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## **Deliverable D.T3.5.2 Inventory report of MSP-relevant spatial data and its quality**

**Cross-border case study: primary data and providers**

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## SUMMARY

This inventory reports the spatial data relevant for Maritime Spatial Planning (MSP) and their providers in the Plan4Blue case, covering the Gulf of Finland and coastal areas of Estonia and Finland. It aims at serving as an example of data requirements and availability in cross-border MSP processes where extensive geographical areas are targeted.

The inventory reflects the data availability situation in January-April 2017 and a task to produce background maps of the current conditions of the Plan4Blue project area. Together with other background information, these maps set the stage for MSP scenario building.

The inventory is restricted to those data that were used either in the map products or during the process, although many other data are available and may be relevant in other specific cases. Particularly, the inventory is concentrated on data with large geographical coverage and relatively coarse spatial scale, which often are the requirements in cross-border MSP. The produced maps of the current conditions of the Gulf of Finland are available in deliverable D.T3.5.1, "Collection of contemporary Gulf of Finland maps for scenario building".

**Table 1. Primary data providers (in alphabetical order) utilised for Plan4Blue background maps (see D.T3.5.1)**

Provider	Coverage	Database	Web cite
IMO - International Maritime Organization	International	GISIS - Global Integrated Shipping Information System	<a href="https://gisis.imo.org/Public/Default.aspx">https://gisis.imo.org/Public/Default.aspx</a>
HELCOM - Baltic Marine Environment Protection Commission - Helsinki Commission	International	Baltic Sea data and map service	<a href="http://maps.helcom.fi/website/mapservice/index.html">http://maps.helcom.fi/website/mapservice/index.html</a>
EMODnet - The European Marine Observation and Data Network	International	EMODnet Data Portals	<a href="http://www.emodnet.eu/portals">http://www.emodnet.eu/portals</a>
Bureau van Dijk	International	Orbis	<a href="https://www.bvdinfo.com/en-gb/our-products/company-information/international-products/orbis">https://www.bvdinfo.com/en-gb/our-products/company-information/international-products/orbis</a>
Estonian Land Board	Estonia	Estonian Geoportaal	<a href="http://inspire.maaamet.ee/home">http://inspire.maaamet.ee/home</a>
Estonian Maritime Administration	Estonia	Estonian Geoportaal	<a href="http://inspire.maaamet.ee/home">http://inspire.maaamet.ee/home</a>
Estonian Environment Agency	Estonia	Estonian Geoportaal	<a href="http://inspire.maaamet.ee/home">http://inspire.maaamet.ee/home</a>
Statistics Estonia	Estonia	Statistical database	<a href="http://www.stat.ee/database">http://www.stat.ee/database</a>
Estonian Environment Agency	Estonia	EELIS - Estonian Nature Information System - Estonian Environmental Register	<a href="http://loodus.keskkonnainfo.ee/eelis/default.aspx?state=1;-164545161;est;eelisand;;&amp;lang=eng">http://loodus.keskkonnainfo.ee/eelis/default.aspx?state=1;-164545161;est;eelisand;;&amp;lang=eng</a>
Finnish Transport Agency	Finland	View & Download service of the Finnish Transport Agency	<a href="https://extranet.liikennevirasto.fi/extranet/web/public/latauspalvelu#">https://extranet.liikennevirasto.fi/extranet/web/public/latauspalvelu#</a>
National Land Survey of Finland	Finland	NLS File service of open data	<a href="https://tiedostopalvelu.maanmittauslaitos.fi/tp/kartta?lang=en">https://tiedostopalvelu.maanmittauslaitos.fi/tp/kartta?lang=en</a>
Statistics Finland	Finland	Statistics Finland, open data and interfaces	<a href="http://tilastokeskus.fi/tup/tilastotietokannat/index_en.html">http://tilastokeskus.fi/tup/tilastotietokannat/index_en.html</a>

