



Open geographic data from NLS Finland

ESTGIS 30.11.2012

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Agenda

NLS topographic data was opened 1th May 2012

- Why opening was done
- What data was opened
- How
 - Delivery
 - License
- Experiences so far
 - Usage of data
 - Resources



Background

- The demand for free governmental data has grown a lot
 - Long discussion lasting almost 20 years
 - Issue get hotter 2009
 - New more structured argumentation
- Geographic information often referred as the most valuable dataset for users to be opened
- Economic value of geographic information is noticed also in highest political level





Government principles 3.3.2011

- The Finnish government made a decision in 2011 to promote the usage of public sector information
 - **Public data** should be available for re-use
 - Free of charge
 - Harmonized licensing



NLS reasons

- Public sector authorities started to use free datasets available on the internet instead of using the accurate high-quality data from a governmental body
- In the long run it is economically better as a whole for the Finnish Society to let all users to use the same reference data rather than limit the usage by charging for it
- Study among VAR's weather NLS should open raster data
 - Conclusion: If data is opened it should be all!
- Challenging decision: income of 1.5 million Euros lost annually
 - no guarantee at the moment that this loss will be compensated
 - only 10 % of all costs in NLS map production which is 90 % tax financed
- NLS made the proposition in October 2011 that topographic data should be used free of charge (the first large data source to be opened in Finland)



Project for opening

- We evaluated that at least 6 months is needed for the project to prepare the data and build new infrastructure for open data delivery
- Ministry of Finance did not support NLS proposal and opening project went to pending status
 - Social media attacked
 - Mass media get interested
- Against all expectations just before Christmas 2011 Government made the decision that topographic data should be open from 1th of May
 - We had only four months time to do the job
- Project concentrated to
 - prepare the data
 - Implement the new open data licence
 - Communicate to the public
 - Develop the download service



Open data from NLS Finland

18 large digital datasets and over 100 different product versions

Laser scanning data

Benchmarks

Elevation model 2 m

Elevation model 10 m

Elevation model 25 m

Elevation model 200 m

NLS aerial photographs

NLS orthophotos

The Topographic database

Basic map raster 1:20 000

Road names raster

Topographic map raster 1:50 000

Topographic map 1:100 000

Topographic map raster 1:100 000

Topographic map 1:250 000

Topographic map raster 1:250 000

Topographic map raster 1:500 000

Background map series

Open topographic data 1th May 2012

Waters, elevation, fields, swamps, rocks, place names, traffic networks, buildings

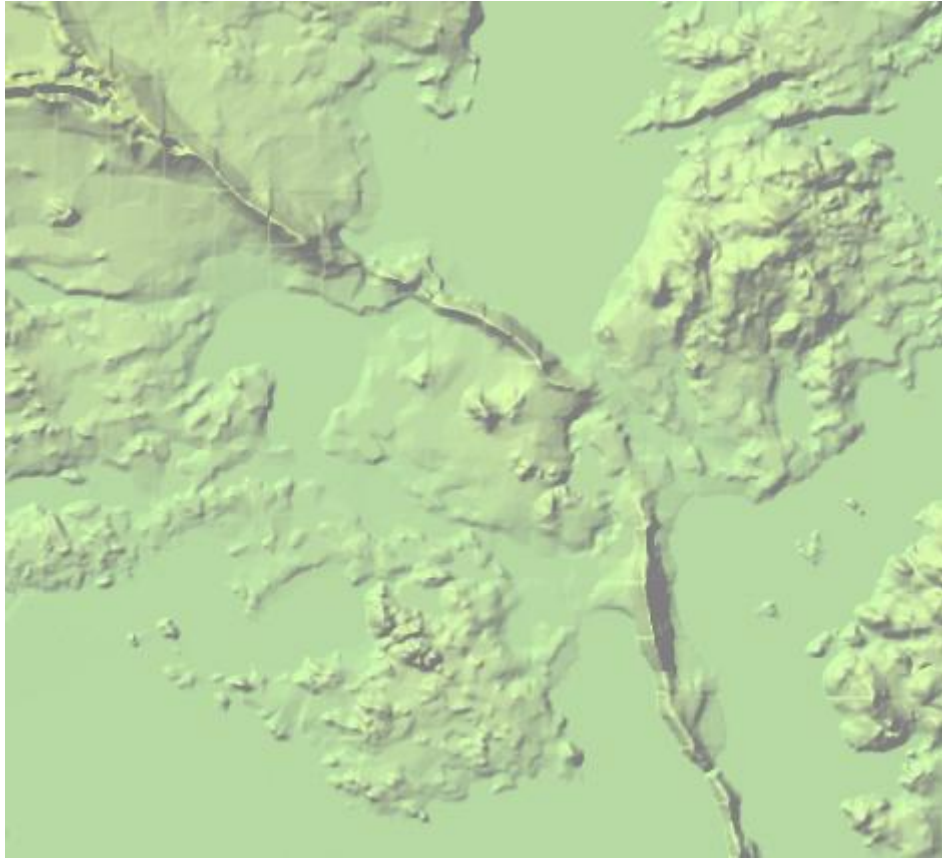


Areal photographs



Open topographic data 1th May 2012

Elevation model



Visualisointi Geodeettinen laitos

LIDAR Data





Open licence

- The user is allowed to:
 - Use the data inside house
 - Publish the data in any possible way
 - Deliver freely to third parties
 - Produce added value products
 - Sell the data
 - ...or use in any other possible way

Free of charge!



