with the road register. European road network numbering is not recorded. Private roads are not currently numbered in the topographic database. ROAD STATUS The classes of road status are: being planned, under construction and in use. A road under construction is recorded when construction has already begun and the location and class can be specified. Only roads in classes Ia-IIIa are recorded as a road under construction. A road taken out of use is separated from the traffic network by breaking the connection or by recording an OBSTRUCTION at the point of the junction ROAD NAME and ADDRESS NUMBERS				
	Derivable	100		Tieviiva						Maastotietokanta	Can be calculated from Tieviiva

ROADS AND INTERCHANGES											
Name of the country *Road* *Interchange*	**Availability measure**	**Coverage** [9]	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Address numbers**	**Positional accuracy (m)**	**Reference data set**	**Additional Information**
France	Yes	100 /26		tronçon de route	Roads, streets, lanes opened or not to vehicular use 2 levels of description depending on the type of area :· urban areas = detailed road description, all attributes are filled· inter-urban areas = simplified description , no address numbers, attributes 1, 2, and 5 to 15 are filled (some values are not allowed in inter-urban areas).	Annually (Achieved in the region of Paris, goal in other regions)	1 : Physical class {Highway, Single carriageway road, 2 carriageways road, slip road, stairs, path, ferry}2 : Functional class {main road, primary road, secondary, tertiary, other service road} 3 : Right Side Street name4 : Left Side Street name 5 : Road position {level, bridge, underground}6 : Level {0, 1, 2, etc for roads connected to briges}7 : Number of lanes8 : Main itinerary {yes/no}9 : Road number10 : European Road number11 : Administrative limit {indicates if the road is also used as an administrative limit}12 : Right Side District number {Zip code of the district on the right side of the road}13 : Left Side District number {Zip code of the district on the left side of the road}14 : Direction of Traffic Flow {positive direction, negative direction, both directions}15 : Traffic access {free, forbidden, impossible, toll road}16 : Bus lane17 : Interdiction to dangerous material transportation18 : Maximum Height Allowed19 : Maximum Weigth allowed (physical)20 : Legal weight restriction21 : Maximum Length allowed22 : Maximum Width allowed23 : Delivery hour {days and hours when deliveries are allowed}24 : Closing period {days and hours when the road is closed to traffic}25 : Seasonal closing {yes/no}Construction Status {under construction, opened to traffic}	Yes	Current : 10 2007: 2	GEOROUTE/ Topo-Routes	Georoute is the current road DB. Topo-Routes is the future road DB: it is obtained from unification of Georoute and BD Topo. Production of Topo-Routes is planned from 2004 to 2007. The positional accuracy of the transport layer of BDTOPO and Topo-Routes is 2 m. Note: France 2007 (Topo-Routes) has same definitions, which are not repeated here. Coverage of Topo-Routes is 42% of population and 26% of territory.

ROADS AND INTERCHANGES											
Name of the country *Road* *Interchange*	**Availability measure**	**Coverage** [9]	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Address numbers**	**Positional accuracy (m)**	**Reference data set**	**Additional Information**
	Yes	100/30		Nœud du réseau routierCarrefour ComplexeNon-communication	Simple crossroads (points)Complexe crossroads (surface) {roundabout, interchange} Non-communication {non-communciation between two road sections : no left turn, no right turn, no straight way} .	Annually (Achieved in the region of Paris, goal in other regions)	Crossroads name Crossroads name		10/2	GEORO UTE See above	See above
Germany	Yes	100	3101	Strasse	Line feature (centre axis). Roads with median are portrayed by complex feature 3104 that is composed of 3105 road body and 3106 road lane.	Biannually	KN - road number(s),BDI - inner-urban importance,BDU - inter-urban importance,BRF - Width of road,FSZ - Number of lanes,IBD - European Road yes/no,WDM - road class,ZUS - Status (in use, under construction)		3	ATKIS Basis-DLM - Amtliches Topographisch-Kartographisches Informationssystem, Digitales Landschaftsmodell, Basis	

ROADS AND INTERCHANGES											
Name of the country *Road* *Interchange*	**Availability measure**	**Coverage**[9]	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Address numbers**	**Positional accuracy (m)**	**Reference data set**	**Additional Information**
	Yes	70	3503	Verkehrsknoten	Node feature, captured along the Autobahnen	Biannually	GN - Geographical Name, KN - Node number		3	See above	
Great Britain	Yes	100	10175	Road	A metalled way for vehicles where a vehicle is defined as one with wheels on both sides of its body	Biannually	accuracyOfPosition anchorPoint calculatedAreaValue descriptiveGroup featureCode make orientation physicalLevel physicalPresence point polygon polyline referenceToFeature textString theme TOID version versionDate		0.4-5	OS Mastermap ITN Roads	
	Yes	100		Interchange or road node	A connection designed to provide traffic access from a major road to another major road	Biannually	See above		0.4-5	See above	

ROADS AND INTERCHANGES											
Name of the country *Road* *Interchange*	**Availability measure**	**Coverage** [9]	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Address numbers**	**Positional accuracy (m)**	**Reference data set**	**Additional Information**
Greece	Yes	100		odiko diktio	A road or street, which is maintained for motor traffic.	5-10 years	ROADCLASS:Roads are divided into following classes:dual highway four lanes wide,all weather hard surface road two lanes wide,all weather hard surface road one lane wide,all weather loose surface road two lanes wide,all weather loose surface road one lane wide,fair or dry weather loose surface road,abandoned road,road under construction,cart tracks,trail passable,passable with difficulty and foat path.				
	No	100		komvi odikou diktiou					25		

ROADS AND INTERCHANGES											
Name of the country *Road* *Interchange*	**Availability measure**	**Coverage** [9]	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Address numbers**	**Positional accuracy (m)**	**Reference data set**	**Additional Information**
Hungary	Yes	100	DC00-08	Út	Road/street for traffic purposes	Unknown	Type of roads: highway, motorway, main road first, second class, secondary road, secondary road built up/not built up, private road, road for bicycles Identifier of the facility Object type code of the facility Topographic number of parcels of public area in question In case of road section: branch name and number of the road including the road section segment number of the starting point of the road section along the road including it axis of the road section intersects the boundary of inhabited area(x, y) Characteristic material of the facility Maximum 3 of characteristics or performance specifications of the facility (e.g. load capacity, permeability, volumetric capacity) Name and address of the owner (organization) Name and address of trustee (organization) Date of abolition For visualisation: code of legend Identifier of the relating surveying rayon Geocode (x, y, H) (starting point of road section, reference point of a facility that is not a road section)		100		Draft Standard

ROADS AND INTERCHANGES											
Name of the country *Road* *Interchange*	**Availability measure**	**Coverage** [9]	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Address numbers**	**Positional accuracy (m)**	**Reference data set**	**Additional Information**
	Yes		DA01	Közúti kereszteződés	Transport facility used for provide traffic access from one road to another		identifier, name, coordinates,				Draft Standard
Iceland	Yes	100	201	Samgöngur		2-4 years	ar_uppl =year of informations.eign = owners of datanakv_xy=accuracynafn= name of the object lu-uppr=origin of the dataheimild=data nafn= nameveg_gerd= road typekaflanr=road sectionsamg_yfirb=surface typeveg_fl = road groupVeg_nr=road nr		5	IS 50V	www.lmi.is/landlysing
	No										

ROADS AND INTERCHANGES											
Name of the country *Road* *Interchange*	**Availability measure**	**Coverage**[9]	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Address numbers**	**Positional accuracy (m)**	**Reference data set**	**Additional Information**
Ireland	Yes	100	201 - 209	Communic_Roads_Motorway; Communic_Roads_Nat_Primar; Communic_Roads_NAt_Second; Communic_Roads_Regional; Communic_Roads_Third; Communic_Roads_Fourth; Communic_Roads_Track; Communic_Roads_Propose_Rd; Communic_Roads_Dual_Cway;	An open way suitable for vehicular access	Continual	Each named thorough fare which contains addressable buildings is recorded in GeoDirectory. The database contains the name, co-ordinates and unique ID for each thoroughfare.		10	Discovery	
	No										

ROADS AND INTERCHANGES											
Name of the country *Road* *Interchange*	**Availability measure**	**Coverage**[9]	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Address numbers**	**Positional accuracy (m)**	**Reference data set**	**Additional Information**
Italy	Yes	-	L311, L312, L313, L302S, L301, L301S, L302, L303A, L303AS, L303B, L304A, L304B, L305A, L315, L314.	Strada		5-10 years	EXS Categoria di esistenza; LOC Categoria di posizione; LTN Numero di binari, numero di corsie; MED Presenza dello spartitraffico; NAM Nome; RST Tipo di fondo stradale;TUC Categoria del sistema di trasporto; TXT Descrizione Oggetto; WD1 Larghezza minima.		2		
	Yes	-	L301A, L301B.	Svincolo		5-10 years	EXS Categoria di esistenza; LOC Categoria di posizione; LTN Numero di binari, numero di corsie; MED Presenza dello spartitraffico; NAM Nome; RST Tipo di fondo stradale;TUC Categoria del sistema di trasporto; TXT Descrizione Oggetto; WD1 Larghezza minima.		2		
Latvia	Yes	70	6102000000-6102050400	Ceļi		2-4 years			2-5	transports (source: Aero images 1:30000 , Ortophoto maps 1:10 000 land surveys)	Roads are subdivided:- Superhighway- Highway(index “A”)- Highroad with solid covering) - Highroad with gravel covering (index “P”)- Earth roads

ROADS AND INTERCHANGES											
Name of the country *Road* *Interchange*	**Availability measure**	**Coverage**[9]	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Address numbers**	**Positional accuracy (m)**	**Reference data set**	**Additional Information**
	Derivable	70									Depicture as separate roads and bridges. (codes 6102000000-6102050400)
Lithuania	Yes	100	gc2gc11gc12gc14-gc16sgc11sgc12fgc11fsgc11	Keliai	Central lines of roads and steets (highways, hard and loose surface roads, tracks, cart tracks)	irregular	GKODAS -geoobject; VARDAS - name; NUMERIS- number; DANGA -surface; JUOSTOS - number of strips and of the road; PLOTIS- width of the road	Yes	1	KDB10LT-mikro	20 % of features have full attribute information
	Derivable	20	oc1-oc4oc6	Tiltai, tuneliaiviadukai	Central lines of bridges, viaducts and tunnels	5-10 years	GKODAS - geoobject; height; width; length in meters; material; INFO - explan. information		2	KDB10LT	
Malta	Yes	100	w35 w36 w37 w86 w87	Road	Centre line of roads and streets	As needed	Road classification: Arterial Road, Distributor Road, Underground Arterial Road, Local Access Road and Access Only Road		2	Roads	

ROADS AND INTERCHANGES											
Name of the country *Road* *Interchange*	**Availability measure**	**Coverage** [9]	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Address numbers**	**Positional accuracy (m)**	**Reference data set**	**Additional Information**
Netherlands	Yes	100	64 linecodes 22 areacodes	wegen	we have trans-lated all the dif-ferent attributes in as many features We have an extensive road classification and therefore many road features	2-4 years			2-3	TOP10NL, TOP10we-gen and NWB (Nationaal Wegen Bestand)	www.tdn.nl TOP10wegen is derived from TOP10NLTOP10wegen is road center lines NWB is made by producer C
	No										
Northern Ireland	Yes	100			A metalled way for vehicles	5-10 years	Address for 50% of 'A' and 'B' class roads only – MOTORWAY, CLASS_A_RD, CLASS_B_ROAD, MINOR_RD, ROAD_OTH, TRACK, FOOTPATH - Other attribution designed for cartographic output only	Yes	1	OSNI Large-scale	
	Yes	100			All included in the above road network	5-10 years	Named as above - no attribution to suggest an interchange.		1	OSNI Large-scale	

ROADS AND INTERCHANGES											
Name of the country *Road* *Interchange*	**Availability measure**	**Coverage** [9]	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Address numbers**	**Positional accuracy (m)**	**Reference data set**	**Additional Information**
Norway	Yes	100	7001	Senterlinje Veg	Line in the Center of the road.	Annually	Road number and name Road type (National, Couty or municipality) Road status		2	FKB-VSIT FKB-Bane FKB-LUFT FKB-Vbase	FKB-B: 1: 5000 - 1:8000 FKB-C: 1: 15 000 - 1_: 18 000 Digitised from old maps VBASE
	Derivable	100				Annually			2	See above	See above
Poland	Yes	10		Drogi i obiekty z nimi związane		unknown			3		
	No										
Portugal	Yes	50	1001	Rede Viária		As needed		Yes	< 2	SCN10K	
	No										available when the database structure would be transform to a object based database
Romania	Yes			drumuri	A road or street which is maintained for motor traffic.		The roads are classified into: national roads, county roads and communal roads				

ROADS AND INTERCHANGES											
Name of the country *Road* *Interchange*	**Availability measure**	**Coverage** [9]	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Address numbers**	**Positional accuracy (m)**	**Reference data set**	**Additional Information**
	No										
Slovak Republic	Yes	100		cesty	road class (motorway, I. class,..), completion, vertical status of road	5-10 years			50	SVM 50	
	Derivable				main road, minor road					SVM 50	
Slovenia	Yes	100		Ceste		2-4 years	Road type;road number.		20	Promet	Roads and railways lines of the national topographical map at the scale of map 1:25. 000. 1 m resolution is also available on part of the country.metadata: http://www.gu.gov.si/
	No										

ROADS AND INTERCHANGES											
Name of the country *Road* *Interchange*	**Availability measure**	**Coverage** [9]	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Address numbers**	**Positional accuracy (m)**	**Reference data set**	**Additional Information**
Spain	Yes	95	060101 060701 061001 061301 061501 061701 061601 061901 062001 062101 062601 061201 061401	Autopista Autovía Carretera RIGE Carretera orden 1 Carretera orden 2 Carretera orden 3 Vía pecuaria Pista Carretera privada Travesía Calzada romana Camino Senda	Highway A Highway B Statal Road Autonomic road class 1 Autonomic road class 2 Autonomic road class 3 Open way for flock Forestal open way Private road Part of a road inside a city Roman way Wide path Narrow path	5-10 years			3	Parcels	
	Yes	95	062201	Enlace	Connection road from one road to another	5-10 years			3		

ROADS AND INTERCHANGES											
Name of the country *Road* *Interchange*	**Availability measure**	**Coverage** [9]	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Address numbers**	**Positional accuracy (m)**	**Reference data set**	**Additional Information**
Sweden	Yes	90	VÄGMO.D VÄGA1.M VÄGA2.M VÄGA3.M VÄGAS.D VÄGA0BY:M VÄGBN.M VÄGBS.M VÄGGG.D VÄGGG.M+ codes for underpass/tunnel for each road code e.g. VÄGMOU.D. Other roads ÖVÄGCYK.M ÖVÄGTRA.M	Motorway Public road >= 7m Public road >=5<7m Public road <5m Public road, dual carriageway Public road under contruction Motor road Poorer quality motor road Through street Other road or track not intended for motor vehicles. Cycle path/parkway Tractor road/track	Permanent road construction primarily used for motor vehicles and including sections on flyovers, in underpasses and in tunnels	Continual	Road class centre line or centre line of carriageway Road name in urban areas		Planimetric: 2 m Height: 2 m	Grund-läggande geografiska data (GGD)	In Sweden there is a nationwide database containing up-to-date, quality-assured information on the entire Swedish road network. The database is called NVDB. NVDB is managed by the Swedish National Road Administration (SNRA) in association with the Central Office of the National Land Survey, the Swedish Association of Local Authorities, and the forest industry. NVDB is used for updating GGD.

ROADS AND INTERCHANGES											
Name of the country *Road* *Interchange*	**Availability measure**	**Coverage**[9]	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Address numbers**	**Positional accuracy (m)**	**Reference data set**	**Additional Information**
	Derivable	90		Vägkorsning (road crossing)	Connection between two or more road centre lines with same node (x,y)	Continual			Planimetric: 2 mHeight: -	Grundläggande geografiska data (GGD)	
Switzerland (two datasets)	Yes	100	str	Strassen-netz	Road network	5-10 years	ObjectID, ObjectOrigin, ObjectVal (e.g. Autobahn, Autob_Ri , Autostr, 1_Klass, 2_Klass, …) YearOfChange, BridgeType, TunnelType		5	VECTOR 25	http://www.swisstopo.ch/en/digital/VECTOR25/str.htm http://www.geocat.ch
	Yes	60		Couverture_du_sol, SurfaceCS	Effective surface of the roads	Continual	Identification, Description, Validite, Date, Qualite, Genre -> route_chemin		0.5		http://www.swisstopo.ch/fr/vd/interlis.htm
	Yes	100	str	Strassen-netz	Road network, Interchange	5-10 years	ObjectID, ObjectOrigin, ObjectVal (Ein_Ausf, A_Zufahrt), YearOfChange, BridgeType, TunnelType		0.5	VECTOR 25	http://www.swisstopo.ch/en/digital/VECTOR25/str.htm http://www.geocat.ch
	No										

ROADS AND INTERCHANGES											
Name of the country *Road* *Interchange*	**Availability measure**	**Coverage** [9]	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Address numbers**	**Positional accuracy (m)**	**Reference data set**	**Additional Information**
Turkey											
Ukraine	Yes	90	61 200 000	Автомобільні шляхи	A road or street which is maintained for motor traffic.	11 years-	ROAD CLASS Roads are divided into the following classes: Primary road (=major, long-distance road), Secondary road (=regional road), Local road		5		

Table G Administative boundaries and areas

ADMINISTRATIVE BOUNDARIES AND AREAS											
Name of the country ***Adm. Boundary*** ***Adm. area***	***Availability measure***	***Coverage*** [10]	***National code***	***National name***	***Description***	***Maintenance***	***Attributes available***	***Eurotstat hierarchy (NUTS1-5)/ SABE USE hierachy (USE1-6)***		***Positional accuracy (m)***	***Reference dataset***	***Additional Information***
Austria	Yes	100	Layer in BEV-DKM-Format	Katastralgemeindegrenze	line of demarcation between cadastral units	Continual				0.5	VGD (Verwaltungsgrenzdatenbank)	VGD=Part of SABE
	Yes	100	-	Katastralgemeinde	an area as a determined part of a community	Continual		Yes		-	VGD (Verwaltungsgrenzdatenbank)	-
Belgium	Yes	100	AD110, AD120, AD130, AD140, AD150	Staatsgrens, gewestgrens, provinciegrens, arrondissementsgrens, gemeentegrens		Annually					Top10V-GIS	
	Yes	100	AD250	gemeente		Annually	NAM-NAME				Top10V-GIS	
Bulgaria												