**Table 2. Primary data utilised for Plan4Blue background maps (see D.T3.5.1)**

Layer	Coverage	Type	Original producer	Distributor	Dataset	Format	CRS	Projection
<b>Boundaries</b>								
COMBINE Baltic Sea subbasins	International	Polygon	HELCOM	HELCOM	HELCOM Baltic Sea data and map service	SHP	ETRS89 / ETRS-LAEA (EPSG 3035)	Lambert azimuthal equal-area
Exclusive economic zone	International	Polyline	HELCOM	HELCOM	HELCOM Baltic Sea data and map service	SHP	ETRS89 / ETRS-LAEA (EPSG 3035)	Lambert azimuthal equal-area
Territorial waters	International	Polyline	HELCOM	HELCOM	HELCOM Baltic Sea data and map service	SHP	ETRS89 / ETRS-LAEA (EPSG 3035)	Lambert azimuthal equal-area
Counties	Estonia	Polygon	Estonian Land Board	Estonian Land Board	Land Register	SHP	Estonian Coordinate System 1997 (EPSG 3301)	Lambert conformal conic
Municipalities	Estonia	Polygon	Estonian Land Board	Estonian Land Board	Land Register	SHP	Estonian Coordinate System 1997 (EPSG 3301)	Lambert conformal conic
State border line	Estonia	Polyline	Estonian Land Board	Estonian Land Board	Generalized Estonian topographic data	SHP	Estonian Coordinate System 1997 (EPSG 3301)	Lambert conformal conic
Seaward limit of territorial sea	Finland	Polyline	Finnish Transport Agency	Finnish Transport Agency	Marine transport	SHP	ETRS89 / ETRS-TM35FIN (EPSG 3067)	Transverse Mercator
Territorial sea	Finland	Polygon	Finnish Transport Agency	Finnish Transport Agency	Marine transport	SHP	ETRS89 / ETRS-TM35FIN (EPSG 3067)	Transverse Mercator
Internal waters	Finland	Polygon	Finnish Transport Agency	Finnish Transport Agency	Marine transport	SHP	ETRS89 / ETRS-TM35FIN (EPSG 3067)	Transverse Mercator
(Territorial sea) baseline	Finland	Polyline	Finnish Transport Agency	Finnish Transport Agency	Marine transport	SHP	ETRS89 / ETRS-TM35FIN (EPSG 3067)	Transverse Mercator
Exclusive economic zone	Finland	Polygon	Finnish Transport Agency	Finnish Transport Agency	Marine transport	SHP	ETRS89 / ETRS-TM35FIN (EPSG 3067)	Transverse Mercator
International maritime boundary	Finland	Polyline	Finnish Transport Agency	Finnish Transport Agency	Marine transport	SHP	ETRS89 / ETRS-TM35FIN (EPSG 3067)	Transverse Mercator
Administrative area borders	Finland	Polyline	National Land Survey of Finland	National Land Survey of Finland	General map 1:1 M	MIF	ETRS89 / ETRS-TM35FIN (EPSG 3067)	Transverse Mercator
Administrative areas	Finland	Polygon	National Land Survey of Finland	National Land Survey of Finland	General map 1:1 M	MIF	ETRS89 / ETRS-TM35FIN (EPSG 3067)	Transverse Mercator
Municipalities	Finland	Polygon	National Land Survey of Finland	National Land Survey of Finland	Administrative borders, for thematic maps, no sea	SHP	ETRS89 / ETRS-TM35FIN (EPSG 3067)	Transverse Mercator
Counties	Finland	Polygon	National Land Survey of Finland	National Land Survey of Finland	Administrative borders, for thematic maps, no sea	SHP	ETRS89 / ETRS-TM35FIN (EPSG 3067)	Transverse Mercator
<b>Environment</b>								
Depth contours	International	Polyline	HELCOM	HELCOM	HELCOM Baltic Sea data and map service	SHP	ETRS89 / ETRS-LAEA (EPSG 3035)	Lambert azimuthal equal-area
