

SDI status in Estonia

Peeter Väling

Estonian Maritime Administration

SDI status in Estonia

Main focus is on INSPIRE.

The project is officially lead by Estonian Land Board (further ELB) (www.maaamet.ee). They are responsible for development and maintenance of relevant data portals, also they have rights to demand INSPIRE-related spatial data from other governmental agencies.

In Estonia spatial data management is regulated by the Spatial Data Act and Public Information Act, Implementing Rules of the INSPIRE Directive and different regulations, development plans and framework documents.

SDI status in Estonia

There is one common coordinate system in Estonia

(ETRS89 datum with Lambert CC projection : EPSG 3301) and one vertical reference system as well (BNC 1977).

Both are mandatory for any kind of spatial data in Estonia.

The VRS will however change after some years (could be 2014 or 2015) to common European height system based on Amsterdam 0.

SDI status in Estonia

ELB hosts two data portals :

Geoportal (http://geoportaal.maaamet.ee/index.php?lang_id=2) is intended for viewing many different web mapping applications. They are mostly about features and charts on land. One application combines land maps with S-57 sea cells from PRIMAR.

It is possible to order some licensed digital data sets paying some fee (for example elevation data).

There is also public WMS service available about land maps (for example <http://kaart.maaamet.ee/wms/fotokaart> ?).

Geoportal is not related to INSPIRE or SDI, but nevertheless makes possible very comprehensive data viewing services.

SDI status in Estonia

Geoportal

geoportaal.maaamet.ee/eng/Map-Server-p35.html

Private Forest Center Ap...
Hereditary Culture Appli...
Areas Sensitive to Nitra...
Administrative and Settl...

Land Information Application
Cadastral Map, Tasks, Evaluation and Fertility Zones, Geodetic Network

State Land Sales Application
Immovables that are currently on auction are displayed

Estonian Road Administration Application
Web Map Application for Road Register

Restrictions Information System Application
Restrictive Objects and Limitation Zones of Parcels

Address data (map)
Web Map Application for Address Data

Estonian Nature Information System Application
Natura 2000 Areas are included

Historical Map Collection Application
Topographic Maps since 1894-1915 and 1919-1934; 1935-1939; 1945-1952

National Register of Monuments Application
Heritage Protection Monuments, Protection Areas and Limitation Zones

Mineral Deposits Application
Mineral Deposits from Environmental Register

Soil Map Application
Soil Areas with Soil Names

Geological Data Application
Geological Thematic Maps

Marine Areas
Estonian Maritime Administration, Estonian Land Board and PRIMAR Web Map Application

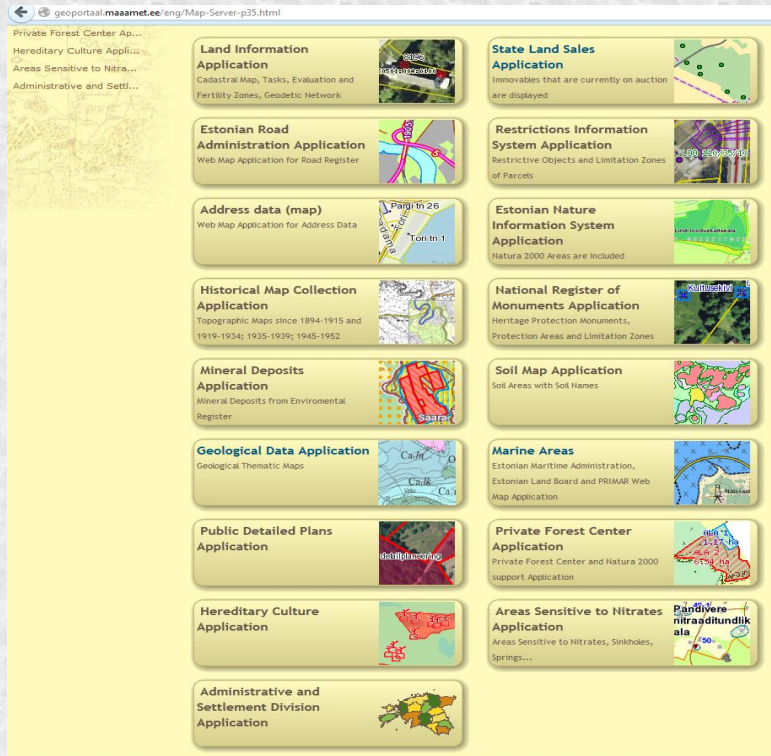
Public Detailed Plans Application

Private Forest Center Application
Private Forest Center and Natura 2000 support Application

Hereditary Culture Application

Areas Sensitive to Nitrates Application
Areas Sensitive to Nitrates, Sinkholes, Springs...