[10] ***In percentage of the country***

ADMINISTRATIVE BOUNDARIES AND AREAS												
Name of the country **Adm. Boundary** **Adm. area**	**Availability measure**	**Coverage** [10]	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Eurotstat hierarchy (NUTS1-5)/ SABE USE hierachy (USE1-6)**		**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
Croatia	Yes	100		administrativna granica		Continual	counties, towns, municipalities and settlements borders		Yes	5	Administrativna granica	published in Official Gazzette, accepted by parlaiment based on proposal of counties, municipalities, towns
	Yes	100	various	administrativno podrucje		Continual			Yes	5	See above	
Cyprus	Yes	100	N/A	Dioikitika synora.	Administrative boundary lines between districts, communities or municipalities, quarters, and registration blocks.	Continual		Yes	Yes	0,15 - 1,5 from cadastral plans,10-100m on various topo maps.	Country, district, community, quarter and block boundaries	Based on cadastral plans which vary in scale between 1:500 and 1:5000 depending on the area. Admin boundaries also exist at other scales such as 1:100000 and 1:250000.
	Yes	100	N/A	Dioikitiki periochi	An official administrative demarcation of:District, Community or municipality, Quarter (province), Registration block.	Continual		Yes	Yes	See above	See above	

ADMINISTRATIVE BOUNDARIES AND AREAS												
Name of the country **Adm. Boundary** **Adm. area**	**Availability measure**	**Coverage** [10]	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Eurotstat hierarchy (NUTS1-5)/ SABE USE hierachy (USE1-6)**		**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
Czech Republic	Yes	100		Hranice spravnich jednotek a katastralnich uzemi v meritku 1:10 000 nebo 1:50 000 (Boundary of administration units and cadastre units at scale 1:10 000 or 1:50 000).	An official national, regional, district and municipality boundary.	Biannually	CLASS OF BOUNDARIES National boundary, regional boundary, district boundary, municipality boundary and also some unsurveyed boundary.	Yes	Yes	30m for the scale 1:10 000 and 200m for the scale 1:50 000	Spravni jednotky	
	Yes	100		Definicni bod spravni jadnotky (definition point of a administration unit)	An official administrative demarcation of a municipality and also demarcation of a district and region.).	Continual	CODENAME Official codes and names of municipality and also codes and names of districts and regions.	Yes	Yes	Not defined	Spravni jednotky	

ADMINISTRATIVE BOUNDARIES AND AREAS												
Name of the country **Adm. Boundary** **Adm. area**	**Availability measure**	**Coverage** [10]	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Eurotstat hierarchy (NUTS1-5)/ SABE USE hierachy (USE1-6)**		**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
Denmark	Derivable	100	1111 /1112 /1113 / 1114	rigsgrænse (frontier) / administrative grænser (administrativ boundary)		continual	Frontier Denmark / Germany. Administrativ boundary can be derived from administrativ area. Administrativ boundary are: county boundary, municipal boundary and parish boundary	Yes		1	TOP10DK	
	Yes	100	6311 / 6312 / 6313	amt (county) / kommune (municipal) / sogn (parish)	An area under control of an official administrative unit)	Continual	Unique-ID, date of creation, producer, accuracy.National code for the administrativ unit and the name.	Yes	Yes	1	TOP10DK	

ADMINISTRATIVE BOUNDARIES AND AREAS												
Name of the country Adm. Boundary Adm. area	Availability measure	Coverage [10]	National code	National name	Description	Maintenance	Attributes available	Eurotstat hierarchy (NUTS1-5)/ SABE USE hierachy (USE1-6)		Positional accuracy (m)	Reference dataset	Additional Information
Estonia	Yes	100				Continual			Yes	position accuracy corresponds to that of 1:10 000 topographical database features	Kataster	Oracle Spatial database, are digitized on the basis of Estonian Basic Map, if necessary adjusted by parcel boundaries
	Yes	100				Continual			Yes		Kataster	See above

ADMINISTRATIVE BOUNDARIES AND AREAS												
Name of the country **Adm. Boundary** **Adm. area**	**Availability measure**	**Coverage** [10]	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Eurotstat hierarchy (NUTS1-5)/ SABE USE hierachy (USE1-6)**		**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
Finland	Yes	100	84111-84115	Kuntaraja MNICIPAL ADMINISTRATIVE BOUNDARY	An official national boundary determined in a treaty or an official provincial boundary based on a Council of State decision, boundary of the Province of Åland or other municipal administrative boundary	Continual	CLASS OF MUNICIPAL ADMINISTRATIVE BOUNDARY he classes of municipal administrative boundary are: national boundary, provincial boundary, municipal boundary and unsurveyed boundary LEGEND FOR MUNICIPAL ADMINISTRATIVE BOUNDARY	Yes	Yes	40	Maastotietokanta	
	Yes	100	84200	Kunta	An official administrative demarcation of a municipality based on a decision of the Council of State.	Continual	MUNICIPALITY NUMBER A three-digit municipality number given by the Population Register Centre.	Yes	Yes	Not defined	Maastotietokanta	

ADMINISTRATIVE BOUNDARIES AND AREAS											
Name of the country **Adm. Boundary** **Adm. area**	**Availability measure**	**Coverage** [10]	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Eurotstat hierarchy (NUTS1-5)/ SABE USE hierachy (USE1-6)**	**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
France	Yes	100/100		tronçon limite	type of limit	Annually			50/500 2008: Varied, from 1m to 10m, depending on the precision of the definition of each limit	BD CARTO / GEOFLA 2008: Couche administrative du Référentiel à grande échelle (RGE)	RGE: 100% coverage planned in 2006.

ADMINISTRATIVE BOUNDARIES AND AREAS												
Name of the country **Adm. Boundary** **Adm. area**	**Availability measure**	**Coverage** [10]	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Eurotstat hierarchy (NUTS1-5)/ SABE USE hierachy (USE1-6)**		**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
	Yes	100/30		Unité administrative		Annually	French hierarchy: region, department, arrondissement, canton, commune.This is equivalent to the NUTS hierarchy, but BD CARTO does not contain NUTS codes directly.			50 2008: Varied, from 1m to 10m, depending on the precision of the definition of each limit.	See above	See above

ADMINISTRATIVE BOUNDARIES AND AREAS												
Name of the country **Adm. Boundary** **Adm. area**	**Availability measure**	**Coverage** [10]	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Eurotstat hierarchy (NUTS1-5)/ SABE USE hierachy (USE1-6)**		**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
Germany	Yes	100[11]/ 70	7299	Grenze	line feature, consistent with topographic features in dataset ATKIS, not consistent in dataset of Administrative Boundaries	Annually		Yes	Yes	3	ATKIS Basis-DLM - Amtliches Topographisch-Kartographisches Informationssystem, Digitales Landschafts modell, Basis	Coverage of special dataset Verwaltungsgrenzen 1: 250.000 is 100 % but geometry is not consistent with the topographic features from the ATKIS DLM. harmonised from contributions of the State Mapping Agencies
	Yes	100[11]/ 70	7101	Verwaltungsgebiet	area feature,consistent with topographic features in dataset ATKIS not consistent in dataset of Administrative Boundaries	Annually	GN - Geographical NameKN - Statistical code,ADM - Administrative Function,EWZ - Number of inhabitants	Yes	Yes	3	See above	See above

[11] Coverage of the special dataset Verwaltungsgrenzen 1:250 000

ADMINISTRATIVE BOUNDARIES AND AREAS											
Name of the country **Adm. Boundary** **Adm. area**	**Availability measure**	**Coverage** [10]	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Eurotstat hierarchy (NUTS1-5)/ SABE USE hierachy (USE1-6)**		**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
Great Britain	Yes	100	10127 10131 10128 10136 10135	Political or Administrative	The limits of responsibility and representation defined for electoral and administrative purposes	Biannually	accuracyOfPosition anchorPoint calculatedAreaValue descriptiveGroup featureCode make orientation physicalLevel physicalPresence point polygon polyline referenceToFeature textString theme TOID version versionDate			0.4-5	Boundary Line	Digitised from boundaries record sheets at 1:10,000 scale
	Derivable	100	10126	Political and Administrative	A blanket term used by Ordnance Survey to refer to all public Administrative areas, specifically local Government management and electoral areas	Biannually	See above			0.4-5	See above	See above

ADMINISTRATIVE BOUNDARIES AND AREAS											
Name of the country **Adm. Boundary** **Adm. area**	**Availability measure**	**Coverage** [10]	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Eurotstat hierarchy (NUTS1-5)/ SABE USE hierachy (USE1-6)**	**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
Greece	Yes	100		diikitika oria	An official national boundary determined in a treaty or an official provincial boundary based on a Council of State decision,	Continual	CLASS OF MUNICIPAL ADMINISTRATIVE BOUNDARY The classes of municipal administrative boundary are: national boundary, provincial boundary & municipal .	Yes	40		

ADMINISTRATIVE BOUNDARIES AND AREAS											
Name of the country **Adm. Boundary** **Adm. area**	**Availability measure**	**Coverage** [10]	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Eurotstat hierarchy (NUTS1-5)/ SABE USE hierachy (USE1-6)**		**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
Hungary	Yes	100	BA01-	Közigazgatási határok	Line of demarcation between administrative units	Continual	Identifier of administrative unit Code of its object type Its name Settlement code by KSH Settlement code by NUTS Name of administrative center Name and address of the organization responsible for administration Date of the establishment of the administrative unit Registry number of the decision recording establishment of the administrative unit Delimitation (preliminary, final) Date of abolition For visualisation: code of legendIdentifier of the relating surveying rayon Geocode of the entrance of the administrative centre (x, y[, H])	Yes	Yes	1		http://fish.fomi.hu

ADMINISTRATIVE BOUNDARIES AND AREAS											
Name of the country **Adm. Boundary** **Adm. area**	**Availability measure**	**Coverage** [10]	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Eurotstat hierarchy (NUTS1-5)/ SABE USE hierachy (USE1-6)**		**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
	Yes	100	BA01	Közigazgatási egység	An area controlled by administrative authority	Continual	BA01 State BA02 County BA03 Land office circuit (land management only) BA04 Settlement, district of capital		Yes	1	Magyar Közigazgatási Határok Adatbázisa (MKH)	DAT Standard, http://fish.fomi.hu Base scale: 1:4000 Source: land survey, digitalised cadastral maps
Iceland	Yes	100	101	stjórnsýslumörk		Annually	ar_uppl =year of informations. eign = owners of data nakv_xy=accuracy nafn= name of the object lu-uppr=origin of the data heimild=data mork_teg= type of boundaries mork_kennit=id number for the boundary line		Yes	50	IS 50V	www.lmi.is/landlysing

ADMINISTRATIVE BOUNDARIES AND AREAS											
Name of the country **Adm. Boundary** **Adm. area**	**Availability measure**	**Coverage** [10]	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Eurotstat hierarchy (NUTS1-5)/ SABE USE hierachy (USE1-6)**		**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
	Yes	-	108111				ar_uppl =year of information s.eign = owners of data nakv_xy=accuracy nafn= name of the object lu-uppr=origin of the data heimild=data umd_nr=uniqe number for the boundary poligon umdaemi=jurisdiction name sveitarf_nr=municipality number sveitarf=municipality name					

ADMINISTRATIVE BOUNDARIES AND AREAS											
Name of the country **Adm. Boundary** **Adm. area**	**Availability measure**	**Coverage** [10]	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Eurotstat hierarchy (NUTS1-5)/ SABE USE hierachy (USE1-6)**	**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
Ireland	Yes	100	30043 - 30048	Administrative Boundary - County Council, City Council, Borough Council, Town Council, Rural Districts Electoral Division,	A line of demarcation between administrative divisions	Continual			2-10		ED boundaries were established under the 1838 Poor Law Act, known then as District Electoral Divisions (DED).Since 1996, now known as Electoral Divisaions (ED).The 1898 Local Gov. Act which set up county boroughs, boroughs, urban districts and towns has been replaced by the 2001 Local Gov. Act. Originally scanned from 1:10560 paper maps, transformed to Irish Grid. Updating in process using 1:1000, 1:2500 and 1:5000 datasets Completed dataset expected to be completed end April 2003
	Yes	100	30043 - 30048	See above	Boundaries defined under Irish 2001 Local Government Act as being the administrative boundaries for the Republic of Ireland.				2-10		See above

ADMINISTRATIVE BOUNDARIES AND AREAS											
Name of the country **Adm. Boundary** **Adm. area**	**Availability measure**	**Coverage** [10]	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Eurotstat hierarchy (NUTS1-5)/ SABE USE hierachy (USE1-6)**		**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
Italy	Yes	-	L804, L803, L802, L801.	limite amministrativo		5-10 years	NM3 Nome dell' amministrazione confinante da un lato; NM4 Nome dell' amministrazione confinante dall'altro lato; TXT Descrizione Oggetto.			2		
	Yes	-	C800D, C800B, C800A.	area amministrativa		5-10 years	NA4 Codice amministrativo;NAM Nome; TXT Descrizione Oggetto.			2		

ADMINISTRATIVE BOUNDARIES AND AREAS												
Name of the country **Adm. Boundary** **Adm. area**	**Availability measure**	**Coverage** [10]	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Eurotstat hierarchy (NUTS1-5)/ SABE USE hierachy (USE1-6)**		**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
Latvia	Yes	70	7101000000	Robežas		Continual				2-5	Administratīvo robežu karte 1:25 000	Map of scale 125 000 on Dgn format. Planned map of administrative borders 1:10000 Border of the State is depicted according to agreements between States on demarcation or other official documents in case where border is not demarced. By regional border is depicted border of regions and cities of the Republic. By third step designation of administrative borders are depicted borders of counties, parishes, regional towns, towns with rural areas. By designation of territorial border is depicted the border of suborb of Riga and border between territorial units with different codes
	No											No problem to supplement the clasification

ADMINISTRATIVE BOUNDARIES AND AREAS											
Name of the country **Adm. Boundary** **Adm. area**	**Availability measure**	**Coverage** [10]	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Eurotstat hierarchy (NUTS1-5)/ SABE USE hierachy (USE1-6)**	**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
Lithuania	Yes	100	as1-as4 as51 as52 fas51 fas52	Administracines ribos	Boundaries of Lithuanian districts	Continual	GKODAS - geoobject		Not defined	KDB10LT-mikro	
	Yes	100	as1-as4 as51 as52 fas51 fas52	Vietoves	Areas with information about names of localities	Irregular	GKODAS - geoobject; VARDAS - name; GYVSK - number of locality; GYV_TIP - category of locality		Not defined	KDB10LT-mikro	
Malta	Yes	100	D38	Local Council Boundary	A region bounding the administrative area	As neededl	Council identifier and council name	Yes	2	Councils	
Netherlands	Yes	100	They are coded but not in the schema of TOP10NL	Rijksgrens Provinciegrens Gemeentegrens	National boundary Provincial boundary Municipal boundary	Annually			0.1-5	Gemeente-grenzenbe-stand	Stored in a different database Source: municipalities

ADMINISTRATIVE BOUNDARIES AND AREAS												
Name of the country **Adm. Boundary** **Adm. area**	**Availability measure**	**Coverage** [10]	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Eurotstat hierarchy (NUTS1-5)/ SABE USE hierachy (USE1-6)**		**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
	Yes	100	They are coded but not in the schema of TOP10NL			Annually				0.1-5	Gemeente-grenzenbe-stand	Stored in a different database
Northern Ireland	Yes	100			Territorial boundaries that facilitate the management of society		TOWNLAND, WARD, LGD - attribution designed for cartographic output only	Yes	Yes	1	OSNI Large-scale	
	Derivable	100			Derivable from above boundary polygons	5-10 years		Yes	Yes	1	OSNI Large-scale	
Norway	Yes	100	Numerous	Numerous	FACC description OK .	Biannually			Yes	Varies	Adminis-trative og statistiske inndelinger (ABAS)	Digitised, field measurements Scale varies from 1:1 to 1:50 000
	Yes	100	Numerous	Numerous	FACC description OK	Biannually			Yes	Varies	See above	See above
Poland	Yes	100		Granice			1-4			15		1: 50 000

ADMINISTRATIVE BOUNDARIES AND AREAS												
Name of the country **Adm. Boundary** **Adm. area**	**Availability measure**	**Coverage** [10]	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Eurotstat hierarchy (NUTS1-5)/ SABE USE hierachy (USE1-6)**		**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
	Yes	100		Granice			1-4			15		1: 50 000
Portugal	Yes	100	0201	Limites Administrativos		Annually		Yes	Yes	< 5	CAO	1:25 000
	Yes	100				Annually		Yes	Yes	< 5	CAO	1:25 000
Romania	Yes			limita administrativă	An official national boundary determined in a treaty or an official provincial boundary in accordance with present legislation.		The hierarchy structure of boundaries is: -country, -county, municipium Bucharest-municipium, town, commune, sector		Yes			
	Yes			unități administrativ teritoriale	An official administrative demarcation of a commune, or a municipium in accordance with present legislation.				Yes			
Slovak Republic	Yes	100		municipal boundary	The national council decides	5-10 years			Yes	50	SVM 50	

ADMINISTRATIVE BOUNDARIES AND AREAS												
Name of the country **Adm. Boundary** **Adm. area**	**Availability measure**	**Coverage** [10]	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Eurotstat hierarchy (NUTS1-5)/ SABE USE hierachy (USE1-6)**		**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
	Yes	100	published in Collection of law	obec	The national council decides	5-10 years			Yes		SVM 50	
Slovenia	Yes	100		Administrativne meje		Continual		Yes	Yes	2	Register prostorskih enot (RPE) 1:5000	Scans and originals of the basic topographic plans at the scale of 1:5.000, 1:10.000. http://www.gu.gov.si/
	Yes			Administrativna območja		Continual		Yes	Yes	2	See above	
Spain	Yes	100	010101 010201 010301 010401	Límite municipal Límite provincial Límite autonómico Límite nacional	Municipal boundary Provincial boundary Autonomic boundary National boundary	Annually		Yes	Yes	10	BDLL	
	Yes	100	015101 015201 015301 015401	Municipio Provincia Autonomía Nación	Connection road from one road to another	Annually		Yes	Yes	10	BDLL	

ADMINISTRATIVE BOUNDARIES AND AREAS											
Name of the country **Adm. Boundary** **Adm. area**	**Availability measure**	**Coverage** [10]	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Eurotstat hierarchy (NUTS1-5)/ SABE USE hierachy (USE1-6)**		**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
Sweden	Yes	90	RIKSGR LÄNSGR KOMMUNGR TRAKTGR TRAKT1:5 KVTRAKTGR FÖRSAMLGR	Riksgräns Länsgräns Kommungräns Traktgräns Traktgräns, 1:5 Kvarterstraktgräns Församlingsgräns	National border County boundary Municipality boundary Region Parish boundary	Continual		Yes		Planimetric: 5 m Height: -	Nationell digital registerkarta (NDRK)	NUT 1, 3, 5
Switzerland (two datasets)	Yes	100	GG25	Gemeinde-grenzlinien	Political and administrative boundaries (line)	Annually	ObjectID, ObjectOrigin, ObjectVal (Land, Kanton, Bezirk, Gemeinde, See), YearOfChange, KantonsNr, BezirksNr, SeeNr, GemName, GemTeil, GemFlaeche			5	GG25 1:25 000	http://www.swisstopo.ch/en/digital/GG25/INDEX.htm http://www.geocat.ch