Bathymetric model	International	Raster	Baltic Sea Hydrographic Commission	HELCOM	HELCOM Baltic Sea data and map service	TIF	ETRS89 / ETRS-LAEA (EPSG 3035)	Lambert azimuthal equal-area
Marine area	International	Polygon	HELCOM	HELCOM	HELCOM Baltic Sea data and map service	SHP	ETRS89 / ETRS-LAEA (EPSG 3035)	Lambert azimuthal equal-area
Major river network	Estonia	Polyline	Estonian Land Board	Estonian Land Board	Generalized Estonian topographic data	SHP	Estonian Coordinate System 1997 (EPSG 3301)	Lambert conformal conic
Water bodies	Finland	Polygon	National Land Survey of Finland	National Land Survey of Finland	General map 1:1 M	MIF	ETRS89 / ETRS-TM35FIN (EPSG 3067)	Transverse Mercator
Water lines	Finland	Polyline	National Land Survey of Finland	National Land Survey of Finland	General map 1:1 M	MIF	ETRS89 / ETRS-TM35FIN (EPSG 3067)	Transverse Mercator
<b>Human activities</b>								
Private companies	International	Non-spatial	Bureau van Dijk	Bureau van Dijk	Orbis	XLSX		
Natura 2000 sites	International	Polygon	European Environment Agency	HELCOM	HELCOM Baltic Sea data and map service	SHP	ETRS89 / ETRS-LAEA (EPSG 3035)	Lambert azimuthal equal-area
UNESCO sites	International	Polygon	UNESCO, European Commission, HELCOM	HELCOM	HELCOM Baltic Sea data and map service	SHP	ETRS89 / ETRS-LAEA (EPSG 3035)	Lambert azimuthal equal-area
Bathing sites	International	Point	HELCOM, European Environment Agency	HELCOM	HELCOM Baltic Sea data and map service	SHP	ETRS89 / ETRS-LAEA (EPSG 3035)	Lambert azimuthal equal-area
Illegal oil discharges	International	Point	HELCOM	HELCOM	HELCOM Baltic Sea data and map service	SHP	ETRS89 / ETRS-LAEA (EPSG 3035)	Lambert azimuthal equal-area
Cables and pipelines	International	Polyline	HELCOM, EWEA, Noridc Energy Link, Nord Stream	HELCOM	HELCOM Baltic Sea data and map service	SHP	ETRS89 / ETRS-LAEA (EPSG 3035)	Lambert azimuthal equal-area
Deep water navigation lines	International	Polyline	HELCOM	HELCOM	HELCOM Baltic Sea data and map service	SHP	ETRS89 / ETRS-LAEA (EPSG 3035)	Lambert azimuthal equal-area
Deep water navigation areas	International	Polygon	HELCOM	HELCOM	HELCOM Baltic Sea data and map service	SHP	ETRS89 / ETRS-LAEA (EPSG 3035)	Lambert azimuthal equal-area
Nuclear facilities	International	Point	HELCOM	HELCOM	HELCOM Baltic Sea data and map service	SHP	ETRS89 / ETRS-LAEA (EPSG 3035)	Lambert azimuthal equal-area
Oil terminals over 3 Mt	International	Point	HELCOM	HELCOM	HELCOM Baltic Sea data and map service	SHP	ETRS89 / ETRS-LAEA (EPSG 3035)	Lambert azimuthal equal-area
IMO ships routing guide	International	Polygon	IMO, HELCOM	HELCOM	HELCOM Baltic Sea data and map service	SHP	ETRS89 / ETRS-LAEA (EPSG 3035)	Lambert azimuthal equal-area
Offshore wind farms	International	Polygon	HELCOM, EWEA	HELCOM	HELCOM Baltic Sea data and map service	SHP	ETRS89 / ETRS-LAEA (EPSG 3035)	Lambert azimuthal equal-area
Total commercial fisheries	International	Polygon	HELCOM	HELCOM	HELCOM Baltic Sea data and map service	SHP	ETRS89 / ETRS-LAEA (EPSG 3035)	Lambert azimuthal equal-area
Baltic Sea Pressure Index	International	Polygon	HELCOM	HELCOM	HELCOM Baltic Sea data and map service	SHP	ETRS89 / ETRS-LAEA (EPSG 3035)	Lambert azimuthal equal-area