Administrative and Settlement Division Application

The image is a screenshot of a web browser displaying the 'SDI status in Estonia Geoportal'. The browser's address bar shows the URL 'geoportaal.maaamet.ee/eng/Map-Server-p35.html'. On the left side, there is a vertical navigation menu with several items: 'Private Forest Center Ap...', 'Hereditary Culture Appli...', 'Areas Sensitive to Nitra...', and 'Administrative and Settl...'. The main content area is a grid of 14 application tiles, each with a title, a brief description, and a small thumbnail map. The tiles are arranged in two columns. The first column contains: 'Land Information Application', 'Estonian Road Administration Application', 'Address data (map)', 'Historical Map Collection Application', 'Mineral Deposits Application', 'Geological Data Application', 'Public Detailed Plans Application', 'Hereditary Culture Application', and 'Administrative and Settlement Division Application'. The second column contains: 'State Land Sales Application', 'Restrictions Information System Application', 'Estonian Nature Information System Application', 'National Register of Monuments Application', 'Soil Map Application', 'Marine Areas', 'Private Forest Center Application', and 'Areas Sensitive to Nitrates Application'. Each tile has a yellow background and rounded corners. The thumbnail maps show various geographical data, such as cadastral maps, road networks, topographic maps, and thematic maps of specific areas like Natura 2000 or soil types.

SDI status in Estonia

Geoportal : land+S-57

Firefox - xgis.maamnet.ee/... x Estonian Land Board: Geoportal: Map... X-GIS3 - Flash Search Search kavor motorsport

Orthophoto Map Relief

Land Board - Veeteede Amet
PRIMAR NAVIGERIMISEKS MITTE KASUTADA

0 5 10km
System updated by DATEL AS
Scale ca. 1:137988

EST ENG
Identify
Map application
Merekaart
select county
select range
select scale

Search by address ID
ex „Mustamäe tee 31, Tallinn“

Using comma while entering the search, a full address is searched. Using space, a proximate address is searched.

As result the first 100 items are displayed. When the searched object is not among them, specify the search criteria or use the link at the end of the search. [Address register](#)

To specify the search criteria, click on the button "Show extra filters"

Kuiva liisifiltrite paneel
Sulge liisifiltrite paneel

Otsi
Liisifiltrite režiimis vaadata ka otsimiseks ruudude, sinil esialvaki ei paku kohe vastust

Eemaldada kordused
Otsi ilma komadeta

Object info
Search (6/6)
Printings

14:05
23.01.2013

SDI status in Estonia

ELB hosts two data portals :

Geoportal (INSPIRE) is as the name states the Estonian INSPIRE portal (<http://inspire.maaamet.ee/>).

According to official opinion of ELB the geoportal is a part of the Estonian SDI, which in turn is a part of the INSPIRE.

According to INSPIRE the geoportal has search and discovery services for both data and the relevant metadata and also WMS services for many data types.

SDI status in Estonia

Geoportal (INSPIRE)

The screenshot shows the Estonian National Geoportal website. At the top, there is a header with the logo "Eesti geoportaal" and "Eesti ruumilandmete infrastruktuur". A navigation menu includes "Home", "Metadata", "Services", "About INSPIRE", "Data owner", "Map", "Sign up", "Help", and "Estonian Land Board Geoportal". A search bar is located in the top right corner. The main content area features a "Welcome to the Estonian National Geoportal!" heading, followed by an introductory paragraph and a list of links for "Metadata", "Services", "About INSPIRE", "Map", "Data owner", "Sign up", and "Help". The footer contains contact information for the Estonian Land Board (MAA-AMET) and logos for the European Union and the Estonian Land Board.

Eesti geoportaal
Eesti ruumilandmete infrastruktuur

EN Login Register

Search the site

Home Metadata Services About INSPIRE Data owner Map Sign up Help Estonian Land Board Geoportal

About Estonian Geoportal
Spatial Data Infrastructure

Welcome to the Estonian National Geoportal!