ADMINISTRATIVE BOUNDARIES AND AREAS												
Name of the country **Adm. Boundary** **Adm. area**	**Availability measure**	**Coverage** [10]	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Eurotstat hierarchy (NUTS1-5)/ SABE USE hierachy (USE1-6)**		**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
	Yes	60		Limites_commune, Limites_district, Limites_canton, Limites_nationales	Administratives Boundaries	Continual	Identification, Description, Validite, Date, Qualite, precision. fiabilite, materialization, geometrie			0.1	MD.01-MO-CH	http://www.swisstopo.ch/fr/vd/interlis.htm Cadastral database: 100% coverage planed in 2008
	Yes	100	GG25	Gemeinde-grenzflächen	Political and administrative boundaries (area)	Annually	ObjectID, ObjectOrigin, ObjectVal, YearOfChange, DateOfChange			5	GG25 1:25 000	http://www.swisstopo.ch/en/digital/GG25/INDEX.htm http://www.geocat.ch
	Yes	60		Limites_commune, Limites_district, Limites_canton, Limites_nationales	Area of administratives boundaries	Continual	Identification, Description, Validite, Date, Qualite, precision. fiabilite			0.1	MD.01-MO-CH	Cadastral database: 100% coverage planed in 2008
Turkey												

ADMINISTRATIVE BOUNDARIES AND AREAS												
Name of the country **Adm. Boundary** **Adm. area**	**Availability measure**	**Coverage** [10]	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Eurotstat hierarchy (NUTS1-5)/ SABE USE hierachy (USE1-6)**		**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
Ukraine	Yes	20	81 200 000	Межі адміністративних одиниць	An official national boundary determined in a treaty. Provincial boundary and other municipal administrative boundary are not determined and based on a Council of State decision	11 years-	CLASS OF MUNICIPAL ADMINISTRATIVE BOUNDARY Using: 1st order national boundary (International boundary), 2nd order national boundary (oblast', autonomic republic and city with special status), 3rd order national boundary (region and city), 4th order national boundary (town, urban village, village)			5	Кордони і межі	
	Yes	20		Адміністративні одиниці	An official national boundary determined in a treaty. Provincial boundary andother municipal administrative boundary other municipal administrative boundary	11 years-	See above			Not defined	Кордони і межі	

Table H Addresses

ADDRESSES									
Name of the country	***Availability measure***	***Coverage*** [12]	***National code***	***National name***	***Description***	***Maintenance***	***Attributes available***	***Positional accuracy (m)***	***Linkage with buildings/roads/ parcels***
Austria	Yes	90	100	Grundstücksadresse und Gebäudeadresse	address of a parcel with koordinates (also available building adresses)	Annually		2	Parcels/buildings
Belgium									
Bulgaria									
Croatia	In analogue form								
Cyprus	Yes	100		Diefthinsi	Stored as separate attributes for each land parcel or sub-property unit, within the Legal/Fiscal sub-system of the Integrated Land Information System (within Oracle tables). Each address can be linked to the GIS system through the uniques sub-property ID.	Continual		0,15 - 1,5 from cadastral plans, 2-3m on street - maps 1:7500.	Parcels/Buildings
Czech Republic									Parcels

[12] ***In percentage of the country***

ADDRESSES									
Name of the country	**Availability measure**	**Coverage [12]**	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Positional accuracy (m)**	**Linkage with buildings/roads/ parcels**
Denmark	Yes	100		adresser (address)	Postal identifier of a property. A building can have one to many addresses and an address can have zero to many buildings (zero if parcel is without building). A parcel have one address and an address can have zero to many parcels. (zero eq. houseboats, can have address but no parcel). A road-segment have by common municipal code, road code link to zero to many addresses and an address have by common municipal code, road code and position along a road-segment derived link to one road-segment	Continual	Unique address-ID, county code, county name, municipal code, municipal name, parish code, parish name, zip-code, name of post-district, road code, road name, alternative names, main door enterence number, stock number, direction.	1	Parcels/Buldings/ Roads
Estonia	No								
Finland	Yes	100		Rakennus	Building (as a centrepoint)	Continual	Address	20	Buildings/Roads (a separate dataset part of the TDB)
France	Yes	100		Adresse début/fin gauche/droite	Addres ranges are available as attributes of street segments.	Annually	Number of the address. Type of addressing (linear, classical, metric, anarchical).	Varied, depending on the length of the street segment.	Roads/Parcels (in a separate dataset VectorPCI)

ADDRESSES									
Name of the country	**Availability measure**	**Coverage [12]**	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Positional accuracy (m)**	**Linkage with buildings/roads/ parcels**
	No	planned		Adresse	Address points. - First version of BD Adresse: address points will be interpolated in street segments. Production planned from 2004 to 2007. - Second version of BD Adresse: address points will be geocoded on the centres of the parcels. Production planned from 2005 to 2008	Annually		- First version of BD Adresse: address points interpolated: decametric accuracy.- Second version of BD Adresse: address points on the centres of the parcels: metric accuracy.	Addresses, roads, parcels, buildings will be gathered in the same database: “RGE” (large scale referential).
Germany	Yes	80	12002	Lagebezeichnung	common used address of building and parcels given by local authorities	Continual	Building number district: part of a municipality	non spatial object	Buildings/Parcels

ADDRESSES									
Name of the country	**Availability measure**	**Coverage [12]**	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Positional accuracy (m)**	**Linkage with buildings/roads/ parcels**
Great Britain	Yes	100		Address		Continual	accuracyOfPosition anchorPoint calculatedAreaValue descriptiveGroup featureCode make orientation physicalLevel physicalPresence point polygon polyline referenceToFeature textString theme TOID version versionDate	0.1	
Greece	Derivable	planned			Building (as a centrepoint)	Continual	Address	0.20	
Hungary	Derivable			Cím					Parcels
Iceland									

ADDRESSES									
Name of the country	**Availability measure**	**Coverage [12]**	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Positional accuracy (m)**	**Linkage with buildings/roads/ parcels**
Ireland	Yes	100		Geodirectory	A unique address database for Ireland, produced and maintained by OSI and An Post		In the GeoDirectory database, the attributes of each addressable building are recorded, e.g, Thoroughfare, Locality, City/Town, Admin Unit, County, Unique ID, co-ordinates, building type (residential or commercial or both).		Buildings
Italy									
Latvia	Yes	50			There are two main objects in map of addresses – axis of street, road / point of the center of address.	AsNeeded		10	Roads
Lithuania	Derivable	100		Adresai		Continual		Not defined	
Malta									
Netherlands	No								
Northern Ireland	Yes	100		Pointer	An unambiguous identification of property with a spatial relationship to the geographic entity			1	
Norway	Yes	100	7450	AdressePunkt	Point of official address (Street address or property register address) One point within the building that has an address. Exceptions for a building with more than one entrances. Address point will then be at each of the entrances.	Continual	Address ID (street nr. house nr. Letter/subnumber. Municipal number Address Type	Varies	Buildings

ADDRESSES									
Name of the country	**Availability measure**	**Coverage [12]**	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Positional accuracy (m)**	**Linkage with buildings/roads/ parcels**
Poland	No								
Portugal	No								
Romania	No								
Slovak Republic									any database, addresses determines municipalities
Slovenia	Yes	100		Naslovi		Continual	Municipality; settlement; street; house number.		
Spain									Parcels
Sweden	Yes	80	ADRPL	Adressplats, belägenhetsadress		Continual	E.g. national key (unique identifier), municipality code, road name.		Parcels/Buldings
Switzerland									
		60		NPA_Localite, Adresses_batiments	All buildings adresses	Continual	Rue, numero, lieu_denomme, NPA6, localite	0.5	
Turkey									
Ukraine									

Table I Buildings

BUILDINGS											
Name of the countr	***Availability measure***	***Coverage*** [13]	***National code***	***National name***	***Description***	***Maintenance***	***Attributes available***	***Address***	***Positional accuracy (m)***	***Reference dataset***	***Additional Information***
Austria	Yes	80		Gebäude		Not planned			0.5	Digitale Katastralmappe DKM	
Belgium	Derivable	70				Not planned				Top10V-GIS	buildings are subdivided into different types which could be easily assembled into one type "Building"
Bulgaria											
Croatia	Yes	60	2100 2200 2300	građevina		5-10 years	contains groups: residential and public buildings,commercial buildings,religious and cultural-historical buildings		2	Zgrada	buildings in database are not connected to adresses available in analogous form aerial photographs in the scale 1:20000

[13] ***In percentage of the country***

BUILDINGS											
Name of the countr	**Availability measure**	**Coverage [13]**	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Address**	**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
Cyprus	Yes	100	N/A	KTIRIO	Building outlines stored as regions (closed polygons) and classified into several categories.	Continual	Address stored on the Legal sub-system of the Land Information System, which is indirectly linked to GIS. Only registered buildings, which are also shown on the certificate of title, are maintained.	Yes	0.5-2	Cadastral plans, aerial photos, satellite imagery.	Derived from the Digital Cadastral Database which is mainly based on cadastral plans from 1:500-1:5000. Only the outlines of registered buildings are drawn on cadastral plans. The rest of the buildings are drawn based on aerial photos and satellite imagery.
Czech Republic	Yes	100	AL015	Budova jednotlivá nebo blok budov (building or building blocks)	A building above the ground, such as public building, school, hospital, monastery, agriculture plant, industrial factory, observatory, stock hall, small water power station, transdrawing station, electricity transformation and distribution plant, building for culture events, church, chappel, forestry, meteo station, administrative and court building, post office, petrol station, small water reservoir.	Continual	BFC Digest or complemented codes for described type of buildings. NAMBU Name of iimportant buildings. MAPNO.		5	ZABAGED	

BUILDINGS											
Name of the countr	**Availability measure**	**Coverage [13]**	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Address**	**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
Denmark	Yes	100	3210 / 2655 / 4625	bygning (building) / tank-silo (tank-silo) / drivhus (greenhouse)	Buildings that are used for residence, offices, industry, agriculture, culture and similar and > 25 sq.m. / oil tanks, liquid manure tanks, silos and other large round containers which cannot be characterized as building and > 25 sq.m. / greenhouses in connection with market gardens and > 500 sq.m.	5-10 years	Unique-ID, date of creation, producer, accuracy. Address is a class of its own. The position is inside the largest building on the property. If no building then the centre point of the property. No direct link to building .In Denmark its the property which have one or more addresses, not the building.	Yes	1	TOP10DK	

BUILDINGS											
Name of the countr	**Availability measure**	**Coverage [13]**	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Address**	**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
Estonia	Derivable	100	601 602 603 605 606 607 608 611 612 613 614 615 617 618 619 620	Ühiskondlik hoone või eluhoone Tootmis- või kõrvalhoone Katusealune Kelder Vundamentvare Kasvuhoone Korsten Kapitaalne torn Kerge konstruktsiooniga torn Raadiomast Tuuleveski Tuulegeneraator Muu ehitis Tsistern või tsisternladu Ilmajaam	buildings for year round use, residential, office, recreational etc 601 Manufacturing 602 Roofed stucture 603 Underground structures 605 Basement 606 Ruins 607 Greenhouse 608 Chimney 611 Tower 612 Framed tower 613 Communication tower 614 Windmill 615 Wind generator 617 Other special-purpose construction 618 Tank 619 Weather station 620	unknown	col 202 (line) col 236 (centroid, 601) col 237 (centroid 602) col 229 (centroid 603) col 109 (centroid 606) col 110 (centroid 607) col 238 (centroid 608) col 232 (centroid 618)		Stero 4	Põhikaart	attribute 'col' means DGN color 'Version 1' available (except an area of 650 km² bordering on the Russian Federation), maintenance interval not decided yet

BUILDINGS											
Name of the countr	**Availability measure**	**Coverage [13]**	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Address**	**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
Finland	Yes	90	42110-42162	Rakennus	A building above the ground, such as a residential, vacation, administrative, industrial, business or public building, a church, an outbuilding, a storage, a shelter, or a maintenance building, production buildings for land, forestry or fishery, a sauna or other corresponding building, or a uniform group of buildings (building group) formed by buildings (residential, vacation, administrative, industrial, business or public building, or church) which are situated above the ground and joined together, or a building/building group with an inner courtyard (a block), or a unit formed by several buildings or open shelters situated close to each other (for example a fur farm or part of a fur farm). .	5-10 years	Class (The classes of use are: residential building, business or public building, vacation building, industrial building, religious building and other building NAME OF BUILDING For example, the postal address. LEGEND FOR BUILDING		Level A: 3 m, Level B: 12,5 m	Maastotietokanta	Plan to introduce annual updating
France	Yes	62		bâtiment		Continual		Yes	1.5	BD TOPO	100% coverage planned in 2006.

BUILDINGS											
Name of the countr	**Availability measure**	**Coverage [13]**	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Address**	**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
Germany	Yes	100	31001	Gebäude	area feature	Continual	name: building name function: usage of the building construction: method of construction height: height of building construction year state: planned, under construction, destroyed	Yes	0.1	ALKIS - Amtliches Liegenschaftskataster-Informationssystem	

BUILDINGS											
Name of the countr	**Availability measure**	**Coverage [13]**	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Address**	**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
Great Britain	Yes	100	10021	Building	A walled and roofed constructionhaving a postal name or number and /or is used by the utilities and/or performs an important function an/or is over 50m2	Biannually	accuracyOfPosition anchorPoint calculatedAreaValue descriptiveGroup featureCode make orientation physicalLevel physicalPresence point polygon polyline referenceToFeature textString theme TOID version versionDate		0.4-5	OS Mastermap	

BUILDINGS											
Name of the countr	**Availability measure**	**Coverage [13]**	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Address**	**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
Greece	Derivable	planned		ktiria	A building above the ground, such as a residential, vacation, administrative, industrial, business or public building, a church, an outbuilding, a storage, a shelter, or a maintenance building, production buildings for land, forestry or fishery, or other corresponding building, or a uniform group of buildings (building group) formed by buildings (residential, vacation, administrative, industrial, business or public building, or church) which are situated above the ground and joined together, or a building/building group with an inner courtyard (a block), or a unit formed by several buildings or open shelters situated close to each other (for example a fur farm or part of a fur farm).	unknown	.	Yes	0.2		Information about buildings is collected during cadastral mapping in the areas gradually included in the programme of the National Cadastre, but this information is not maintained at the moment in the areas, where the cadastre has reached the operational phase.

BUILDINGS											
Name of the countr	**Availability measure**	**Coverage [13]**	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Address**	**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
Hungary	Yes	10	CA01-21	Épület	A building above the ground, such as residential, vacation, industrial, storage, building for, administrative, culture, entertaitment purposes, building for the government, armee, municipality,church and other buildings for religional purposes, building for health, business, building for public services, building for commercial or financial purposes,building for criminal procedure, Building for teaching and research, Representative buildings, buildings for conferences, buildings of the diplomatic corps, buildings for funeral purposes, buildings for storage of transport vehicles,buildings of aircrafts, water traffic, hotel, other industrial buildings, other buildings, outbuildings.	Unknown	identifier, code of objektum types, postal address, legend for building,number of floors, height:DIGEST:HGT, material: DIGEST:MCC, direction: DIGEST:AOO, name/ DIGEST:NAM, function: DIGEST:EXS, type of religiononla building:DIGEST:HWT, height of the highest point above see level:/DIGEST:ZV2, type of the roof: DIGEST: SSR, the code of the functional undertype:: DIGEST:BFC	Yes	0.5	DAT	DAT Standard
Iceland	Yes	100	320 409 241	mannvirki	in this layer there are structures as houses as well as power line and airports.	5-10 years	ar_uppl =year of information .eign = owners of data nakv_xy=accuracy nafn= name of the object lu-uppr=origin of the data mannv_gerd= use of the structure heimild=data source nafn=name ral_spenna= voltage sam_yfirbord= surface type		50	IS 50V	www.lmi.is/landlysing

BUILDINGS											
Name of the countr	**Availability measure**	**Coverage [13]**	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Address**	**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
Ireland	Yes	100	901	Buildings_Solid	A relatively permanent structure roofed and usually walled and designed for some particular use	Continual	The Address Database (GeoDirectory) is currently independent of the main geographic database. In GeoDirectory, the attributes of each addressable building are recorded, e.g, Thoroughfare, Locality, City/Town, Admin Unit, County, Unique ID, co-ordinates, building type (residential or commercial or both). This only applies to addressable buildings. Buildings that do not have an address are not recorded in GeoDirectory.	Yes	1-10m depending on source	Urban	sourced from photogrammetry photoscale from 1:5000 - 1:30000 Buildings cover all urban areas greater than 1500 population and rural areas covered by 1:2500 and 1:5000 mapping. National coverage will be complete at end 2004
Italy	Yes	100	C439, C437, C433A, C433, C432, C431C, C431B, C431, C402A, C402, P434A, P431B, P432B.	Edificio		5-10 years	AO1 Angolo di orientamento del particolare con precisione 0.01 DEG; BFC Funzione edificio; NAM Nome; TXT Descrizione Oggetto		2		

BUILDINGS											
Name of the countr	**Availability measure**	**Coverage [13]**	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Address**	**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
Latvia	Yes	70	5200000000-5209040000	Būve		Continual	By code 5200000000), are depicted all capital buildings.Term "building" use also for:remains (code 5202010000) line (5202020000) symbol, greenhousea (5204010000), pavilion (5204020000), smokestack (5206020000), underpass, disjunctive line between floors (5206030000), fences (5208040000), squares (5208050000), place of mineral (5208060000), Trace (5208090000), Container (5208130000), Tower (5208170000), objects of water supply (5208200000), Others engineering structures (5208220000),objects of economic activity (5208230000),explanation text of engineering building(5209020000 separate objects (5209030000),explanation text for objects of hystorical culture (5209040000)		2-5	būves	Aero images 1:30000 , Ortophoto maps 1:10 000, land surveys
Lithuania	Yes	20	pa0 gpa0 pa41-pa47 pa51 pa55-pa59 pa6 pa61-pa66	Pastatai	Areal and point features	5-10 years	GKODAS - geoobject; VARDAS - name; INFO - explan. information		2	KDB10LT	Stereo- interpretation in built-up areas