Coastal traffic density	International	Point	HELCOM, AIS	HELCOM	HELCOM Baltic Sea data and map service	SHP	ETRS89 / ETRS-LAEA (EPSG 3035)	Lambert azimuthal equal-area
AIS shipping density 2011	International	Raster	FMI, HELCOM	HELCOM	HELCOM Baltic Sea data and map service	SDE raster	ETRS89 / ETRS-LAEA (EPSG 3035)	Lambert azimuthal equal-area
Ports	International	Point	EMODnet, Eurostat	EMODnet	Human Activities	GDB	WGS 84 (EPSG 4326)	(geographic)
Lighthouses	International	Point	EMODnet, Amateur Radio Lighthouse Society	EMODnet	Human Activities	GDB	WGS 84 (EPSG 4326)	(geographic)
Nationally designated areas	International	Polygon	EMODnet, European Environmental Agency	EMODnet	Human Activities	SHP	WGS 84 (EPSG 4326)	(geographic)
Land-use	Estonia	Polygon	Estonian Land Board	Estonian Land Board	Generalized Estonian topographic data	SHP	Estonian Coordinate System 1997 (EPSG 3301)	Lambert conformal conic
Major railroad network	Estonia	Polyline	Estonian Land Board	Estonian Land Board	Generalized Estonian topographic data	SHP	Estonian Coordinate System 1997 (EPSG 3301)	Lambert conformal conic
Dumping ground	Estonia	Polygon	Estonian Maritime Administration	Estonian Maritime Administration	Estonian water transport network	SHP	ETRS89 / ETRS-LAEA (EPSG 3035)	Lambert azimuthal equal-area
Fairway	Estonia	Polygon	Estonian Maritime Administration	Estonian Maritime Administration	Estonian water transport network	SHP	ETRS89 / ETRS-LAEA (EPSG 3035)	Lambert azimuthal equal-area
Ports	Estonia	Polyline	Estonian Maritime Administration	Estonian Maritime Administration	Estonian water transport network	SHP	ETRS89 / ETRS-LAEA (EPSG 3035)	Lambert azimuthal equal-area
Pipelines	Estonia	Polyline	Estonian Maritime Administration	Estonian Maritime Administration	Estonian water transport network	SHP	ETRS89 / ETRS-LAEA (EPSG 3035)	Lambert azimuthal equal-area
RECTRC	Estonia	Polyline	Estonian Maritime Administration	Estonian Maritime Administration	Estonian water transport network	SHP	ETRS89 / ETRS-LAEA (EPSG 3035)	Lambert azimuthal equal-area
Ferry routes	Estonia	Polyline	Estonian Maritime Administration	Estonian Maritime Administration	Estonian water transport network	SHP	ETRS89 / ETRS-LAEA (EPSG 3035)	Lambert azimuthal equal-area
Navigation line	Estonia	Polyline	Estonian Maritime Administration	Estonian Maritime Administration	Estonian water transport network	SHP	ETRS89 / ETRS-LAEA (EPSG 3035)	Lambert azimuthal equal-area
Inshore traffic zone	Estonia	Polygon	Estonian Maritime Administration	Estonian Maritime Administration	Estonian water transport network	SHP	ETRS89 / ETRS-LAEA (EPSG 3035)	Lambert azimuthal equal-area
Recommended traffic lane	Estonia	Polygon	Estonian Maritime Administration	Estonian Maritime Administration	Estonian water transport network	SHP	ETRS89 / ETRS-LAEA (EPSG 3035)	Lambert azimuthal equal-area
Protected sites (nature)	Estonia	Point	Estonian Environment Agency	Estonian Environment Agency	EELIS - Estonian Nature Information System	SHP	ETRS89 / ETRS-LAEA (EPSG 3035)	Lambert azimuthal equal-area
Population	Estonia	Non-spatial	Statistics Estonia	Statistics Estonia		XLS		