Open licence

- User has to:
 - mention the name of the Licensor, the name of the dataset(s) and the time when the National Land Survey has delivered the dataset(s) (e.g.: contains data from the National Land Survey of Finland Topographic Database 06/2012)
 - provide a copy of this licence or a link to it, as well as
 - require third parties to provide the same information when granting rights to copies of dataset(s) or products and services containing such data and
 - remove the name of the Licensor from the product or service, if required to do so by the Licensor.
 - The data is licenced as is and the NLS does not guarantee that the data will be available in the future.
- The [licence](http://www.maanmittauslaitos.fi/en/NLS_open_data_licence_version1_20120501) can be found from:
http://www.maanmittauslaitos.fi/en/NLS_open_data_licence_version1_20120501



Downloading service

- To deliver data to large amount of users requires automated services!
- The NLS developed a [file downloading service](#)
- Only e-mail address is needed to use the service
- If the user downloads the data using the file downloading service there is no charge at all

Viesti Muokkaa Liitetiedosto Lähetä Asetukset Ohje



Teamware

Lähetäjä: no-reply@nls.fi

Aihe: NLS open data file download service

Viesti: Lähetetty: 29.11.2012 22:39

Your download order Nov 29, 2012, 10:39:32 PM sent to the email address antti.kosonen@nls.fi

The files you have ordered can be downloaded from

<https://tiedostopalvelu.maanmittauslaitos.fi/tp/tilaus/v2io0jlm9te3klringi6qc8ng?lang=en>

This page is available for 30 days. If the download service is busy, try again later.

Thank you for your download order.

Please, do not reply to this message. In case of problems, contact the support service on kansalaisenkarttapaikka@nls.fi



Some charges remain

- Delivery costs are charged in case manual work for delivery is needed
- Few datasets remain subject to charge
 - Cadastral information, including cadastral maps, are defined in legislation to be personal data. They are therefore under more strict regulation and thus not ready to be opened.



Experiences

- Opening so many datasets in so short time is challenging
 - 18 large datasets and over 100 different product versions
- Communication was challenging
 - Old customers had to be informed
 - New user groups had to be reached
 - Up to date information about opening process in web-site and blog
 - Open data interest groups in social media were very helpful!



Experiences

- Second day after the opening the whole topographic database was put in PtoP delivery (torrent-server) by OSM community
 - First week database was copied over 200 times
- In a week after NLS file download service was announced Internet users association started to deliver data files from their own site and implemented also WMS and WMTS services
- Our licence was properly communicated in both services!