BUILDINGS											
Name of the countr	**Availability measure**	**Coverage [13]**	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Address**	**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
Malta	Yes	100	B01 B02 B05 B06 B08 B40 B91	Building	Polygon features representing physical constructions of a permanent nature	2-4 years	Building Type		1	BaseMap	
Netherlands	Yes	100	01000 01020 01030	Gebouw Groot gebouw Hoogbouw	Building Great building larger then 1500 m2 High-rise building	2-4 years			3	TOP10NL	
Northern Ireland	Yes	100			FACC	5-10 years	NB. Seed point linked to dataset (see POINTER) DWELL_HOUS, LAW_ADMIN, HEALTH_B, EDUCATE_B, RELIGION_B, SERVICES_B, RECREATE_B, GOV_OFFICE, COMM_OTH, INDUSTRY_B, COMMERCE_B, GENERAL_OT - . Other attribution designed for cartographic output only	Yes	1	OSNI Large-scale	
Norway	Yes	100	5001	BygningsEnhet	A building or a a part of a building that could be seen as a partial unit that could be taken down separately. More building units can be physically connected.	Continual	Address can be connected to) Municipal ID number) ID Building typeStatus (planned, constructed, destroyed)	Yes	Rregistered(point):varies "building-lines":FKB-B:0,22 mFKB-C:2 m	FKB-Bygg	For buildings lines:FKB-B: 1: 5000 - 1:8000 FKB-C: 1: 15 000 - 1_: 18 000 For buildings information: GAB-register Scale FKB-B: 1:1000 FKB-C: 1:5000

BUILDINGS											
Name of the countr	**Availability measure**	**Coverage [13]**	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Address**	**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
Poland	Yes	10		Budynki i budowle		unknown			3		
Portugal	Yes	50	06	Contruções		Not planned		Yes	< 2	SCN10K	
Romania	Yes			construcții	A building above the ground, such as a residential, vacation, administrative, industrial, business or public building, a church, an outbuilding, a storage, a shelter, or a maintenance building, production buildings for land, forestry or fishery, a sauna or other corresponding building, or a uniform group of buildings (building group) formed by buildings (residential, vacation, administrative, industrial, business or public building, or church) which are situated above the ground and joined together, or a building/building group with an inner courtyard (a block), or a unit formed by several buildings						
Slovak Republic	Yes	100		sídla	the area without specification, a building, block of buildings, block of cottages	5-10 years			50	SVM 50	

BUILDINGS											
Name of the countr	**Availability measure**	**Coverage [13]**	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Address**	**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
	Yes	50-70		stavby	object for living, family house, school, medical, cultural, boarding object ,...garage	Continual	codes for building description		0.3	súbor geodetických informácií (geodetic information file)	
Slovenia	Yes	100		Ceste	A building is a structure a person may enter and is designed for their permanent or temporary residence, conducting a business or any other activity or a shelter and cannot be moved without damage for its substance.	5-10 years	Attributes available for the use of topographical database :building identifier ;characteristic heights of the building; connection to house numbers and parcels.	Yes	0.5	Stavbe	Aerial photographs at the scale of 1:17 500: http://www.gu.gov.si/
Spain	Yes	95	051101 050301 053101 050901 053601 061401	Iglesia Ermita Ayuntamiento Edificio singular Edificación aislada	Church Hermitage City hall Remarkable building Isolated building	5-10 years			3	BCN25	

BUILDINGS											
Name of the countr	**Availability measure**	**Coverage [13]**	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Address**	**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
Sweden	Yes	90	HUS.T HUSÖVR.T KYRKA.T KYRKA.C KYRKAL.C KÅTA.C	Husbyggnad, takkant	A permanent structure with roof and, normally, also walls that stands partially or wholly above ground and which is suitable for dwelling, storage or production activities. The roof edge of dwelling houses, leisure homes, public buildings and other commercial, office or similar buildnings.	Continual	Classes:House Outhouse Church Public building CotName and function of a public building E.g. National key (unique identifier), connection to assessment		Planimetric: 2 m Height: 2 m	Grundläggande geografiska data (GGD) Fastighetsregistrets byggnadsdel	Aerial photographs 1:30 000, 1:60 000. Information about buildings in the Property register
				Uthus	The edge of the roof for buildings that are not: dwelling houses, leisure homes, summer cottages, public buildings, buildings used for commercial, office and similar purposes. The definition outhouse includes: industrial buildings, saw mills, tanks, silos, water-mills and large towers.						
				Kyrka, takkant Kyrka, församlingskyrka Kyrka, annan	Edge of roof for church buildings that belong to the Church of Sweden. Church buildings that are abandoned or only used occasionally should also be included.The centre point of a parish church that belongs to the Church of Sweden.The centre point of a church that belongs to the Church of Sweden, but which is not a parish church.						
				Cot							

BUILDINGS											
Name of the countr	**Availability measure**	**Coverage [13]**	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Address**	**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
Switzerland (two datasets)	Yes	100	geb	Gebäude	Buildings (no addresses)	5-10 years	ObjectID, ObjectOrigin, ObjectVal (e.g. Gebaeude, Huette, Innenhof, Station), YearOfChange,		5	VECTOR25	http://www.swisstopo.ch/en/digital/VECTOR25/geb.htm http://www.geocat.ch
	Yes	60		Couverture_du_sol, SurfaceCS	All buildings	Continual	Identification, Description, Validite, Date, Qualite Genre -> batiment	Yes	0.1	MD.01-MO-CH	Cadastral database: 100% coverage planed in 2008
Turkey											
Ukraine											

Table J Railways

RAILWAYS										
Name of the country	***Availability measure***	***Coverage*** [14]	***National code***	***National name***	***Description***	***Maintenance***	***Attributes available***	***Positional accuracy (m)***	***Reference dataset***	***Additional Information***
Austria	Yes	100	1300	DLM-Objektbereich Verkehr, Objektgruppe "Bahnen		Continual	CLASS - single track, double track, narrow gauge railway, rack-railways more than 20m. NAME NUMBER STATUS - below the surface, on the surface and above the surface. CARTOGRAPHIC - Signature in scale 1:50000 DATE OF ACTUALLITY METHOD OF ACQUISITION	3	Digitale Katastralmappe DKM	
Belgium	Derivable	70	RA111	Spoorweg		Not planned	**BRC-BRIDGE CATEGORY: INDICATES TYPE OF BRIDGE** **LEV-LEVEL: TUNNEL, SURFACE LEVEL, BRIDGE** **LTN-LANE TRACK NUMBER: NUMBER OF TRACKS** **RPS-RAILROAD POWER SOURCE** **USE: RAILWAY TYPE**		Top10V-GIS	
Bulgaria										

[14] ***In percentage of the country***

RAILWAYS										
Name of the country	**Availability measure**	**Coverage [14]**	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
Croatia	Yes	60	4201	zeljeznicka pruga		5-10 years	feature class, belongs to group "railway transport" and category "transportation", clasified as single, double and industrial track (secured and unsecured road crossing)	2	Prometnica	
Cyprus	No									There are no railway lines in Cyprus today.
Czech Republic	Yes	100	AN010 AN050	Zeleznicni trat (railway) Zeleznicni vlecka (siding)	A transport facility equiped with rails and used for passenger and/or goods transportation, plus siding.	Continual	NAMZ (for railway only) Official code of a transport and definition section of railway. RRC narrow gauge railway/normal gauge railway RRA not electrified/electrified railway EXS (for railway only) railway under construction-railway out of use/in use USR (for railway only) state railway/private railway/undefined LTN number of rails MAPNO	5	ZABAGED	
Denmark	Yes	100	2310	jernbanespor (railway track)	Centre line between the two rails which together constitute a track and > 50 m.	5-10 years	Unique-ID, date of creation, producer, accuracy	1	TOP10DK	
Estonia	Derivable	100	701 702 703 705 706	Laiarööpmeline raudtee Haruraudtee Elektriraudtee Kitsarööpmeline raudtee Rippraudtee või suusatõstuk	Broad gauge 701 Sidetrack 702 Electrified 703 Narrow gauge 705 Telpher railway or ski lift 706	Unknown	col 142 (701) col 133 (702) col 143 (703) col 203 (705) col 146 (706)	Stero 4	Põhikaart	attribute 'col' means DGN color 'Version 1' available (except an area of 650 km² bordering on the Russian Federation), maintenance interval not decided yet

RAILWAYS										
Name of the country	**Availability measure**	**Coverage [14]**	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
Finland	Yes	100	14111-14112	Rautatie	A transport facility equipped with rails and used for passenger and/or goods transportation, plus sidings.	Annually	RAILWAY CLASS Railway classes are: railway (gauge 1,524 mm), narrow-gauge railway (gauge less than 1,524 mm) and metro. VERTICAL STATUS OF RAILWAY The classes of vertical status are: under the surface, on the surface and above the surface. STATUS OF ELECTRIFICATION The classes are: electrified and not electrified. STATUS OF COMPLETION The classes of completion are: under construction, in use and out of use. A railway under construction is recorded when construction has already begun and the location can be specified. A railway is recorded as being out of use if its use in transportation has been terminated but the rails have not been dismantled. If the rails have been dismantled, the feature is classified according to its current use.	Level A: 3 m, Level B: 12,5 m	Maastotietokanta	
France	Yes	100/60		troncon voie ferree		Continual	Nature Energy Number of tracks Gauge Level position {level, bridge, underground} Name	Curren: 15/ 2006: 1.5	Current: BDCARTO/ 2006: end of production of BD TOPO	.

RAILWAYS										
Name of the country	**Availability measure**	**Coverage [14]**	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
Germany	Yes	100	3201	Schienenbahn	line feature	Biannually	KN - line number, BKT - Railway category, BKT - Width of object, ELK - Electrification, GLZ - Number of tracks, SPW - Gauge width, ZUS - Status (in use, under construction, out of use)	3	ATKIS Basis-DLM - Amtliches Topographisch-Kartographisches Informationssystem, Digitales Landschaftsmodell, Basis	
Great Britain	Yes	100	10155	Railway Line	A specially prepared strip of ground on which metal rails are on laid on either concrete or wooden sleepers for trains to run on	5-10 years	accuracyOfPosition anchorPoint calculatedAreaValue descriptiveGroup featureCode make orientation physicalLevel physicalPresence point polygon polyline referenceToFeature textString theme TOID version versionDate	0.4-5	OS Mastermap	

RAILWAYS										
Name of the country	**Availability measure**	**Coverage [14]**	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
Greece	Yes	100		sidirodromiko diktio	A transport facility equipped with rails and used for passenger and/or goods transportation, plus sidings.	5-10 years	RAILWAY CLASS Railway classes are: railway (gauge 1,524 mm), narrow-gauge railway (gauge less than 1,524 mm) and metro,inclined railroad. VERTICAL STATUS OF RAILWAY The classes of vertical status are: under the surface, on the surface and above the surface. STATUS OFELECTRIFICATIONThe classes are: electrified and not electrified. STATUS OF COMPLETION The classes of completion are: under construction, in use and out of use. A railway under construction is recorded when construction has already begun and the location can be specified. A railway is recorded as being out of use if its use in transportation has been terminated but the rails have not been dismantled. If the rails have been dismantled, the feature is classified according to its current use.			
Hungary	Yes	100	DC01-02	Vasút	Transport facility eqipped with rails, used for transport passangers and goods	Unknown	Function:/ DIGEST: EXS Number of rails: DIGEST: RTA Position:DIGEST: LOC Name: DIGEST: NAM distance of rails: DIGEST: RGC Power: DIGEST: RRA Cathegory: DIGEST: RRC Type of subrails: DIGEST: RSA Height above the ground: DIGEST: ZV2	100		Draft Standard
Iceland	No									

RAILWAYS										
Name of the country	**Availability measure**	**Coverage [14]**	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
Ireland	Yes	100	1001 - 1003	Communic_Railways_Nat_Rail; Communic_Railways_Ind_Rail; Communic_Railways_Disused_RR;	A set of parallel rails on which a train or tram runs;	5-10 years	None	10	Discovery	
Italy	Yes	-	L201, L201A, L205A, L207, L207A, L214, L216, L202, L202C, L205, P224.	Ferrovia/Tranvia/Funicolare		5-10 years	EXS Categoria di esistenza; LOC Categoria di posizione; LTN Numero di binari, numero di corsie; NAM Nome; RGC Categoria di scartamento ferroviario;RRA Elettrificazione della ferrovia; RRC Categoria ferroviaria; TXT Descrizione Oggetto.	2		
Latvia	Yes	70	6101010000-6101020000	Dzelzceļš	Railway with one, two, three railway tracks.	2-4 yearsl		2-5	transports	
Lithuania	Yes	100	gz1 gz2 gz4 gz31 gz32 sgz1 sgz2 sgz4	Gelezinkeliai	Central lines of railroads	irregular	GKODAS - geoobject; BEGIU_SK - number of rails* INFO - explan. Information	1	KDB10LT-mikro	
Malta										

RAILWAYS										
Name of the country	**Availability measure**	**Coverage [14]**	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
Netherlands	Yes	100	04000 04040 04100 04140 04230 04250 04260	enkel spoor dubbel spoor driesporig viersporig tram smalspoor metro	single track double track triple tarck four tracks light rail narrow gauge subway above ground	2-4 years		2-3	TOP10NL, TOP10we-gen and NWB (Nationaal Wegen Bestand)	
Northern Ireland	Yes	100			An area that contains a track or set of tracks on which trains run.	5-10 years	RAIL_LINES, RAIL_CNTR, PERM_WAY RAILWAY . - attribution designed for cartographic output only	1	OSNI Large-scale	
Norway	Yes	60	7101	Spormidt	Centerline in the middle of the track. For more than one track, each centerline will be registered.	Irregular		FKB-B:0,2m FKB-C:2 m		For buildings
Poland	Yes	10		Koleje i obiekty z nimi związane		unknown		3		
Portugal	Yes	50	1002	Rede Ferroviária		As needed		< 2	SCN10K	
Romania	Yes			căi ferate	A transport facility equipped with rails and used for passenger and/or goods transportation, plus sidings. buildings					
Slovak Republic	Yes	100		železnice		5-10 years	Railway gauge, vertical status, electrification, number of rails, status of completion	50	SVM 50	
Slovenia	Yes	100		Železnice		2-4 years	Railway line number; railway line type; railway line electrification.	20	Promet	

RAILWAYS										
Name of the country	**Availability measure**	**Coverage [14]**	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
Spain	Yes	95	063101 063501 063201 063601 064201 063301 063701 063401 063801 063001 061401	Double railway Double narrow railway Double electrified railway Double electrified narrow railway Railway under construction Single railway Single narrow railway Single electrified railway Single electrified narrow railway High speed Railway		5-10 years		3		
Sweden	Yes	90	JVGR1.M JVGR2.M JVGBY.M JVGÖ.MJ VGU.MJ VGÖU.M	Järnväg med enkelspår Järnväg med dubbelspår Järnväg under byggnad Övrig järnväg Järnväg i underfart/tunnel Övrig järnväg i underfart/tunnel	A railway line including section on flyovers and in underpasses and tunnels. Single-track railway Double-track railway Railway under construction Other railway Railway underpass /tunnel Other railway underpass/tunnel	Continual	Railway class	Planimetric: 2 m Height: 2 m	Grund-läggande geografiska data (GGD)	

RAILWAYS										
Name of the country	**Availability measure**	**Coverage [14]**	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
Switzerland (two datasets)	Yes	100	eis	Eisenbahnnetz	Railway network	5-10 years	ObjectID, ObjectOrigin, ObjectVal (e.g. NS_Bahn1, NS_Bahn2, SS_Bahn1, SS_Bahn2, Str_Bahn), YearOfChange, BridgeType, TunnelType	5	VECTOR25	http://www.swisstopo.ch/en/digital/VECTOR25/eis.htm http://www.geocat.ch
	Yes	60		Objets_divers, Objet_divers		Continual	Identification, Description, Validite, Date, Qualite, geometrie, Genre –> voie_ferree	0.5		http://www.swisstopo.ch/fr/vd/interlis.htm
Turkey										
Ukraine	Yes	90	61 100 000	Залізниці	A transport facility equipped with rails and used for passenger and/or goods transportation, plus sidings.	11 years-	RAILWAY CLASS Railway classes are: location category: on ground surface, uderground = tunnel, feature configuration: multiple, single; Railway power source: Overhead electrified, non-electrified; Gauge width = 1,524 m.	5	Дорожня мережа	


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Table K Lakes and ponds, Watercourses, Coastline/Shoreline

LAKES AND PONDS, WATERCOURSES, COASTLINES/SHORELINES										
Name of the country ***Lakes/ponds*** ***Watercourses*** ***Coastline/Shoreline***	***Availability measure***	***Coverage*** [15]	***National code***	***National name***	***Description***	***Maintenance***	***Attributes available***	***Positional accuracy (m)***	***Reference dataset***	***Additional Information***
Austria	Yes	100	4200	DLM-Objektbereich Gewässer, Objektgruppe "Stehende Gewässer"	lakes, ponds, pools, ...	5-10 years	CLASS (length) - less than 2km, 2-4km, 4-10km and more than 10km. NAME DATE OF ACTUALLITY METHOD OF ACQUISITION	3		
	Yes	100	4100	DLM-Objektbereich Gewässer, Objektgruppe "Fließende Gewässer"	Rivers, streams, canals, falls, fountains, ...	5-10 years	CLASS (width) - periodical, less than 5m, 5-20m and more than 20m. NAME STATUS - below the surface, on the surface and above the surface. DATE OF ACTUALLITY METHOD OF ACQUISITION	3		
										No coastline
Belgium	Derivable	70	HY120	meer, vijver, poel		Not planned	**HYC - HYDROLOGICAL CATEGORY: DISTINGUISHES BETWEEN PERMANENT IN INTERMITTENT NAV - NAVIGABILITY**		Top10V-GIS	

[15] ***In percentage of the country***

LAKES AND PONDS, WATERCOURSES, COASTLINES/SHORELINES										
Name of the country *Lakes/ponds* *Watercourses* *Coastline/Shore line*	**Availability measure**	**Coverage** [15]	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
	Yes	70	HY111	waterloop		Not planned	**HYC - HYDROLOGICAL CATEGORY: DISTINGUISHES BETWEEN PERMANENT AND INTERMITTENT WATERCOURSES LEV - LEVEL: SUBTERRANEOUS, SURFACE LEVEL, AQUEDUCT NAV – NAVIGABILITY TON - TONNAGE WID - WATERCOURSE WIDTH**		Top10V-GIS	
Bulgaria										
Croatia	Yes	60		jezero/bara	belongs to the class "standing water" (6108), further to the group "inland waters" and category "hydrography"	5-10 years		2	Hidrografija	aerial photographs in the scale 1:20000
	Yes	60	6102 6103 6105 6106 6107	vodotok	belongs to the feature group "inland waters", further to the category "hydrography" (6000) and comprises following classes: river, narrow river, canal, narow canal, stream	5-10 years		2	See above	