Table 2. Continued

Layer	Coverage	Type	Original producer	Distributor	Dataset	Format	CRS	Projection
<b>Human activities (continued)</b>								
Cables and pipelines	Finland	Polyline	Finnish Transport Agency	Finnish Transport Agency	Marine transport	SHP	ETRS89 / ETRS-TM35FIN (EPSG 3067)	Transverse Mercator
Lights	Finland	Point	Finnish Transport Agency	Finnish Transport Agency	Marine transport	SHP	ETRS89 / ETRS-TM35FIN (EPSG 3067)	Transverse Mercator
Disposal area	Finland	Polygon	Finnish Transport Agency	Finnish Transport Agency	Marine transport	SHP	ETRS89 / ETRS-TM35FIN (EPSG 3067)	Transverse Mercator
Aids to navigation	Finland	Point	Finnish Transport Agency	Finnish Transport Agency	Marine transport	SHP	ETRS89 / ETRS-TM35FIN (EPSG 3067)	Transverse Mercator
Navigation line	Finland	Polyline	Finnish Transport Agency	Finnish Transport Agency	Marine transport	SHP	ETRS89 / ETRS-TM35FIN (EPSG 3067)	Transverse Mercator
Daymark	Finland	Point	Finnish Transport Agency	Finnish Transport Agency	Marine transport	SHP	ETRS89 / ETRS-TM35FIN (EPSG 3067)	Transverse Mercator
Restricted areas	Finland	Polygon	Finnish Transport Agency	Finnish Transport Agency	Marine transport	SHP	ETRS89 / ETRS-TM35FIN (EPSG 3067)	Transverse Mercator
Shoreline constructions	Finland	Polyline	Finnish Transport Agency	Finnish Transport Agency	Marine transport	SHP	ETRS89 / ETRS-TM35FIN (EPSG 3067)	Transverse Mercator
Traffic Separation Scheme Crossing	Finland	Polygon	Finnish Transport Agency	Finnish Transport Agency	Inspire - Traffic networks	SHP	ETRS89 / ETRS-TM35FIN (EPSG 3067)	Transverse Mercator
Traffic Separation Scheme Lane	Finland	Polygon	Finnish Transport Agency	Finnish Transport Agency	Inspire - Traffic networks	SHP	ETRS89 / ETRS-TM35FIN (EPSG 3067)	Transverse Mercator
Traffic Separation Scheme Roundabout	Finland	Polygon	Finnish Transport Agency	Finnish Transport Agency	Inspire - Traffic networks	SHP	ETRS89 / ETRS-TM35FIN (EPSG 3067)	Transverse Mercator
Dredging area	Finland	Polygon	Finnish Transport Agency	Finnish Transport Agency	Marine transport	SHP	ETRS89 / ETRS-TM35FIN (EPSG 3067)	Transverse Mercator
Locks and canals	Finland	Polygon	Finnish Transport Agency	Finnish Transport Agency	Marine transport	SHP	ETRS89 / ETRS-TM35FIN (EPSG 3067)	Transverse Mercator
Locks and canals	Finland	Polyline	Finnish Transport Agency	Finnish Transport Agency	Marine transport	SHP	ETRS89 / ETRS-TM35FIN (EPSG 3067)	Transverse Mercator
Leading line	Finland	Polyline	Finnish Transport Agency	Finnish Transport Agency	Marine transport	SHP	ETRS89 / ETRS-TM35FIN (EPSG 3067)	Transverse Mercator
Racon	Finland	Point	Finnish Transport Agency	Finnish Transport Agency	Marine transport	SHP	ETRS89 / ETRS-TM35FIN (EPSG 3067)	Transverse Mercator
Light sectors	Finland	Point	Finnish Transport Agency	Finnish Transport Agency	Marine transport	SHP	ETRS89 / ETRS-TM35FIN (EPSG 3067)	Transverse Mercator
Waterway sign	Finland	Point	Finnish Transport Agency	Finnish Transport Agency	Marine transport	SHP	ETRS89 / ETRS-TM35FIN (EPSG 3067)	Transverse Mercator
Fairway area	Finland	Polygon	Finnish Transport Agency	Finnish Transport Agency	Marine transport	SHP	ETRS89 / ETRS-TM35FIN (EPSG 3067)	Transverse Mercator
Fairway	Finland	Polyline	Finnish Transport Agency	Finnish Transport Agency	Marine transport	SHP	ETRS89 / ETRS-TM35FIN (EPSG 3067)	Transverse Mercator
Ports	Finland	Point	Finnish Transport Agency	Finnish Transport Agency	Inspire - Traffic networks	SHP	ETRS89 / ETRS-TM35FIN (EPSG 3067)	Transverse Mercator
Railroads	Finland	Polyline	Finnish Transport Agency	Finnish Transport Agency	Inspire - Traffic networks	SHP	ETRS89 / ETRS-TM35FIN (EPSG 3067)	Transverse Mercator
Military buffer zones	Finland	Polygon	National Land Survey of Finland	National Land Survey of Finland	General map 1:1 M	MIF	ETRS89 / ETRS-TM35FIN (EPSG 3067)	Transverse Mercator
Conservation areas	Finland	Polygon	Finnish Environment Institute	National Land Survey of Finland	General map 1:1 M	MIF	ETRS89 / ETRS-TM35FIN (EPSG 3067)	Transverse Mercator
Post code areas, population, demography	Finland	Polygon	Statistics Finland	Statistics Finland	Paavo	SHP	ETRS89 / ETRS-TM35FIN (EPSG 3067)	Transverse Mercator
Production and industrial facilities	Finland	Point	Statistics Finland	Statistics Finland	Production and industrial facilities	SHP	ETRS89 / ETRS-TM35FIN (EPSG 3067)	Transverse Mercator





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