The Estonian geoportal is a "gateway" through which spatial data that are owned by the Estonian state, local governments and other legal persons governed by public law are published and made available.

The Estonian geoportal is a part of the Estonian Spatial Data Infrastructure the aim of which to ensure that different spatial data meet certain requirements and are available via harmonized services.

A short overview of the portal's content and its possibilities is as following:

Metadata – Discovery service. It enables to search, view and save metadata on view services that have been entered into the Estonian geoportal.

Services – Information on the INSPIRE view services (content of services and addresses) and guidelines on how to use the services.

About INSPIRE – Information on the INSPIRE Directive – overview, monitoring, legislation.

Map – It enables to browse backdrop maps and data layers in the Estonian geoportal, and by combining them to create different thematic maps. The created maps can be shared or printed. User registration provides additional capabilities for adding, managing and sharing your own data layers.

Data owner – Information on the owners of data that have been made available through the Estonian geoportal.

Sign up – Information on how to become a registered user of the Estonian geoportal. Rights and liabilities. Who, why and how to register and what are the additional capabilities for the registered user.

Help – Help information on how to use the Estonian geoportal.

The Estonian Spatial Data Infrastructure was established within the framework of European Union Structural Assistance "Operational Programme for the Development of Economic Environment", priority axis "Development of the Information Society", financed by the European Regional Development Fund.

NOTE! To get the best possible user experience of the Estonian geoportal, we recommend for browsing Mozilla Firefox, Google Chrome or Internet Explorer (v8 or newer).

Land Board 2012. All rights reserved.
Mustamäe tee 51, 10621 Tallinn
Phone: +372 665 0600

By: Regio

MAA-AMET
Estonian Land Board

European Union
Regional Development Fund

SDI status in Estonia

Currently most of the data available through the geoportals are maintained by ELB itself.

Some data are from Environmental registry.

Estonian Maritime Administration (further EMA) is contributing with S-57 cells via PRIMAR.

Some additional data from S-57 cells related to INSPIRE technological networks are under preparation for adding to INSPIRE portal.

Data about nav aids and harbours are at the same status as well.

SDI status in Estonia

EMA has also operational Hydrographic data portal which makes available data about survey areas, depths, contours and underwater objects (rocks, wrecks, obstructions).

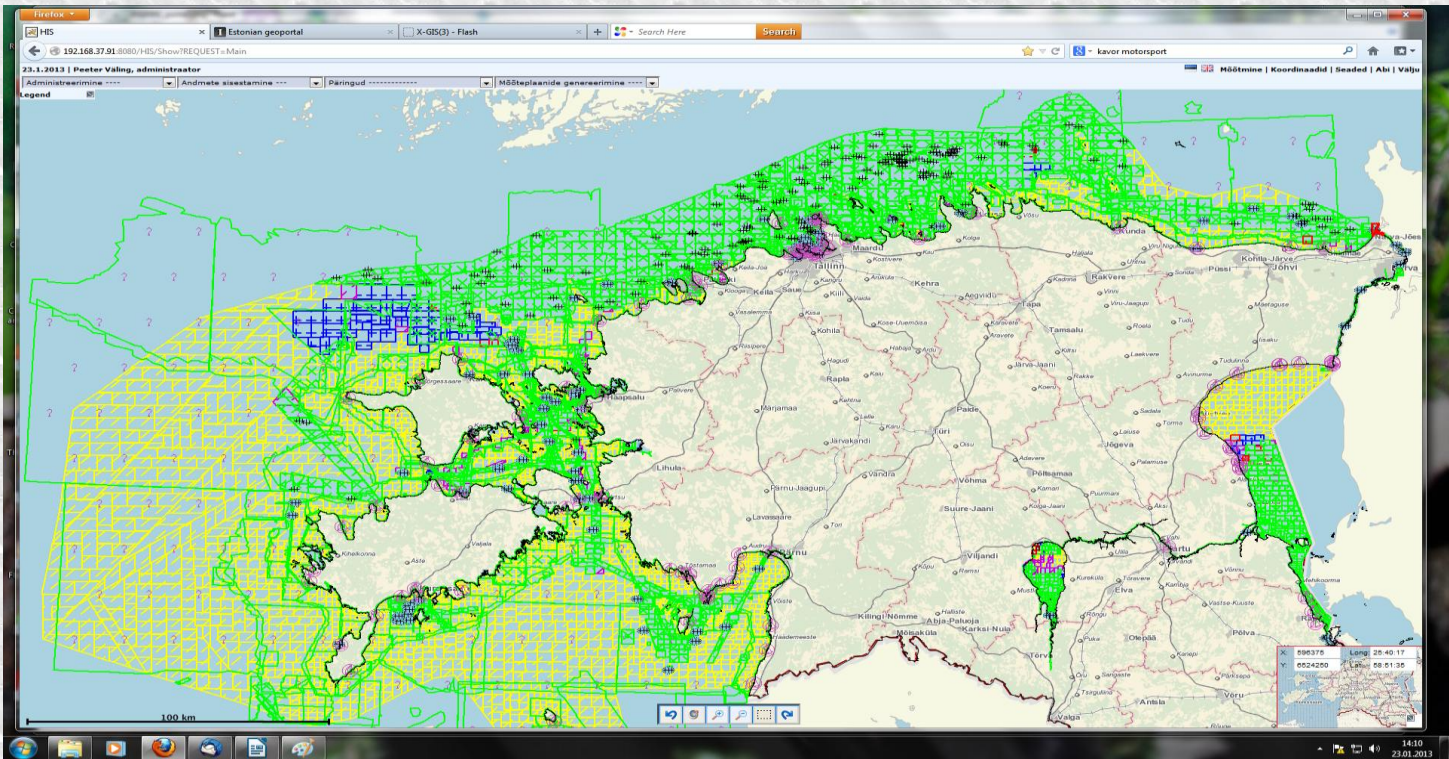
They can be viewed and queried in lots of different ways, also downloadable as files in different types and as WMS service.