LAKES AND PONDS, WATERCOURSES, COASTLINES/SHORELINES										
Name of the country *Lakes/ponds* *Watercourses* *Coastline/Shoreline*	**Availability measure**	**Coverage** [15]	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
	Yes	80	6101 6201	obalna linija (coastline of inland waters)obalna linija mora(sea coastline)	coastline (built or natural) belongs to the feature group "inland waters",sea costline (built or natural) belongs to the feature group "sea", and both groups further to the feature category "hydrography" (6000)	5-10 years		2	See above	
Cyprus	Yes	100	N/A	Limnes.Permanent or periodic water cover.	Lakes.Ponds.Water reservoirs.Salt lakes. .	As needed	LAKE POND WRESERV SALTLAKE	1m, 5m 20m, or 50m.		
	Yes	100	N/A	Potamia kai ryakia	Permanent or periodic water flow or cover. Primary river or channel.Secondary river or channel.	As needed	RIVER1 RIVER2	1m, 5m 20m, or 50m		Exists in several resolutions. Source: Cadastral plans, aerial photos, satellite imagery, topo maps.
	Yes	100	N/A	Aktogrammi	Coastline boundary. Separating sea water and inland terrain. Measured at mean sea level.	As needed		Level 1 - 1mLevel 2 - 5mLevel 3 - 20 mLevel 4 - 50m		See above

LAKES AND PONDS, WATERCOURSES, COASTLINES/SHORELINES										
Name of the country *Lakes/ponds* *Watercourses* *Coastline/Shore line*	**Availability measure**	**Coverage** [15]	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
Czech Republic	Yes	100	BH080	Vodni plocha (water area)	Area of continuous water cover forming part of the natural water cycle whose water level remains the same across the water area (lakes and ponds). However to this category also belongs any water area of water with current where its with is over 5m.	Continual	NAMVP Name of water area, if does it exist. MAPNO	Level A: 5mLevel B: 15m	ZABAGED	Any area is formed by area boundaries (land use boundaries) and a centroid, to which the attribute information of area is linked. It is representation in Microstation/MGE (Intergraph)data format, but now data are also converted into ESRI Shape files and Geomedia (Intergraph) data format, where the areas are represented as polygons, carrying all attribute information.
	Yes	100	BH140	Vodni tok	A line representing water with current up to width 5m and a center line between river side lines representing water with current, where its with is over 5m.	Continual	NAMVT Name of watercourse NAMVTK Official code of watercourse NAMRO Official code of watershed in which the course is located HYC Intermittent/permanenent course LOC Below the surface/on the surface MAPNO The number of a map sheet, where the line is located.	Level A=5m Level B=15 m	ZABAGED	

LAKES AND PONDS, WATERCOURSES, COASTLINES/SHORELINES										
Name of the country *Lakes/ponds* *Watercourses* *Coastline/Shore line*	**Availability measure**	**Coverage** [15]	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
	Yes	100	BH000	Brehova cara (river side line)	A land use boundary between a water area and another type of land use area	Continual	MAPNO The number of a map sheet, where the line is locating	Level A=5m Level B=15 m	ZABAGED	
Denmark	Yes	100	7219 / 7425	sø (lake) / fiskedam (fishponds)	Inland water area with no flow rate defined by the boundary between water and land and > 100 sq.m. / fishponds in fish farms > 50 sq.m.	5-10 years	Unique-ID, date of creation , producer, accuracy	1	Top10 DK	
	Yes	100	7319 / 7318 / 7313	vandløbsbred (stream bank) vandløbsmidte (stream centre line) / grøft (ditch)	Area of natual or artificial water stream cover which has a flow rate and a width > 12 m and > 2500 sq.m. / centre line of natural or artificial stream with a width > 2.5 m and < 12 m and a length > 50 m / centre line of natural or artificial stream with a width < 2.5 m and a length > 50 m	5-10 years	Unique-ID, date of creation, producer, accuracy	1	Top10 DK	
	Yes	100	7110 / 2439	kystlinie (coastline) / havn (harbour)	Natural boundary between sea and land / Artificially created boundary between land and water at harbours	5-10 years	Unique-ID, date of creation, producer, accuracy	1	Top10 DK	
Estonia	Derivable	100	320 321	Järv Muu veekogu	Lake (non salted water) Other waterbody (pond etc)	Unknown	col 48 (320)col 59 (321)	Stereo 4	Põhikart	attribute 'col' means DGN color 'Version 1' available (except an area of 650 km² bordering on the Russian Federation), maintenance interval not decided yet

LAKES AND PONDS, WATERCOURSES, COASTLINES/SHORELINES										
Name of the country Lakes/ponds Watercourses Coastline/Shore line	**Availability measure**	**Coverage** [15]	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
	Derivable	100	305 306 308 319	Jõgi, ojakraavkuiv voolusängvooluveekogu	Flowing watercourse (summer mean water level) 305 Artificial flowing watercourse 306 Temporarily filled with water 308 watercourse (areal object) 319	Unknown	..2m (col 36) 2..4m (col 37) 4..6m (col 41) 6..8m (col 42) centerline (col 38) direction arrow (col 50)* col 40 (308) col 57 (319)	Stereo 4	Põhikart	See above
	Derivable	100	302 303 628	Kallas Ebaselge kallas Tehissein	Coastline/shoreline of sea, lake, areal river, pond etc (302 definite, 303 uncertain, 628 artificial)	Unknown	col 49 (302 col 39 (303) col 132 (628)	Stereo max 4m fieldworks max 20m	Põhikart	See above

LAKES AND PONDS, WATERCOURSES, COASTLINES/SHORELINES										
Name of the country *Lakes/ponds* *Watercourses* *Coastline/Shore line*	**Availability measure**	**Coverage** [15]	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
Finland	Yes	90	36200	Vakavesi	Area of continuous water cover forming part of the natural water cycle whose water level remains the same across the water area and in which there is no significant flow rate. Seas, lakes, ponds, reservoirs/artificial lakes and canals are considered waters without current	5-10 years	MEAN ELEVATION OF WATER WITHOUT CURRENT (The mean elevation is the mean water level based on long-term observations, or, if such observations are not available, on the estimated mean water level during summer. The elevation of a regulated water without current is the mean water level during summer. If the water level has changed, the data on water level can be obtained from the Environmental Data Centre.) REGULATION LOWER LIMIT OF WATER WITHOUT CURRENT REGULATION UPPER LIMIT OF WATER WITHOUT CURRENT NAME OF WATER WITHOUT CURRENT	Level A: 7,5 m, Level B: 15 m	Maastotietokanta	

LAKES AND PONDS, WATERCOURSES, COASTLINES/SHORELINES										
Name of the country *Lakes/ponds* *Watercourses* *Coastline/Shore line*	**Availability measure**	**Coverage** [15]	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
	Yes	90	36311 36312 36313	Virtavesi kapea ja leveä (WATER WITH CURRENT)	Area of permanent or periodic (forest ditches) water cover forming part of the natural water cycle and which has a flow rate. Rivers, streams and ditches are considered waters with current.	5-10 years	CLASS OF WATER WITH CURRENT Waters with current are classified on the basis of channel width: less than 2 m, 2-5 m and more than 5 m. NAME OF WATER WITH CURRENT FLOW DIRECTION OF WATER WITH CURRENT VERTICAL STATUS OF WATER WITH CURRENT The classes of vertical status are: below the surface, on the surface and above the surface.	width less than 2 m, Level A: 5, Level B 12,5 mwidth 2-5 m, level A 5 m, level B: 12,5 mwidth over 5 m, level A 7,5, level B 15 m	Maastotietokanta	
	Derivable	90	30200	Maastokuvion reuna	A boundary restricting the area of a topographic compartment in natural terrain or a land use compartment (in the feature group TERRAIN/1).	5-10 years	CLASS (definite, indefinite, artificial costline, boundary between water current)Cartographic code (class of the area, 36200=water without current)	Level A: 7,5 m, Level B: 15 m	Maastotietokanta	

LAKES AND PONDS, WATERCOURSES, COASTLINES/SHORELINES										
Name of the country *Lakes/ponds* *Watercourses* *Coastline/Shore line*	**Availability measure**	**Coverage** [15]	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
France	Yes	100/62		hydro surfacique 2006 : surface d'eau		Annually 2006: Continual	2006: Nature Type of water flowing {permanent or intermittent}	20 2006: 2,5	BD CARTO 2006:BDTOPO	BDTOPO:100% coverage planned in 2006.BDTOPO is not seamless at the moment and has no identifiers, but the "BD UNI" (unification of BDTOPO and other vector databases of IGN) is planned to be made seamless and to have unique identifiers..
	Yes	100/62		tronçon hydro 2006 : tronçon de cours d'eau		Annually 2006: Continual	Width Nature Type of water flowing {permanent or intermittent} Name	20 2006: 2,5	See above	See above
	Yes	100/62		Laisse 2006 : tronçon de laisse	High tide mark	Annually 2006: as needed	Rocky or not 2006: High tide mark or Low tide mark	50 2006: 2,5	See above	See above
Germany	Yes	100	5112	Binnensee, Stausee, Teich	area feature	5-10 years	GN - Geographical Name	3	ATKIS	

LAKES AND PONDS, WATERCOURSES, COASTLINES/SHORELINES										
Name of the country *Lakes/ponds* *Watercourses* *Coastline/Shore line*	**Availability measure**	**Coverage** [15]	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
	Yes	100	5101 / 5102 / 5103	Strom, Fluss, Bach / Kanal (Schifffahrt) / Graben, Kanal (Wasserwirtschaft)	line feature, area feature if width > 12 m	5-10 years	GN - Geographical Name, KN - Hydrographic code number, BRG - Width of watercourse, HYD - permanent water flow yes/no, OFL - on surface or below surface	3	ATKIS	
	Derivable	100	5111	Meer	The coastline together with helplines form the outline of the area feature 5111 Meer	5-10 years	GN - Geographical Name	10	ATKIS	
Great Britain	Derivable	100	10089	Inland Water Area	A large area of salt or fresh water which may be entirely surrounded by land and is larger than a pondA small area of fresh water, often artificially created which is smaller than a lake	5-10 years	accuracyOfPosition anchorPoint calculatedAreaValue descriptiveGroup featureCode make orientation physicalLevel physicalPresence point polygon polyline referenceToFeature textString theme TOID version versionDate	0.4-5	OS Master map	
	Yes	100	10087	Inland Water	Water flowing in a definite natural or man-made channel towards the sea, a lake or into another river	5-10 years	See above	0.4-5	OS Master map	

LAKES AND PONDS, WATERCOURSES, COASTLINES/SHORELINES										
Name of the country *Lakes/ponds* *Watercourses* *Coastline/Shoreline*	**Availability measure**	**Coverage** [15]	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
	Yes	100	10211 10212	Mean High Water (springs)Mean Low Water (springs)	Foreshore - The land lying between MHW and MLW or MHWS and MLWS in Scotland	5-10 years	See above	0.4-5	OS Master map	
Greece	Yes	100		Limnes	Area of continuous water cover forming part of the natural water cycle whose water level remains the same across the water area and in which there is no significant flow rate. Seas, lakes, ponds, reservoirs/artificial lakes and canals are considered waters without current flow.	5-10 years		25		
	Yes	100		potamoi me fisiki & diefthetimeni kiti		5-10 years		25		
	Yes	100		aktogrammi	A boundary restricting the area of a topographic compartment in natural terrain or a land use compartment .	5-10 years	CLASS rocky coast, sandy beach, anchorage for large vessels, anchorage for small vessels	25		
Hungary	Yes	100	FA04-05	Állóvizek	Area of continuous water cover forming part of the natural/man-made water cycle in which there is no significant flow rate. Lake (pond), reservois/ artifical lake	Unknown	Identifiers, Function: Működés / DIGEST: EXS, State: Állapot / DIGEST: HYC, Width: Szélesség / DIGEST: WID	10	DAT	Draft standard
	Yes		FA01-03	Folyóvizek	Area of permanent or periodic water which has a flow rate. Rivers/streams, brooks, canals.					Draft standard

LAKES AND PONDS, WATERCOURSES, COASTLINES/SHORELINES										
Name of the country *Lakes/ponds* *Watercourses* *Coastline/Shoreline*	**Availability measure**	**Coverage** [15]	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
Iceland	Yes	100	706	Stöðuvatn/tjörn		11 years -	ar_uppl =year of informations. eign = owners of data nakv_xy=accuracy nafn= name of the object lu-uppr=origin of the data ar-arst=existense	50	IS 50V	www.lmi.is/landlysing
	Yes	100	701 702 703 704 705 712 715 716 723 724	Á / Lækur		11 years -	See above	50	IS 50V	
	Yes	100	718	Strandlína		5-10 years		50	IS 50V	
Ireland	Yes	100	301 and 304	Water_Lake (301) and Water_Pond (304)	All inland lakes and ponds, ie bodies of water surrounded by land.	5-10 years	None	10	Discovery	

LAKES AND PONDS, WATERCOURSES, COASTLINES/SHORELINES										
Name of the country *Lakes/ponds* *Watercourses* *Coastline/Shoreline*	**Availability measure**	**Coverage** [15]	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
	Yes	100	3021 and 3022	River Centre 3021; River Bank 3022	For rivers greater than 20m wide, both river banks are available. For narrower rivers, river centre line is available	5-10 years	None	10	Discoveryu	
	Yes	100	3061	Water_Coastal_HWM	Represents the High Water MArk (HWM)	5-10 years	None	10	Discovery	
Italy	Yes	100	C611	Lago/Stagno		5-10 years	NAM = Nome; TXT = Descrizione Oggetto	2		
	Yes	-	L999	Linea di Costa		5-10 years	NAM = Nome; TXT = Descrizione Oggetto	2		
Latvia	Yes	70	3101020100	Ūdenstilpne, ūdenstece		2-4 years		2-5	hidrogrāfija	Water body, flowing water feature (code 3101020100):- sea cost line according to the highest level of water,- cost line of lakes and rivers at the lawest level of water,- cost line of reservoirs at normal level of water
	Yes	70	3101020100	Ūdenstilpne, ūdenstece		2-4 years		2-5		See above

LAKES AND PONDS, WATERCOURSES, COASTLINES/SHORELINES										
Name of the country *Lakes/ponds* *Watercourses* *Coastline/Shoreline*	**Availability measure**	**Coverage** [15]	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
	Yes	100	3101020100 310101000	Water body, flowing water feature,sea costline	Water body, flowing water feature (code 3101020100):- sea cost line according to the highest level of water,- cost line of lakes and rivers at the lawest level of water,- cost line of reservoirs at normal level of water-in administrative borders map (scale 1: 100 00) sea cost line is registered by code 310101000	2-4 years		2-5	hidrogrāfija	Aero images 1:30000 , Ortophoto maps 1:10 000 land surveys
Lithuania	Yes	100	hd3 hd4	Ezerai, tvenkiniai,baseinai, kudros	Areal lakes and ponds	5-10 years	GKODAS - geoobject; VARDAS - name; INFO - explan. information	2 m defined for aerial photographs	KDB10 LT-mikro	
	Yes	100	hc1 hc3 ,hc31, hc32, hc33hd1, hd2	Upes, kanalai	Central lines of rivers, streams, canals and drainages (width 1-12 m) - hc*; areal rivers and streams - hd*	5-10 years	GKODAS - definite, indefinite; VARDAS -names; PLOTIS - width	1	KDB10 LT-mikro	
	Derivable	100		Kranto linija	Define and perrennial coastline; indefinite coastline	5-10 years	GKODAS - definite, indefinite, artificial	2	KDB10 LT-mikro	
Malta										
		100	p06	Water course	Temporary or permanet water course in a natural area	As needed		2	BaseMap	

LAKES AND PONDS, WATERCOURSES, COASTLINES/SHORELINES										
Name of the country *Lakes/ponds* *Watercourses* *Coastline/Shoreline*	**Availability measure**	**Coverage** [15]	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
		100	p01	Coast	Delineation of Land and sea	As needed		2	BaseMap	
Netherlands	Yes	100	06113	Landblauw	centroid 06113(landblue)	2-4 years		2-3	TOP10NL	
	Yes	100	06010 06020 06110	Waterloop	watercourse with width smaller then 3 m watercourse with width between 3 and 6 m bank with extra centroid 06113(landblue)	2-4 years		2-3	TOP10NL	
	Yes	100	06200 06210	hoogwater-lijn laagwater-lijn	high-water mark low-water mark	2-4 years		5	TOP10NL	
Northern Ireland	Yes	100			FACC	5-10 years	MOAT_LAKE, DAM_POND, RESERVOIR - . - attribution designed for cartographic output only	1	OSNI Large-scale	
	Yes	100			FACC	5-10 years	RIVER, STREAM, DRAIN, C_LINE_W - . - attribution designed for cartographic output only	1	OSNI Large-scale	
	Yes	100			Level to which Highest mean tide rises and level to which lowest mean tide falls	5-10 years	HWWMT, LWMMT. - attribution designed for cartographic output only	1	OSNI Large-scale	

LAKES AND PONDS, WATERCOURSES, COASTLINES/SHORELINES										
Name of the country *Lakes/ponds* *Watercourses* *Coastline/Shore line*	**Availability measure**	**Coverage** [15]	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
Norway	Yes	60	3101	Innsjø	The part of the water where there is no significant flow rate. Lake (Innsjø) bordered by the following items; "innsjøkant, regulert innsjøkant, innsjøsperre or fiktiv innsjølinje"	irregular	Elevation (above sea level) Highest regulated waterlevel. Lowest regulated waterlevel	FKB-B:0,33 mFKB-C:2m	FKB-Vann	
	Derivable	60	3201 3211 3203	ElvBekkMidtlinje ElvBekk KanalGrøft	River/Creek:Streaming water in natural waterway. Area bordered by ElvBekkKant and eventually ElveSperre, InnsjøSperre, KystSperre and ElvelinjeFiktiv where these occur.	Irregular	Over/under the groundRiver width	FKB-B:0,33 mFKB-C:2m	FKB-Vann	
	No	60	3001		Boarder between land and sea, defined as middle Grense mellom land og sjø, definert som midlere høyvannslinje	Irregular	Elevation reference Hight	FKB-B:0,33 mFKB-C:2m	FKB-Vann	
Poland	Yes	10		I Wody i obiekty z nimi związane		unknown		3		
	Yes	10		Wody i obiekty z nimi związane		unknown		3		
	Yes	10		Wody i obiekty z nimi związane		unknown		3		
Portugal	Yes	50	1204	Superfícies Aquáticas		Not planned		< 2	SCN10K	
	Yes	50	1201	Rios/Ribeiras		Not planned		<2	SCN10K	

LAKES AND PONDS, WATERCOURSES, COASTLINES/SHORELINES										
Name of the country *Lakes/ponds* *Watercourses* *Coastline/Shoreline*	**Availability measure**	**Coverage** [15]	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
	Derivable			Linha Costa		Not planned		<2	SCN10K	
Romania	Yes			Lacuri	Area of continuous water cover forming part of the natural water cycle. Seas, lakes, ponds, reservoirs/artificial lakes and canals are considered waters without current.					
	Yes	70		rețea hidrografică	Area of permanent or periodic water cover forming part of the natural water cycle, with current.				topo nd cadastral maps	
	Yes			linie de coastă/ linie de țărm	A boundary restricting the area of a topographic compartment in natural terrain					
Slovak Republic	Yes	100		vodné plochy	the area without specification, a building, block of buildings, block of cottages	5-10 years	types: lake, pond, reservoir, sedimentational pool, swimming pool, farm reservoir		SVM 50	
	Yes	100		toky		5-10 years	WIDTH: less than 6 m, 6-20, more than 20 m. STATE of the watercourse: on the surface - under surface, occasional, water carrier, abandoned water carrier, sluice-way, irrigation chanal, flume. TYPE of node: waterfall, stream joint, stable water-gate, moving water-gate, ford, ferry. Spring. Name.		SVM 50	
	No									