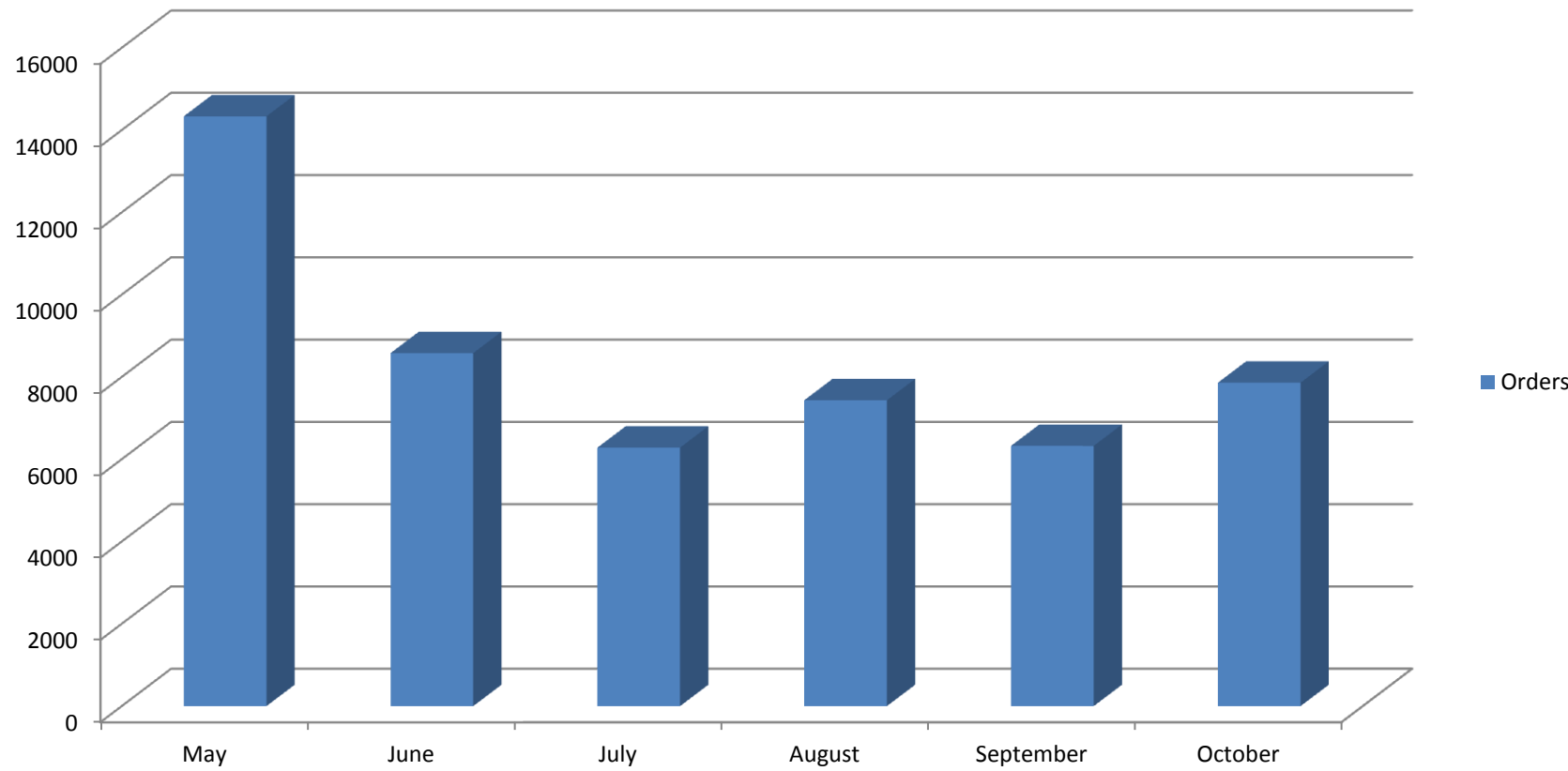
Experiences

- During first three months we have had individual users and delivered data 50 times more than in average year before!
- The usage of fileservice in 6 months
 - 14 000 users
 - 52 500 orders
 - 811 000 files
 - 25 terabytes data
- Amount of manual deliveries has decreased significantly
 - mass deliveries are still needed by large customers and customers from abroad
- No big rush in customer support
 - Only slightly more work needed in guidance
- Interest for services (WMS, WMTS, WFS) has increased a lot!



Development of orders

Orders





How did the opening affect

Lot of changes now and in the future:

- economy
- processes
 - capture
 - production
 - delivery
- usage
- customer support





Finally

- Never had so much positive publicity in media!

YLE.fi YLE.fi-etusivu | Löydä ^ ^ ^

Uutiset Uutiset Urheilu

HS.fi UUTiset TEEMAT SÄÄ DIGILEHTI

PINNALLA: Kim Jong-ilin kuolema Velkakriisi Rikokset Elokuvat Poh

Maanmittauslaitoksen maastotiedot tul Maanmittauslaitos saa sittenkin antaa kartoja ilmaiseksi

KOTIMAA Etusivu > Koti

Uutiset Etusivu Tuoreimmat Luetuimmat

Maanmittauslaitoksen maastotiedot tul Maanmittauslaitos saa sittenkin antaa kartoja ilmaiseksi

Julkaistu tänään 21.12. klo 17:18, päivitetty tänään 21.12. klo 20:30

21.12.2011 14:06 | Päivitetty 21.12.2011 16:33 | 14 | Suosittele 115

ILTALEHTI.fi Keskiyö 21.12.2011 | Tuomas, Tuomo, Tommi, Tomi

Sää Tampere ylin 1° alin -1°

PRESIDENTTI 2012 VAALIKO

Etusivu Uutiset Urheilu Viihde Sää IL-TV Terveys Rakkaus & seksi Nainen Muoti & Kotimaa Ulkomaat Talous Hinta ja laatu Sää Hullu maailma Pääkirjoitus Lukijan kuva Jouko

KOTIMAAN UUTiset Perhetapaaminen muuttui murhenäytelmäksi - Kaksi lasta ja äiti löytyivät surmattuina Siuntion

Kartat ja ilmakuvat tulostetaan sittenkin maksuttomiksi

Keskiyö 21.12.2011 klo 18:55

yle AREENA TV Radio Hae ohjelmia A-Ö Ohjeet ja palaute

Kaikki ohjelmat Sarjat ja elokuvat Viihde ja kulttuuri Dokumentit ja fakta Uutiset Urheilu Lapset

ANTTI KOSONEN Johtaja, Maanmittauslaitos

Yle Uutiset 20.30 Jaksot 88/736 Kesto: 14 min



Thank you!