However as Estonian Ministry of Defence wants to restrict access to those data, they are not currently publicly available.

Could be in future.

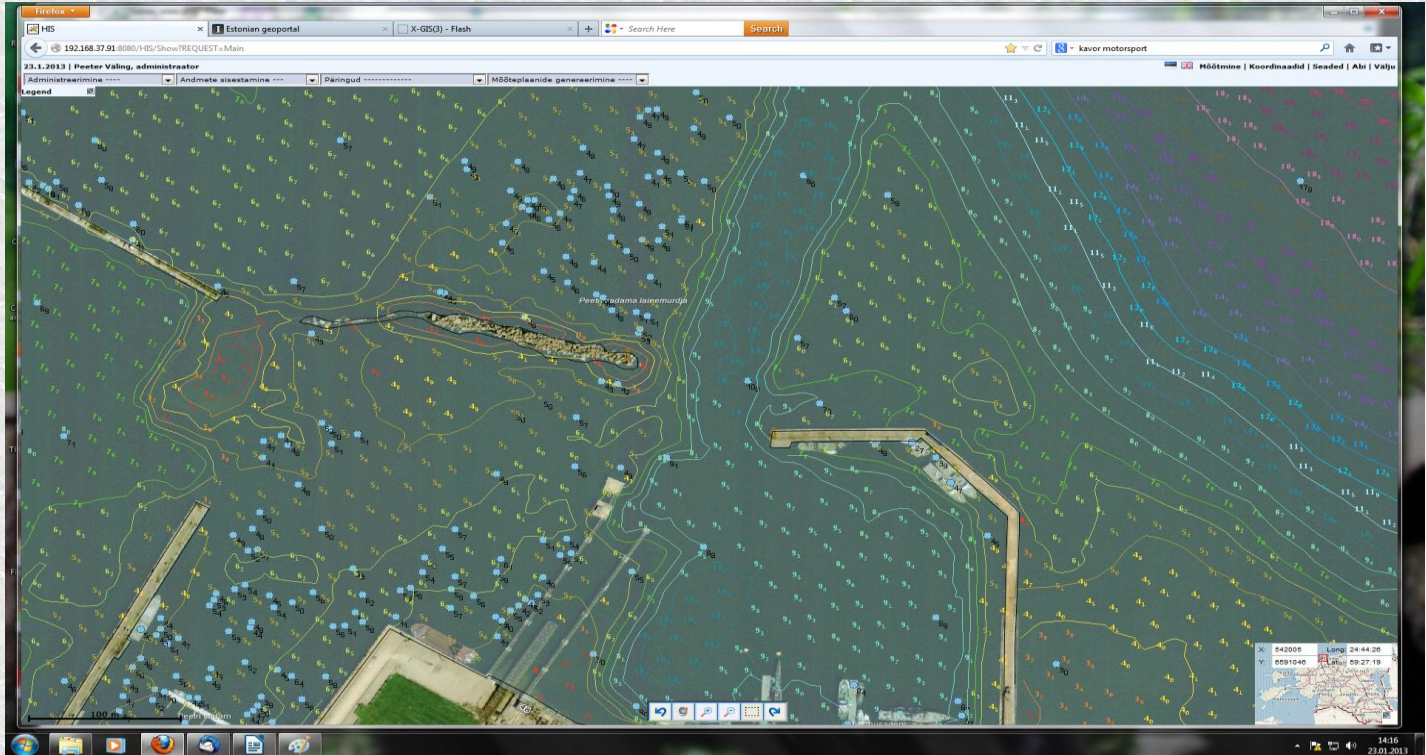
SDI status in Estonia

Hydrography portal



SDI status in Estonia

Hydrography portal



SDI status in Estonia

Hydrography portal

The screenshot shows a web browser window displaying a hydrography portal. The browser's address bar shows the URL 192.168.37.91:8080/HIS/Show/REQUEST=Main. The page title is "Estonian geoport" and the search bar contains "Search Here".

The main content area displays a bathymetric map of a coastal area, likely in Estonia, showing depth contours and various navigational markers. A legend is visible in the top left corner.

On the left side, there is an information panel titled "Infoaken - Mozilla Firefox" for the object "192.168.37.91:8080/HIS/Show/REQUEST=MapClickForm". The panel lists the following details:

- Vrakk**
- Id: 27
- Vraki sügavus (m): 46.64
- Vraki pikkus (m): 80.0
- Vraki laius (m): 11.0
- Vraki kõrgus (m): 10.0
- Laeva pikkus (m): 76.7
- Laeva laius (m): 10.4
- LAEVANIMI: NAJADEN
- Tonnaaab (t): 1448 brt
- Laeva tüüp: Kaubaaurik
- Omanik hukkumise ajal: 11.02.1905