LAKES AND PONDS, WATERCOURSES, COASTLINES/SHORELINES										
Name of the country *Lakes/ponds* *Watercourses* *Coastline/Shore line*	**Availability measure**	**Coverage** [15]	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
Slovenia	Yes	100		Stoječe vode	Area of permanent or periodic water bodys.	5-10 years	Waterbody ID;waterbody type.	20	Hidrografija	Hydrography of the national topographical map at the scale of map 1:25. 000. is also available on part of the country.metadata: http://www.gu.gov.si/
	Yes	100		Tekoče vode	Network of permanent or periodic waters with current. Rivers, streams, ditches and canals are considered waters with current.	5-10 years	Watercourse ID;watercourse type;direction of the water current.	20	Hidrografija	See above
	Derivable	100		Obalna linija		As Needed		20	Hidrografija	See above
Spain	Yes	95	035101 035201 035601 035801 037004 037802 037803	Laguna Laguna no permanente Laguna salada Albufera Embalse Estanque Piscina	Lake (permanent) Lake (non permanent) Salt water lake Lagoon placed near to the sea with a channel of communication with it Dam Pond Pool	5-10 years		3	BCN25	

LAKES AND PONDS, WATERCOURSES, COASTLINES/SHORELINES										
Name of the country *Lakes/ponds* *Watercourses* *Coastline/Shoreline*	**Availability measure**	**Coverage** [15]	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
	Yes	95	037704 036104 036204 030101 030201 030308 030309 030303 033101 036504 031001 031021 058902	Ría Río permanente (S) Río no permanente (S) Río permanente (L) Río no permanente (L) Canal > 3m Canal < 3m Acequia Rambla (L) Rambla (S) Tubería Tubería subterranean Acueducto	Final part of a watercourse full of sea water in high tide Permanent natural superficial watercourse Non permanent natural superficial watercourse Permanent natural linear watercourse Non permanent natural linear watercourse Channel > 3m width Channel < 3m width Irrigation ditch Linear watercourse usually dry Superficial watercourse usually dry Pipe (over ground) Pipe (underground) Aqueduct	5-10 years		3		
	Yes	100	036001 036005 036006	Coastline High tide line Low tide line		5-10 years		3		
Sweden	Yes	90	VATTENID	Vattenyta	An id point for areas of water that are sea, lakes, dams or watercourses that are at least 6 m wide.	5-10 years	Classes:House Outhouse Church Public building CotName and function of a public building	Planimetric: -Height: 2 m	Grund-läggande geografiska data (GGD)	corresponding to the information used in official mapping at the scales of 1:10 000 - 1:50 000Hydro; some generalization is madeMetadata:http://www.geolex.lm.se/http://www.lm.se/kartplan

LAKES AND PONDS, WATERCOURSES, COASTLINES/SHORELINES										
Name of the country *Lakes/ponds* *Watercourses* *Coastline/Shoreline*	**Availability measure**	**Coverage** [15]	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
	Yes	80	VATTDR.M	Bäck/dike	The centre line for identifiable watercourse that are less than 6 m wide and which are part of a drainage system.	5-10 years		Planimetric: 2 mHeight: 2	See above	See above
	Yes	90	STRANDSTRANDOTY	StrandlinjeStrandlinje, diffus	The line dividing land and water.A clearly identifiable dividing line between land and water	5-10 years	definite, indefinite	Planimetric: 5 mHeight: 2	See above	See above
Switzerland	Yes	100	gwn	Gewässernetz	Hydrographic network	5-10 years	ObjectID, ObjectOrigin, ObjectVal (See Seeachse, Seeinsel), YearOfChange, Abschnitt, GEWISSNR, Name, NebenarmNr, Unterirdisch, Von_Adresse, Zu_Adresse	5	VECTOR25	http://www.swisstopo.ch/en/digital/VECTOR25/gwn.htm area features: lakes and rivers -> layer landcover http://www.geocat.ch
	Yes	100	gwn	Gewässernetz	Hydrographic network	5-10 years	ObjectID, ObjectOrigin, ObjectVal (e.g. Bach, Fluss, Drucksto, Kanal), YearOfChange, Abschnitt, GEWISSNR, Name, NebenarmNr, Unterirdisch, Von_Adresse, Zu_Adresse	5	VECTOR25	http://www.swisstopo.ch/en/digital/VECTOR25/gwn.htm http://www.geocat.ch

LAKES AND PONDS, WATERCOURSES, COASTLINES/SHORELINES										
Name of the country *Lakes/ponds* *Watercourses* *Coastline/Shore line*	**Availability measure**	**Coverage** [15]	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
	Yes	100		Couverture_du_sol, SurfaceCS Objets_divers, Objet_divers	Couverture_du_sol -> Surface object Line object	5-10 years	Identification, Description, Validite, Date, Qualite, geometrie, Genre -> eau_stagnante, cours_eau or roseliere Identification, Description, Validite, Date, Qualite, geometrie Genre -> ru	0.5	MD.01-MO-CH	MD.01-MO-CH => Data Model of Official Cadastral Surveying. Cadastral database: 100% coverage planed in 2008
Turkey										
Ukraine		90	31 120 000		Area of continuous water cover forming part of the natural water cycle whose water level remains the same across the water area and in which there is no significant flow rate. Seas, lakes, ponds, reservoirs/artificial lakes and canals are considered waters without current	11 years -	Hydrological category: non-perenial, perenial.	5		
		90	31 400 000	Водотоки	Area of permanent or periodic (forest ditches) water cover forming part of the natural water cycle and which has a flow rate. Rivers, streams and ditches are considered waters with current.	11 years -	Hydrological category: dry, non-perennial, perenial; location category: on ground surface, underground, suspended or elevated above ground or water surface;Width category of the watercourse: width less or equal than 100 m, width more than 100 m..	5		

LAKES AND PONDS, WATERCOURSES, COASTLINES/SHORELINES										
Name of the country *Lakes/ponds* *Watercourses* *Coastline/Shoreline*	**Availability measure**	**Coverage** [15]	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
		90		Берегові лінії	0Sea coastline is used for closing the polygons of the administrative units in those cases, when the location of the real international boundary is not stored on sea area.	11-years -		5	Гідрографія	

Table L Named location

NAMED LOCATION										
Name of the country	***Availability measure***	***Coverage*** [16]	***National code***	***National name***	***Description***	***Maintenance***	***Attributes available***	***Positional accuracy (m)***	***Reference dataset***	***Additional Information***
Austria										
Belgium	No	2006: 100				11 years-			Top10V-GIS	available in an analogic form, icluded in Top10V-GIS in 2006.
Bulgaria										
Croatia	Yes	60	1000	toponim	feature category, contains several groups	5-10 years			Toponim	Croatian Geodetic Institute Field decryption, data published in Official Gazzette, old maps
Cyprus	Yes	100	N/A	Toponimia.	Geographical names (toponyms).	As needed		0,15 - 1,5 from cadastral plans,10-100m on various topo maps.		Based on cadastral plans which vary in scale between 1:500 and 1:5000 depending on the area. Geonames also exist at other scales such as 1:7500, 1:50000, 1:100000 and 1:250000.

[16] ***In percentage of the country***

NAMED LOCATION										
Name of the country	**Availability measure**	**Coverage [16]**	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
Czech Republic	Yes	100	BH080	Geonames	Name of geographic place	5-10 years	FEATURE CLASS OF ALL GEOGRAPHICAL NAMESNames of terrain objects, names of hydrology objects, names of sites (builtup areas), names of other objects as buildings, railwaiy stations, damps etc. TYPSETTING CODE Font, font size, font color	Not defined	Geonames	Database also contains coordinates of text position on the map. contains all the names from ZABAGED
Denmark	Yes	100	more than 300 codes	stednavne (place names) / stamoplysninger (appellatives)	Place name is a name which is marely used to point out a locality or a topographic feature. Appellativ is a text which is used to describe a locality or a topographic feature. Some features will have both place names and appellatives.	Continual	Unique-ID, date of creation, producer, accuracy. Official spelling, alternative spellings, typesetting codes for font, size, layout. Position of the name / text in the different map-products.	1		
Estonia	Derivable	100				Continual			Riigi Kohanimeregister	Oracle database contains all names from Baaskaart (1:50 000 topografic database) www.ekk.ee/knr

NAMED LOCATION										
Name of the country	**Availability measure**	**Coverage** [16]	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
Finland	Yes	90	various	Paikannimi	Name of a geographic place	As needed	FEATURE CLASS OF NAME OF OTHER TERRAIN FEATUREThe feature classes of a name of other terrain feature are: name of field or meadow, name of forested area, name of mire, name of elevation, name of depression, name of headland, name of island, name of shoal, and other name of terrain feature. TYPESETTING CODE OF NAME OF OTHER TERRAIN FEATURE The typesetting code indicates font, font size, boldness of text and character spacing. LANGUAGE OF NAME OF OTHER TERRAIN FEATUREThe languages are: undefined, Finnish, Swedish, Inari Sámi, Skolt Sámi and Northern Sámi.	Not defined	Nimistöreksteri	http://www.maanmittauslaitos.fi/Default.asp?id=140&docid=21 contains all the names from the maastotietokanta

NAMED LOCATION										
Name of the country	**Availability measure**	**Coverage** [16]	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
France	Yes	100		Toponyme	Everything that is on topographic maps: name of commune,name of topographic feature, relief, hydrography, vegetation, urban places (quarters, religious buidings, equipments (airports, activities).	Continual	localisation x,y zip code of commune nature of name (road having a name, river, mount, valley, etc.) Orthography. Number of the 1:50.000 map containing the name. Code of writing in 1/25.000 map : size of letters, etc. Date of validation of field survey Date of creation ie first capture in name database Date of modification (updating) Date of deletion	10 m approximativily	BD NYME	Source: Digitised + field surveys Scale : between 1:10k and 1:25k 1 700 000 names with 10 meter resolution Currently, there are different layers of names for different products and applications.Goal for 2007: unique name layer for all products.
Germany	Yes	100	5112	Geographical Name	gazetteer database	As needed	Name, Variant Name(s), Feature Code, Coordinates, Object Number	Not defined	Geographisches Namenbuch Bundesrepublik Deutschland	official name registers of the State Statistical Agencies, Topographic Maps 1: 500.000 Scale: 1:250 000 Standard: UNGEGN Responsible organization AdV

NAMED LOCATION										
Name of the country	***Availability measure***	***Coverage*** [16]	***National code***	***National name***	***Description***	***Maintenance***	***Attributes available***	***Positional accuracy (m)***	***Reference dataset***	***Additional Information***
Great Britain	Derivable	100		Distintive Text	Name given to a feature or place to distinguish it from others.	Biannually	AccuracyOfPosition AnchorPoint CalculatedAreaValue DescriptiveGroup FeatureCode Make Orientation PhysicalLevel PhysicalPresence Point Polygon Polyline ReferenceToFeature TextString Theme TOID Version VersionDate	0.4-5	50k Gazetteer	Derived from Landranger map production database Scale: 1:50 000 Point based

NAMED LOCATION										
Name of the country	**Availability measure**	**Coverage** [16]	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
Greece	Yes	100		toponimia	Name of a geographic place	5-10 years	FEATURE CLASS OF NAME OF OTHER TERRAIN FEATUREThe feature classes of a name of other terrain feature are: name of field or meadow, name of forested area, name of mire, name of elevation, name of depression, name of headland, name of island, name of shoal, and other name of terrain feature. TYPESETTING CODE OF NAME OF OTHER TERRAIN FEATUREThe typesetting code indicates font, font size, boldness of text and character spacing.	not defined	Geografiko Lexiko Ellinikon toponimion	Scale: 1:50 000
Hungary	Yes	100		Földrajzi név	Name of a geographical place	Unknown	Name of field or meadow, terrain objects, forested areas, mines, names of hydrology objects, names of sites/builtup areas, names of other objects such as buildings, railway stations, etc. TYPSETTING CODE:Font, font size,font color, bolding, character spacing Language: Hungarian	Not defined	Földrajzinév-tár	http://fish.fomi.hu Scale: 1:25 000 Source: multisources

NAMED LOCATION										
Name of the country	***Availability measure***	***Coverage*** [16]	***National code***	***National name***	***Description***	***Maintenance***	***Attributes available***	***Positional accuracy (m)***	***Reference dataset***	***Additional Information***
Iceland	Yes	100	901	Örnefni		As needed	Tvinefni=duble name Nafnberi=name type	50	IS 50V	www.lmi.is/landlysing
Ireland	Yes	100	111	Text_Text_50000	A geographic place on the earth, not normally appearing as a feature on a map, but having a name that requires it to be placed on a map.	5-10 years	None	1000		
Italy	Yes	-		nome di località		5-10 years		2		

NAMED LOCATION										
Name of the country	**Availability measure**	**Coverage [16]**	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
Latvia	Yes	70	5102000 0003101 0400002 400000000	Apdzīvotas vietas nosaukums. Hidrogrāfijas paskaidrojošie teksti Reljefa formu paskaidrojošie teksti			Feature class of Name of other Terrain feature The feature classes of a name of other terrain feature are: name of field or meadow, name of forested area, name of mire, name ofelevation, name of depression, name of headland, name of island, name of shoal, and other name of terrain feature. Typesetting code of Name of Name of other terrain feature The typesetting code indicates font, font size, boldness of text and character spacing.Language: Latvian	2-5	Ģeogrāfiskie nosaukumi	contains all the names from satelite image map at the scale 1:50 000
Lithuania	Derivable	20	np0 np1 np2 nr0 nd0	Pavadinimai	National and regional parks, preserved and protected areas	Irregular	GKODAS - geoobject; VARDAS - name	2 m defined for aerial photographs	KDB10LT	A new geographics names database is planned
Malta	Yes	100	Y25 Y26 Y27	Geographic Name	Place names with specific or general delineations.	As needed	Name type		Base Map	

NAMED LOCATION										
Name of the country	***Availability measure***	***Coverage*** [16]	***National code***	***National name***	***Description***	***Maintenance***	***Attributes available***	***Positional accuracy (m)***	***Reference dataset***	***Additional Information***
Netherlands	No									We have a database with names related to the map 1:25.000 but these names have no relation with geometrical objects
Northern Ireland	Yes	100			A name that distinguishes a feature or place from others.	5-10 years	ADMIN_NAME, DESCRIPT_N, DISTINCT_N, ROAD_NAME	1	OSNI Large-scale	
Norway	Yes	100	Numerous	Numerous	FACC description OK	Continual		>=2	Sentralt stedsnavn-register (SSR)	Scale: 1:1000 Source: Digitised, registered by administrative input ca 550.000 names
Poland	Yes	50		Napisy		unknown				Source: 1:10 000
Portugal	Yes	100		Toponímia		Not planned		Not defined	TOPONIMIA	Scale: 1:25 000

NAMED LOCATION										
Name of the country	**Availability measure**	**Coverage [16]**	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
Romania	Yes			denumiri topice	Name of a geographic place		FEATURE CLASS OF NAME OF OTHER TERRAIN FEATUREThe feature classes of a name of other terrain feature are: name of field, name of forested area, name of mire, name of elevation, name of depression, name of island, name of shoal, and other name of terrain feature.			
Slovak Republic	Yes	100		GEONAZ	Name of geographical object	As needed	slovak languague		GEONAZ	Scale: 1:10 000 Source: contains the names on basic map 1:10000
Slovenia	Yes	100		Zemljepisna imena	The register of geographical names contains geographical names with a historical, ethnological or social identity, meaning that they are more or less permanent in their environment..	As needed	The database includes place names (names of settlements, their constituent parts, and names of buildings) hydronyms (names of waters), oronyms (names of relief forms), horonyms (names of parts of regions); the names are drawn from basic topographic maps.	20	Not defined	Scale: 1:5 000 Source: Geographical names on the national topographical map at the scale of map 1:25. 000. metadata: http://www.gu.gov.si/
Spain	Yes	95	080000	Texto	Named location	5-10 years		10		

NAMED LOCATION										
Name of the country	**Availability measure**	**Coverage [16]**	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
Sweden	Yes	90	BEBTX BEBTÄ TTX KYRKATX ANLTXANL UTX TERRTX TERRUTX VATT DRTX VATT DELTX VATTTX GLACIÄRT X SANKTX ADMTXLÄ NTX KOMMUNT X FÖRSAML TX SOCKENT X KVTRAKTT X REGNRTX REGNRTX HA REGNAMN TX NATTX NATUTX KULTURTX KULTURU TX MILUTX	Bebyggelsenamn Tätortsnamn Kyrkonamn Anläggningsnamn Upplysningstext för anläggning och bebyggelse Natur- och terrängnamn Upplysningstext för natur- och etrrängföreteelse. Namn på vattendrag Namn på del av vatten Sjönamn Namn på glaciär Namn på sankmark Administrativt namn Länsnamn Kommunnamn Församlingsnamn Sockennamn Kvarterstraktnamn Registerisffror Registersiffror inom hakparentes Registernamn Namn på naturområden som skyddas genom lagstiftning Upplysninggällande naturområden som skyddas genom lagstiftning Namn på fornlämningUpplysningstext för fornlämning. Upplysning om militärt område	Place names and Appelatives	Continual		Planimetric: -Height: -	GSD-Ortnamn	Source: Papermaps, registerdata http://www.geolex.lm.se/ http://www.lm.se/kartplan

NAMED LOCATION										
Name of the country	**Availability measure**	**Coverage [16]**	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
Switzerland (two datasets)	Yes	100	SN25	SwissNames25	Geographical names, digitized from national map 1:25'000, …	5-10 years	ObjectID,ObjectOrigin,ObjectVal,YearOfChange,Name Altitude GemNr GemName Kantonszeichen	5 m	SWISSNAMES	http://www.swisstopo.ch/en/digital/namen.htm http://www.geocat.ch
	Yes	60	ku	Nomenclature, Nom_local, Nom_de_lieu, Lieudit	Nom_local -> Type Surface, Nom_de_lieu -> Type Surface Lieudit -> Type Point	5-10 years	Nom, geometrie		MD.01-MO-CH	Scale: 1:1000 Cadastral database: 100% coverage planed in 2008
Turkey										
Ukraine		90	31 120 000	Географічні назви	Name of a geographic place	11 years-	FEATURE CLASS OF NAME OF OTHER TERRAIN FEATURE The feature classes of a name of other terrain feature are: name of field or meadow, name of forested area, name of mire, name of elevation, name of depression, name of headland, name of island, name of shoal, and other name of terrain feature. TYPESETTING CODE OF NAME OF OTHER TERRAIN FEATURE The typesetting code indicates font, font size, boldness of text and character spacing..	Not defined	Географічні назви	Coverage: 50

Table M Contour lines

Name of the country	Availability measure	Coverage [17]	National code	National name	Description	Maintenance	Attributes available	Positional accuracy (m)	Reference dataset	Additional Information
Austria										
Belgium	Derivable	90		hoogtelijnen	isoline indicating geomorphology and elevation above sea level			NOT DEFINED	Top10V-GIS/altinet Top10R	50% vector 50% raster
Bulgaria										
Croatia	Derivable	60	7202	slojnica	belongs to the group 7200 "Cartographic relief presentation" and category 7000 RELIEF	5-10 years		2	Digitalni model visina DMV	on demand could be derived from DEM
Cyprus	Yes	100	N/A	Isoypseis kampyles	Primary Contour lines. Secondarycontour lines.etc	As needed	CONTOUR1 CONTOUR2 CONTOUR3....	1m, 25m, 50m, 100m.	Aerial photos and topo map 1:50000	Scale: 1:50 000 Source: 1:8000 and 1:15000 for source aerial photos
Czech Republic	Yes	100	CA10CA11CA12	Vrstevnice zakladni (principal or index contour lines - interval 2m) Vrstevnice zduraznena (thickened contour lines - interval 10m) Vrstevnice doplnkova (intermediate or supplementary)	Isoline indicating elevation of ground above sea level.	Continual	VAL Height in meters TXT Information, if a contour line is only auxiliary.	Height accuracy between 1 and 6 meters.	Vyskopis 3D	Source: contour lines of the basic map 1:10 000 At present contour lines (without described coding and attribute information) are available as 3D vector files (z coordinate is height). Format of file is MicroStation DGN (Bentley/Intergraph).We also plan to have contour lines as database objects as described here as a part of ZABAGED dataset.

[17] *In percentage of the country*

Name of the country	Availability measure	Coverage [17]	National code	National name	Description	Maintenance	Attributes available	Positional accuracy (m)	Reference dataset	Additional Information
Denmark	Yes	100	8300+0.4*elevation value (8308 = 20 m contour line)	8300+0.4*elevation value (8308 = 20 m contour line)	Line describing points with same elevation value	5-10 years	Unique-ID, elevation value	1.5 m on elevation value, 5 m in plane	Top10DK	
Estonia	Yes	100	1010005 1010010 1010020	kõrgusjoon	height contour line	Unknown	HEIGHTCODE (1010005 - 5m lines; 1010010 - 10m lines; 1010020 - 20m lines)	up to 1/3 of distance btw contourlines	Baaskaart	Scale: 1: 25 000 Source: Digitized, 1:25000 Russian General Staff topos ArcInfo coverage
Finland	Yes	100	52100	Korkeuskäyrä	Isoline indicating elevation of ground above sea level.	5-10 years	ELEVATION VALUE OF CONTOUR	Not defined	Maastotietokanta	National coverage is available separetely
France	Derivable	100/30		Iso-hypse 2008 : Courbe de niveau	2008:not yet specified	Not planned	altitude 2008: not yet specified	Heterogenous precision (worst case 20-30 m)	BD ALTI 2008: Couche altimétrique du Référentiel à grande échelle (RGE)	Source: -2/3 : source = digitise map-1/3 : source = stereoplotting Scale varies from 25k to 50k. 2008: Scale: 1:25 000 30% already covered: source : BD TOPO (stereoplotting + field surveys)- 70% not yet covered: source : improvment of BD ALTI (which was digitised from maps) The 30% BD TOPO are available.The 70% improvment of BD ALTI are planned.

Name of the country	Availability measure	Coverage [17]	National code	National name	Description	Maintenance	Attributes available	Positional accuracy (m)	Reference dataset	Additional Information
Germany	Yes	planned	6102	Hoehenlinie	line feature	5-10 years	HHL - Height Value	10		Feature type is not supported by all German states
Great Britain	Yes	100	10201	Terrain and Height (Line)	A line connecting points of equal elevation	5-10 years	accuracyOfPosition anchorPoint calculatedAreaValue descriptiveGroup featureCode make orientation physicalLevel physicalPresence point polygon polyline referenceToFeature textString theme TOID version versionDate	0.4-5	Landform Profile	Scale: 1:10 000 Source: Contours surveyed and digitised from aerial photography (1:24,000 photo scale)
Greece	Yes	100		isoipsis	Isoline indicating elevation of ground above sea level.	Not Planned	ELEVATION VALUE OF CONTOUR	25		Source 1:50 000 maps
Hungary	Yes	100	GA01-03	Szintvonal	Isoline indicating elevation of ground above/below see level by isolines, point with height data	Unknown	elevation value of contour / DIGEST: WID	5-10	DTA-100	Scale: 1:100 000 Standard: DITAB (Draft) Source: digitised maps in scale 1:100000 This dataset is a layer of the database 1:100000 Digital Topographic MapSee: http://fish.fomi.hu

Name of the country	Availability measure	Coverage [17]	National code	National name	Description	Maintenance	Attributes available	Positional accuracy (m)	Reference dataset	Additional Information
Iceland	Yes	100	803 805	Hæðarlínur		11 years -	ar_uppl =year of informations. eign = owners of data nakv_xy=accuracy nafn= name of the object lu-uppr=origin of the data z = hight value lega= placement	50	IS 50V	www.lmi.is/landlysing
Ireland	Yes	100	101; 102 and 108	Elevation_Contours_Contour_50; Elevation_Contours_Contour_10; Elevation_Contours_Contour_20;	A line connecting points having the same vertical value in meters above mean sea level	Not planned	None	10	Discovery	
Italy	Yes	100	L901	Curva di livello		5-10 years	CRV Valore della curva di livello e/o della curva batometrica, numero reale con una cifra decimale, incremento di 0.1 m;TXT Descrizione Oggetto;USE Uso della struttura	2		
Latvia	Yes	20	2101000100	Horizontāles		5-10 years		2-5	reljefs	Source: Aero images 1:30000 , Ortophoto maps 1:10 000, land surveys, historical topo maps 1: 10000

Name of the country	Availability measure	Coverage [17]	National code	National name	Description	Maintenance	Attributes available	Positional accuracy (m)	Reference dataset	Additional Information
Lithuania	Yes	20	ri11 ri12 ri13 ri14	Horizontales	Linear features of the relief	5-10 years	GKODAS - intermediate, index, half-interval or supplementary; ZEMES_H - value in meters (above sea level)	up to 1/3 of distance btw contour lines	KDB10LT	
Malta	Yes	100	T38 T39	Contour	Contours at 2.5m intervals	Not planned		2	Contours	Scale:1:2500 Source: 1:15 000 aerial photography
Netherlands	Yes	100	none	Hoogtelijn		2-4 years		2-3	Hoogtelijnenbestand	Scale: 1:10 000 Source: derived from DEM Contourlines are stored in a separate database
Northern Ireland	Yes	50			FACC	Not planned	CONTOUR - vertival height value	1	OSNI 1:10,000	Scale: 1:10 000 Source: digitised
Norway	Yes	60	2001	HøydeKurve	Isoline indication elevation above reference sea level.	irregular	Elevation	FKB-B: 0,3m 'FKB-C:2m	FKB-Høyde	
Poland	Yes	10		Rzeźba terenu		unknown		3		
Portugal	Yes	70	0301	Curvas Nível		Not planned		< 2	Altimetria	Scale: 1:10 000 Standards: IGDS -Integraph with User Data Linkage Source: aerial photographs 1:22 500

Name of the country	Availability measure	Coverage [17]	National code	National name	Description	Maintenance	Attributes available	Positional accuracy (m)	Reference dataset	Additional Information
Romania	Yes	70		curbe de nivel	Isoline indicating elevation of ground above sea level.		ELEVATION VALUE OF CONTOUR		topo nd cadastral maps	Scale:1:50 000 Source: digitised National coverage is available separately
Slovak Republic	Yes	100		výškopis	isoline indicating elevation of the ground upon sea level (Balt after adjustment)	5-10 years	elevation value of contour		SVM 50	
Slovenia	Yes	100		Plastnice		11 years -	Elevation of contour line.	20	Plastnice	Scale: 1:25 000 Source: Contour lines of the national topographical map at the scale of map 1:25. 000. metadata: http://www.gu.gov.si/
Spain	Yes	100	020232 020231 020132 020131 010133	Curva de depresión Curva de depresión maestra Curva de nivel 10 m Curva de nivel maestra Curva de nivel auxiliar	Depression contour line (10 m) Depression contour line (50 m) Contour line (10m) Contour line (50m) Auxuliar contour line	5-10 years	Height	3	BCN25	
Sweden	Yes	90	HÖJDK 25 HÖJDK 5	25 meters höjdkurva 5 meters höjdkurva	Contour Line with interval 25 m Contour Line with interval 5 m	As needed	Contour Value	Planimetric: 20 m Height: -	GSD-Höjdkurvor)	Scale: 1:10 000 Source: Analog photogrammetricly made contour lines are automaticly digitized http://www.geolex.lm.se/ http://www.lm.se/kartplan

Name of the country	Availability measure	Coverage [17]	National code	National name	Description	Maintenance	Attributes available	Positional accuracy (m)	Reference dataset	Additional Information
Switzerland (two datasets)	Yes	100	DHM25	Basismodell	Isolines, elevationpoints, ..	5-10 years	ObjectID, ObjectOrigin, ObjectVal (KU, LA, …) YearOfChange, Altitude	5	DHM25 Source: digitised map 1:25'000	http://www.swisstopo.ch/en/digital/DHM25.htm http://www.geocat.ch
	Yes	50	ku	Altimetrie	Produkt MNT-MNS	5-10 years	Identification, Description, Validite, Date, Qualite	0.5	MNS-MO	MNS-MO = Digital Surface Model of Official Cadastral Surveying. 100% coverage planed in 2005. Accuracy 2 m. Source: Laserscan Standard: INTERLIS http://www.swisstopo.ch/fr/vd/lwnproduits.htm
Turkey										
Ukraine		90	21 000 000	Рельєф, виражений горизонталями	Isoline indicating elevation of ground above sea level.	11 years -	ELEVATION VALUE OF CONTOUR	1-2	Рельєф	Scale:1:10 000

Table N Benchmarks

BENCHMARKS										
Name of the country	***Availability measure***	***Coverage*** [18]	***National code***	***National name***	***Description***	***Maintenance***	***Attributes available***	***Positional accuracy (m)***	***Reference dataset***	***Additional Information***
Austria									KDB-TP, KDB-EP	Source: GPS, surveying
Belgium										
Bulgaria										
Croatia		100		reper					Geodetska osnova	triangulation data and GPS surveys
Cyprus	Yes	100	N/A	Ethniko geodetiko diktyo.	National geodetic reference system. The geodetic points are classified into primary, secondary and tertiary, and they are accurately measured using GPS methods. .	As needed		0,10 - 0,25m used primarily for cadastral and topographical surveys.	Geodetic reference system 1st, 2nd and 3rd order	Source: The major part of the island is covered by sound GPS measured coordinates. The whole island is already covered by trig points which are progressively upgraded by GPS measured points.
Czech Republic	Yes	100	Geodetic ke body		Geodetic points from the national register	Continual				Dataz.cuzk.cz nivelace.cuzk.cz

[18] ***In percentage of the country***

BENCHMARKS										
Name of the country	**Availability measure**	**Coverage** [18]	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
Denmark	Yes	100		fikspunkter (control points)	Physically established and surveyed control points used as the basis of surveys, computation, registration and collocation of geodata	Continual	z control point: unique number, alternative numbers, accuracy, coord.-system, location coordinates, point description, marking and control point sketch x, y control point:unique number, alternative numbers, level in computed system, accuracy, coord.-system, point description, marking and control point sketch	<0.1	Fikspunkt register	Source: Survey and GPS www.geodata-info.dk
Estonia	Yes	100				Continual		geodetic	Geodeetiliste punktide andmebaas	Source: Geodetic surveys
Finland	Yes	100		Kiintopiste	A bench mark which is measured using geodetic methods, entered into the national bench mark register and built into the terrain	As needed	Number Coordinates Sketch of the location	Varies	Kiintopisterekisteri	
France	Yes	100		Repère de nivellement	Normal altitude	2-4 years	Coordinates. Altitude Sketch of the situation. Digital photograph. Number	Relative accuracy: 2 to 4 mm per square of km	BD GEODESIQUE	Maintenance: 1000 basis benchmarks "RBF" : 2 years.Rest of the benchmarks "RTF" : not maintained. Source: Field survey + feedback from private surveyors and from gendarmes (policemen)

BENCHMARKS										
Name of the country	**Availability measure**	**Coverage**[18]	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
Germany	Yes	100		Trigono-metrischer Punkt Nivelle-mentpunkt	Base of geodetic network measured using geodetic methods provided by marks	Continual	unique ID-number and name, coordinates and heights, reference systems, coordinate systems, height systems, point description, many other details	positio-nal acc. 0,01 m vertical 0,001m	ETRS89/ UTM DHDN90/ GK ---------- DHHN92/ Normal heights (Molodensky)	ETRS89 is also available by SA*POS*® (Satellite Positioning Service of the German States) Sources: ETRS89 - GPS, DHDN90 - triangulation, trilateration DHHN92 - precise levelling, connected to NAP
									AFIS - Amtliches Festpunkt - Informationssystem	Standard: dataset will be compliant with ISO 191xx. Source: GPS, surveying Dataset is under construction. At present coordinates are available from NMA of the German Länder in preliminary formats.

BENCHMARKS										
Name of the country	**Availability measure**	**Coverage**[18]	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
Great Britain	Yes	100	10196 10198 10200	Terrain and Height	A surveyed mark on a building, monument or other fixed object with a known height above OS datum	Not planned	accuracyOfPosition anchorPoint calculatedAreaValue descriptiveGroup featureCode make orientation physicalLevel physicalPresence point polygon polyline referenceToFeature textString theme TOID version versionDate		Control Database EUREF 2001 GB	Standard: Ratified by IAG Section 1 Commission X Source: GPS Network http://ww.gps.gov.uk
Greece	Yes	100		trigonometriko-ipsometriko diktio	A horizontal bench mark which is measured using geodetic methods, entered into the national bench mark register and built into the terrain	Continual	ELEVATION VALUE OF TRIANGULATION POINTElevation of a horizontal bench mark according to the bench mark register. The elevation is indicated in metres.			

BENCHMARKS										
Name of the country	**Availability measure**	**Coverage**[18]	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
Hungary	Yes	100	AA01-05 AB01-07 AC01-09	Geodéziai alapponto k: vízszintes és 3D, magassá gi, részletpo nt	Base of geodetic networks, measured on the terrain using geodetic methods, built up into terrain, registered	Continu al	Identifier, Code of its object type, point number and name, x, y, z coordinates, height, way of marking of the reference point, Type of point protection facility Its condition Underground signal: way of marking Surface signal: way of marking ts condition Quantity of twin point Twin points': namebearing datadistance valueway of marking its condition way of determination Name and address of person performing determination Date of marking Field measures: dates establishments Restaurations: dates name and address of organization performed operation Date of its abolition Layout plan and address of point definition EUREF-89 coordinates (WGS-84, GPS): X,Y, data determined in former projection systems (x,y),system data, visualisation code of legend,Identifier of the relating surveying rayon etc.	various	Geodéziai alapponth álózat (EOVA, EOMA, OGPSH)	http://fish.fomi.hu Source: land surveys Geodetic Control Network consists of three databases: Uniform National Horizontal Network,Uniform National Height System,National GPS Network
Iceland	No									

BENCHMARKS										
Name of the country	**Availability measure**	**Coverage [18]**	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
Ireland	Yes	100	None	Benchmark	Fixed point with known mean sea-level value in metres above Malin Head Datum	Irregular	Exact location is defined by hand drawn sketch, describing each benchmark uniquely.	10		While coverage is nationwide, some areas have limited availability due to a high loss rate caused by road and urban developments. All information is available in paper form only.
Italy										
Latvia	Yes	100		Atbalsta punkti	Geodetic benchmark network	5-10 years	Yes	1	Tikls	Source: GPS measurements Edge matching beween Lithuania and Estonia
Lithuania	Yes	100	fp0-fp1 fp3	Geodezinis pagrindas	Ground control points	5-10 years	GKODAS - geoobject; NUMERIS - number and code; X,Y,Z - coordinates and height in meters	geodetic	KDB10LT-mikro	
Malta	Yes	100	T70 T71 T72 T73 T74	Horizontal and Vertical Control	A hierarchical control network with horizontal and vertical benchmarks.	As needed		12mmf or primary network	Leveling Network	
Netherlands	Yes	100	codes base upon topographic mapsheet and hierarchy	RD-stelsel NAP-stelsel ETRS98		Continual		cm	RD-stelsel/NAP-stelsel/ETRS89	Source: land survey (GPS) levelling www.rdnap.nl

BENCHMARKS										
Name of the country	**Availability measure**	**Coverage**[18]	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
Northern Ireland	Yes	100			A permanent mark, surveyed to a precisely known height above Ordnance datum.	5-10 years	BENCH_MARK	5	Control Descriptions	Source: Surveyed
Norway									EUREF89NGO1948	Standard: ISO 19111 Source: EUREF89 - GPS NGO1948 - Triangulation and trilateration EUREF86 -Coverage 70% The new national godetic network since 1997, edgematching only in EUREUF89 NGO1948 - coverage 100% The old geodetic networc, still in use in most municipalities
Poland	No									
Portugal	Yes	100		Rede Nivelamento		Continual			RGN	
Romania				borne	A horizontal bench mark which is measured using geodetic methods, entered into the national bench mark register and built into the terrain	Biannually	ELEVATION VALUE OF TRIANGULATION POINTElevation of a horizontal bench mark according to the bench mark register.The elevation is indicated in metres			

BENCHMARKS										
Name of the country	**Availability measure**	**Coverage [18]**	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
Slovak Republic	Yes	100		geodetické body	geodetic points from national register	5-10 years			SVM 50	
Slovenia	Yes	100		Geodetske točke	A bench mark which is measured using geodetic methods, entered into the national bench mark register and built into the terrain.	Continual	Elevation and type of a bench mark according to the bench mark register..	Vertical accuracy 0,001m	Osnovni geodetski sistem	Source: Land surveys. metadata: http://www.gu.gov.si/
Spain										
Sweden	Yes	90	VATTENID	Riksnätspunkter (control points)	Physically established and surveyed control points used as the basis of surveys, computation, registration and collocation of geodata.	Continual	Height control point: unique number, alternative numbers, accuracy, coord.-system, location coordinates, point description, marking and control point sketch. x, y control point:unique number, alternative numbers, level in computed system, accuracy, coord.-system, point description, marking and control point sketch	0.1	Digitalt Geodetiskt Arkiv	Source: Survey and GPS RT 90, The National (Mapping) Coordinate Datum. The Swedish national map series are based on a Transverse Mercator grid of this datum, denoted: RT 90 2.5 gon V 0:-15RH 70, The National Height System 1970The system is connected to the NAP (Normaal Amsterdams Peil) via UELN 55 (United European Levelling Network 1955). SWEREF 99 is a Swedish realisation of ETRS 89.. SWEREF 99 coincides with WGS 84[G730] and WGS 84[G873] within some decimeters