- Hukkumise seegi: always under water/submerged
- WATLEV: non-dangerous wreck
- CATWRK: ex ARDMELLE
- Muud nimed: 1884
- Ehitusaja: Suurbritannia, Aberdeen, Hall Russell
- Liputik hukkumise ajal: DNK
- Kapteni hukkumise ajal: H. J. Jasson (1899-1905)
- Ohvrite arv: 384 press
- Hukkumise põhjus: 56-59
- Ümbritseva ala sügavus (m): hea
- Vraki seisund: 30-210
- Vraki suund: 1884 ehitatud ARDMELLE GBR, omanik Adelm & Co; 1899 NAJADEN DNK, omanik Demoskibis-Selskabet Vesterhavet, loodusdam Felberg L. O., Lauritsen; 1905 hukkus jääs, laadungiks puuvill ja punane vask; 1926 tehti katset laevalt laadungit kätte saada; 2004 juulis mõeldakse vraki ANERO tehnikonoriga põllav EVA-308 Peamassi: 2-pildiline kompaunduurimasin, 669 hji;Kandevõime 1400 tonni(identifitseeritud, V. Mass, Eesti Mereuseum
- Märkused: 539222.84 6400449.60
- Koordinaadid ELaat: 59;32.387006 24;41.597413

At the bottom right of the map, the coordinates are displayed as X: 541447, Y: 6597057, and the date is 23.01.2013. A scale bar indicates 1 km.

SDI status in Estonia

Hydrography portal

Mööteala sheet10_57_3

Nimi: sheet10_57_3
Pindala: 4447.6
Liine:
Läbitud km:
Punkte algelt:
Punkte kustutatud:
Punkte muudetud:
Punkte lõplikult:

Statistika - Mozilla Firefox

Standardhälve [m]:	0.11
Aritmeetiline keskmine [m]:	0.0
Mediaan [m]:	0.01
Ruutkeskmine [m]:	0.11
Minimaalne väärt [m]:	-1.04
Maksimaalne väärt [m]:	1.18
Sügavuste erinevus üle 10 cm (%):	17.6
Sügavuste erinevus üle 20 cm (%):	2.7
Sügavuste erinevus üle 30 cm (%):	0.0
Punktide hulk:	2800805
IHO S44 sügavuste teati tulemus 0.95 klassis (võrdlus):	1A
IHO S44 ERI klassile vastavate sügavuste %:	99.6
IHO S44 Ia klassile vastavate sügavuste %:	100.0
IHO S44 Ib klassile vastavate sügavuste %:	100.0
IHO S44 II klassile vastavate sügavuste %:	100.0
IHO S44 ERI klassile vastavate ala %:	68.9
IHO S44 Ia klassile vastavate ala %:	100.0
IHO S44 Ib klassile vastavate ala %:	100.0
IHO S44 II klassile vastavate ala %:	100.0
iho_eri_auk_prota:	0.0
iho_1a_auk_prota:	0.0
iho_1b_auk_prota:	0.0
iho_2_auk_prota:	0.0
Kasutatud ruudu küljepikkus (m):	10.0

Statistilised näitajad on leitud lähedaste (samas ruudus asuvate) eri möötelinide sügavuspunktide võrdlusest.

Mööteala - Mozilla Firefox

Salvesta	Kustuta	Mahalaadimine	Statistika
Näita kaardi	Plaaninisse		

Nimi: ankur_e_2011
Sisestusaeg: 28.01.2011
Status: 3 - valmis
Pindala: 550.79
Möötesaeg: 08.06.2011
Mööga: VA
Levi: EVA 320
Tehnika: IXSEA OCTANS gyro Topcon NET-G3 RTK GPS, IXSEA OCTANS HRP, ANERO kirietehvik leeval EVA 320
Läbitud km: 105.2
Min sügavus: 29.23
Mx sügavus: 40.57
Liine: 52
Liinide vähe: lausmoodustatus
Puhastusaeg: 08.12.2011
Puhastaja: Dniit
IHO kategooria: Ia
Punkte algelt: 2823350
Punkte kustutatud: 24545
Punkte lõplikult: 612751
Punkte hulk: 2800805
Puhastamata liinid:
Puhastamise jagakord: puudub
Kontrollija: mareli

Salvesta	Kustuta	Mahalaadimine	Statistika
Näita kaardi	Plaaninisse		

sheet10_57_3 möötelin 1957
ankur_e_2011 möötelin Ia Jar 2011

1 km

532984 Long: 24 34 00
532984 Lat: 59 28 09

14:23
23.01.2013

SDI status in Estonia

Hydrography portal

The screenshot shows a web browser window displaying a GIS application. The main area is a map of water bodies in Estonia, with a large black polygon highlighting a specific area. The map features a grid of green squares and red outlines. A sidebar on the left contains a table of data and various controls.

Mõõteplaanide seadmine

526156 6613875
541844 6627000
553469 6618938
559344 6607188
550219 6600313
529409 6598755
Ala pindala: 642 km²

Ala valikuks lohiate hiirt kaardil paremat klahvi all hoides, kiki kaardil parema hiireklahviga, anna ette fail või sisesta ala kuni 4 nurgapunkti

Puhasta **Valmis**

Mõõteplaanid

Mõõteala nimi	IHD_kat	Mõõtkava	Pindala
um_sw	la	1:1000	2.5
tom	la	1:1000	1.0
vraak_purjekas	la	1:1000	1.2
kainasasad_m120...	ERI	1:1000	0.0
leppneemesad_35...	ERI	1:1000	0.0
nälisaasasad_34...	ERI	1:1000	0.0
asgna_x	ERI	1:1000	0.4

Mõõteplaanid pindala
Kasutame mõõtealasi mõõtkavaga kuni 1:20000

Mõõteplaanid genereerimine

Soovitev info
Väljundvorming
Generaliseerimise mõõtkava
Koordinatsüsteem
Minimaalne objekt kõrgus
Isopoonid teha
Isopoonid intervall

1.0
2, 5, 10, 20, 50, 100, 200

Lehitse

Mõõteplaanid genereerimine

vraak_p_veliki mõõteala ta ar 2005

10 km

121618 24 22 48
0003719 10 09 34 05

14:27
23.01.2013

SDI status in Estonia

Many other institutions (like Marine Institute or Estonian Meteorological And Hydrological Institute) are not contributing yet, but this could change in future.

They are interested in SDI but not sure which data to make available and how to do that.

At least there is now one common geoportal which is supposed to act as NSDI and MSDI portal in Estonia.

Sooner or later most institutions having spatial data will make them available through this.