BENCHMARKS										
Name of the country	**Availability measure**	**Coverage [18]**	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
Switzerland	Yes	100	-	geod. Fixpunkte	National geodetic reference network for position and height	Continual	Unique identifier, coordinates and height, point description, point sketch	0.1	LV95 LV03 LN02	http://www.swisstopo.ch/de/geo/grundlagen.htm
Turkey										
Ukraine	Yes	90	11 000 000	Опорні пункти	A horizontal bench mark which is measured using geodetic methods, entered into the national bench mark register and built into the terrain	11 years-	ELEVATION VALUE OF TRIANGULATION POINTElevation of a horizontal bench mark according to the bench mark register.The elevation is indicated in metres to one decimal place.	2	Опорні пункти	

Table O Cadastral parcels

CADASTRAL PARCELS										
Name of the country	**Availability measure**	**Coverage [19]**	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Positional accuracy (m)**	**Address information**	**Additional Information**
Austria	Yes	100	Layer GG in BEV-DKM Format	Grundstück	piece of land which belongs to an owner	Continual		0.5	Yes	
Belgium										
Bulgaria										
Croatia				Parcela		Continual		0.2-0.5		Parcels are kept in cadastral maps which are not jet organised in a data base on a national level
Cyprus	Yes	100	N/A	Temachia	A real estate unit (land parcel).	Continual	A unique land parcel ID is assigned both to geographical data (GIS system) and Oracle data (Legal/Fiscal System).	0,15m - 1,5m	Yes	Scales: from 1:500 - 1:5000.
Czech Republic		100	NVF ISKN	Vymenny format informacniho systemu katastru nemovitosti ISKN (Transfer format of Information system of real estates ISKN)	A real estate unit	Continual	Descriptive and also graphic information about real estates (parcels). Graphic part contains also buildings.	Not defined	Yes	

[19] ***In percentage of the country***

CADASTRAL PARCELS										
Name of the country	**Availability measure**	**Coverage [19]**	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Positional accuracy (m)**	**Address information**	**Additional Information**
Denmark	Yes	100	matr_fl	matrikel (parcel)	Smallest real estate unit	Continual	Unique parcel-ID and the full cadastre-registration.Addresses can be derived from the property where the parcel is a part. See building and address.	0.1-3	Yes	
Estonia	Yes	100				Continual		Depends on parcel type, 10cm to 20m	Yes	Oracle Spatial database, too complex to describe
Finland	Yes	100	Kiinteistötunnus	Kiinteistöyksikkö	A real estate unit	Continual	Registernumber and other attributes related to parcel.	Not defined		Note: New unified cadastral database will contain also municipality data 2005.
France	Yes	100		Parcelle	Raster "PCI image" : a parcel is described by its raster image plus a punctual object (centroid).Vector "PCI vecteur" : a parcel is described by a polygon plus a punctual object (centroid). 2008: Raster "BD Parcellaire image" : a parcel is described by its raster image plus a punctual object (centroid).Vector BD Parcellaire : a parcel is described by a polygon plus a punctual object (centroid).	Annually or biannually 2008: Annually	The official code of the parcel is an attribute available in parcel feature.In Vector PCI, the address is available in another feature “plaque adresse” that can be related to the parcel feature. 2008: Addresses will be contained in another DB, namely BD Adresse, which will be coherent with BD Parcellaire.	0,3 to 3 mBut note that Raster PCI is not georefernced. 2008: 5 cm to 10 m		2008:The accuracy of the source (PCI) is heterogeneous Metadata of BD Parcellaire will provide scale and accuracy for each homogeneousproduction unit.

CADASTRAL PARCELS										
Name of the country	**Availability measure**	**Coverage [19]**	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Positional accuracy (m)**	**Address information**	**Additional Information**
Germany	Yes	100	11001	FLurstück	A parcel (in case of cadastre) is a restricted spatial, not seperated surface	Continual	parcel numbe rlegal area date of registration object coordinate: representative coordinate of the parcel	0.03	Yes	
Great Britain	Derivable	100				Biannually	accuracyOfPosition anchorPoint calculatedAreaValue descriptiveGroup featureCode make orientation physicalLevel physicalPresence point polygon polyline referenceToFeature textString theme TOID version versionDate	0.4-5		

CADASTRAL PARCELS										
Name of the country	**Availability measure**	**Coverage [19]**	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Positional accuracy (m)**	**Address information**	**Additional Information**
Greece	Derivable	Planned		Geotemaxia	A real estate unit	continous	Land parcel identifer Area Address or local name Postal code Information about the owner (surname, name, father's name mother's name, spouce name, identity number, tax register number, home address) In the case of real estate rights on apartments: Identfier in the registers of the National Cadastre Number of building in the land parcel Number of floor Percentage of co-ownership Address	0.20	Yes	Information about land use, although it is collected is not included in the registers of the cadastral offices, wherever they operate, nor is kept up to date. Information about building in general, although it is collected, is not included in the registers of the cadastral offices, wherever they operate, nor is kept up to date.

CADASTRAL PARCELS										
Name of the country	**Availability measure**	**Coverage [19]**	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Positional accuracy (m)**	**Address information**	**Additional Information**
Hungary	Yes	10	BC01-08, BD01-02	Földrészlet (közterületi/nem közterületi)	An unit for land property and use	Unknown	Identifier of the parcel Code of its object type Its topographic number I ts postal address Code of position Dimensions of the area registered Land valueMarket value of the parcel when acquiring Data relating to the sector Data relating to legal feature Data relating to easement Data relating to legal status Data relating to the legal title of acquiring Data relating to charge, mortgage Lines of cultivation (also areas out of cultivation) Personal identifier of the owner person or national registry identifier ofthe owner organization Name and address of the owner persons or organizations Property share of the owners Name and address of the person or organization responsible for management Delimitation (preliminary, final) Data relating to changes producing the parcel DateRegistry number of decision Feature of change (e.g. union, share, easement) Storage address of sketch of updating Date of abolition For visualisation: code of legend Identifier of the relating surveying rayon Geocode of the parcel (x, y[, H])	various	Yes	

CADASTRAL PARCELS										
Name of the country	**Availability measure**	**Coverage [19]**	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Positional accuracy (m)**	**Address information**	**Additional Information**
Iceland	No									
Ireland	Yes	100				Continual		10		Irish Land Registry and Registry of Deeds is responsible for maintaing all land ownership (cadastral) information http://www.landregistry.ie/ This information is currently available in paper form only but will be available digitally by 2010. Ordnance Survey Ireland is responsible for the production of mapping used within this registration process. All land parcel information will be available digitally by end 2004.
Italy										

CADASTRAL PARCELS										
Name of the country	**Availability measure**	**Coverage [19]**	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Positional accuracy (m)**	**Address information**	**Additional Information**
Latvia	Yes	70	7201010000-7208040000					2-5		
Lithuania	Derivable	100	ed1 ed2 ek1 ek2 hd6 mk1 ms1-ms3 ms41-ms43	Durpynai karjerai pelkes, krumynai miskai sodai uogynai		unknwon	name, explan. information	Not defined		
Malta										
Netherlands	Yes	100	14 different types of landuse ADPC 241 (example)	Kadastraal perceel	identical to definition given on p.3 of this document	Continual	coordinates in national reference system	0.3m (urban)0.6m (rural)		www.ncgi.nl 100% national coverage continual update
Northern Ireland	Yes	100			A clearly defined area of land or water	5-10 years	PARCEL . - attribution designed for cartographic output only	1		
Norway	Yes	80	4011	Eiendomsteig	One part of a ground parcel or leasehold. One part is a coherent area surrounded by various types of property borders.	Continual	Adress can be connecte to) Identification (GID) Municipal number Documentnumber(mm)	0,12m - 2m	Yes	

CADASTRAL PARCELS										
Name of the country	**Availability measure**	**Coverage [19]**	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Positional accuracy (m)**	**Address information**	**Additional Information**
Poland	No									
Portugal	Yes	10		Cadastro		As needed		Not defined	Yes	
Romania	No			parcela	A real estate unit		Registernumber			
Slovak Republic	Yes	50	code of the cadastral unit and the parcel number	parcela	The parcel is an undivided land property, located within one land registration district and recorded in the cadastre as a parcel with its parcel number.	Continual				
Slovenia	Yes			Parcele	The lad parcel is an udivided land property, located within one land registration district and recorded in the land cadastre as a land parcel with its parcel number..	Continual	Parcel number.	0 - 10	Yes	
Spain										
Sweden	Yes	80	FASTGR FAST1:5 FASTSTR FASTID	Fastighetsgräns Fastighetsgräns, 1:5 Fastighetsstrand Fastighetsområde (identitetspunkt)	Cadastral boundary	Continual	E.g. National key (unique identifier), Area, Purpose	Planimetric: 5 mHeight: -		
Switzerland	Yes	60		Biens_fonds, Immeuble	Parcels datas	Continual	Identification, Description, Validite, Date, Qualite, precision. fiabilite, genre, geometrie	0.1		http://www.swisstopo.ch/fr/vd/interlis.htm
Turkey										

CADASTRAL PARCELS										
Name of the country	Availability measure	Coverage [19]	National code	National name	Description	Maintenance	Attributes available	Positional accuracy (m)	Address information	Additional Information
Ukraine										

Table P Built-up area

BUILT-UP AREAS										
Name of the country	***Availability measure***	***Coverage*** [20]	***National code***	***National name***	***Description***	***Maintenance***	***Attributes available***	***Positional accuracy (m)***	***Reference dataset***	***Additional Information***
Austria										
Belgium	No									
Bulgaria										
Croatia	Yes	60	5300	izgradjena povrsina	Built-up areas are mostly man-made or finished surfaces, most frequently, but not necessarily with firm cover (asphalt, concrete and similar).	5-10 years	feature group, belongs to category "vegetation and land use", contains classes: public and commercial areas,cemetery areas of road traffic, areas of railway traffic, sea coast areas	2	Vegetacija i vrste zemljišta (vegetation and land usage)	aerial photographs in the scale 1:20000, field decryption
Cyprus	Yes	100	N/A	KATOIKIMENES PERIOCHES	Stored as several closed polygons for each individual building, on maps 1:7500, or stored as regions, one for each residential area.	As needed		2		from the Digital Cadastral Database which is mainly based on cadastral plans from 1:500-1:5000.

[20] ***In percentage of the country***

BUILT-UP AREAS										
Name of the country	**Availability measure**	**Coverage [20]**	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
Czech Republic	Yes	100	AL020 AL000	Intravilan (built-up area) Areal ucelove zastavby (built-up complex)	Public places and unspecified areas in seats (towns and cities).Industrial areas and areas serving for special purposes asindustrial and agriculture complexes, archeological findings, ZOO or Safari, playgrounds and stadiums, race-cources, swimming areas, campings, summer cinemas and theatres, exhibition areas, shooting places,railway stations, cottage colony, group of garages, holliday resorts, palace or castle areas, monastery and church areas, hospital areas, health resorts,school areas, water cleaning stations, water reservoir areas, group of greenhouses,storage areas, forestry areas, petrol station areas, ports, bus stations, broadcasting stations or transmitters, meteo station areas, observatory areas, squares. .	Continual	NAMOB (for AL020) Name of intravilan. TXT (for AL000) Two letters for defining described types of built-up complexes. NAMAR ame of important complexes. MAPNO	Level A: 5m Level B: 15m	ZABAGED	The coverage with vector elements (without attributes) is 100%Any area is formed by area boundaries (land use boundaries) and a centroid, to which the attribute information of area is linked.

BUILT-UP AREAS										
Name of the country	**Availability measure**	**Coverage [20]**	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
Denmark	Yes	100	3113 / 3118 / 3117 / 3116	bykerne (town centre) / høj bebyggelse (high-rise buildings) / lav bebyggelse (low-rise buildings) / industri (industry)	Area with adjoining buildings or blocks which entirely or partly close about the area at the back (courts, backyards and parking areas) and > 2.500 sq.m. / area of utilization in connection with buildings with more than two storeys and > 2.500 sq.m. / area of utilization, gardens, in connection with one- and two-storey buildings and > 500 sq.m. / area which is mainly used for commercial aims (storage spaces and parking areas are included) and > 2.500 sq.m.	5-10 years	Unique-ID, date of creation, producer, accuracy	1	Top10DK	
Estonia										
Finland	Yes	90	39211 39212 39213	Taajama	Built-up area, area built according to town plan or building plan.	5-10 years	CLASS OF BUILT-UP AREAThe classes of built-up area are: high-rise area, low-rise area and industrial area	40	Maastotietokanta	

BUILT-UP AREAS										
Name of the country	**Availability measure**	**Coverage [20]**	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
France	Yes	100		bâti		5-10 years		The area is interpreted, so the concept of positional accuracy is not adequate. "interest zones (e.g.hospitals) are documented only in the “agglomeration" part of the BD	BDCARTO OCS	Scale: 1:100 000 Source: map digitised +SPOT images.
Germany	Yes	100	2101	Ortslage	area feature	5-10 years	GN - Geographical name.The area is composed of elements that indicate the major usage: 2111 residential area / 2112 industrial and commercial / 2113 mixed / 2114 special use	10	ATKIS	

BUILT-UP AREAS										
Name of the country	**Availability measure**	**Coverage [20]**	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
Great Britain	Derivable	80 (England and Wales)	10031	Urban Area Extents	All contiguous built-up areas that are over 20 ha in extent and have a permanent population over 1000	Biannually	none	10	OS Mastermap	DC Urban Area Extents that is not available to customers
Greece	Yes	100		katikimeni topi	Built-up area, area built according to town plan or building plan.	5-10 years	CLASS OF BUILT-UP AREAThe classes of built-up area are: high-density area, low-density area	25		
Hungary	Yes	10	BB01 BB0303	Fekvés Településrész (beépített terület/belterület)	Part of a settlement. Built up area according to town plan	Unknown	Identifier of the administrative subunit Code of object type Its name Date of establishing the administrative subunit Registry number of the decision recording the establishment of the administrative subunit Delimitation (preliminary, final) Date of abolition For visualisation: code of legend Identifier of the relating surveying rayon Geocode of the administrative subunit (x, y[, H])	2.5	DAT	DAT Standard

BUILT-UP AREAS										
Name of the country	**Availability measure**	**Coverage [20]**	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
Iceland	Yes	100	121	þéttbýli		5-10 years	ar_uppl =year of informations. eign = owners of data nakv_xy=accuracy nafn= name of the object lu-uppr=origin of the data heimild=data source nafn=name	50		www.lmi.is/landlysing
Ireland	Yes	100	603	Boundaries_Town_Per	An area containing a conception of buildings and other structures	5-10 years	None	50	Urban	Currently, built-up areas are derived from 1:1000 (urban), 1:2500 (suburban) and 1:5000 (rural) mapping programmes. These are produced from photogrammetry in the photoscale range 1:5000 – 1:40000
Italy	Yes	100	C401A	Centro abitato		5-10 years	NAM Nome; PPL Numero di abitanti; TXT Descrizione Oggetto			
Latvia	Yes	70	5101000000	Blīvas apbūves kvartāla līnija		2-4 years		2-5	būves	Blocks of densely builded areas are depicted by this code.
Lithuania	Yes	20	pu0	Uzstatyta teritorija	Built up areas (incl. industrial area)	5-10 years	GKODAS; INFO - explan. Information	2	KDB10LT	

BUILT-UP AREAS										
Name of the country	**Availability measure**	**Coverage [20]**	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
Malta	Yes	100		Limit of Development	A delineation of urban areas	As needed		2		
Netherlands	Yes	100	01010	bebouwd gebied	area outlined by a line with code 01010 area filled with centroid 01013 (build-up area)	2-4 years		3	TOP10NL	
Northern Ireland	Yes	70			FACC	Continual	BUILD_LIM - . - attribution designed for cartographic output only	1	OSNI Large-scale	100 % coverage expeted in 2006.
Norway	Derivable		5200	Bebygd	Build up area (bordered by vegetation area)	irregular	no	2-15		
Poland	No									
Portugal	No									
Romania	No									
Slovak Republic	Yes	100		zastavané územie obce	According to building plan	Continual	types: lake, pond, reservoir, sedimentational pool, swimming pool, farm reservoir	0,3	subor geodetický ch infor mácií	
Slovenia	No									

BUILT-UP AREAS										
Name of the country	**Availability measure**	**Coverage [20]**	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
Spain	Yes	95	057501 057701	Casco urbano Urbanización	Built-up area (city or village) Built-up area (housing developement	5-10 years		3	BCN25	
Sweden	Yes	90	BEBOMR.B BEBSLUTID BEBHÖGID BEBLÅGID BEBINDID ANLOMR.B	Bebyggelseområdesgräns Sluten bebyggelse Hög bebyggelse Låg bebyggelse Industriområde Anläggnings- och rekreationsområdesgräns	An area with compact building and infrastructural development Limits of built-up area Blocks of buildings High buldings Low buildings Industrial area Limits of work and recreation areas	2-4 years	Classes of built up areas:Blocks of building High buldings Low buildings Industrial area	Planimetric: 5 Height:	Grund-läggande geografiska data (GGD)	We are planning to create routines for updating. The maintenance interval depends on the quality class for a particular area. The updating interval can be 1-10 years depending on quality class
Switzerland (two datasets)	Yes	100	pri	Primärflächen	Landcover (Settlement, …)	5-10 years	ObjectID, ObjectOrigin, ObjectVal (Z_Siedl, …) YearOfChange,	5	VECTOR25	http://www.swisstopo.ch/en/digital/VECTOR25/pri.htm http://www.geocat.ch
	Yes	60	batiment	Couverture_du_sol, SurfaceCS		Continual	Identification, Description, Validite, Date, Qualite Genre -> batimen	0.1	MD.01-MO-CH	http://www.swisstopo.ch/fr/vd/interlis.htm
Turkey										

BUILT-UP AREAS										
Name of the country	**Availability measure**	**Coverage [20]**	**National code**	**National name**	**Description**	**Maintenance**	**Attributes available**	**Positional accuracy (m)**	**Reference dataset**	**Additional Information**
Ukraine		90	40 000 000	Населені нункти	Built-up area, area built according to town plan or building plan.	11 years-	CLASS OF BUILT-UP AREA The classes of built-up area are:city of spetial status (Kyiv, Sevastopol'), city of oblast' value and regional city, town, urban village and village..	5		


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