

The Finnish geoportal and statistical data

Marja Tammilehto-Luode
Statistics Finland

The Finnish geoportal and statistical data

- Paikkatietoikkuna – the Geoportal in Finland
- Statistical data and services in Paikkatietoikkuna
- Implementation of INSPIRE at Statistics Finland
- Further developments

Paikkatietoikkuna – the Geoportal in Finland

<http://www.paikkatietoikkuna.fi/web/en>

- GEODATA SEARCH - Metadata service
 - MAP WINDOW - Standard view services – WMS
also Standard web feature services (WFS) and browsing of
features - soon possible to download data for reuse
 - OPEN SPATIAL DATA - a list of links to some of the most
central open spatial datasets and interface services
 - Advices and information - Guidelines for implementation of
INSPIRE and NSDI
-
- Maintenance by the National Land Survey of Finland

Paikkatietoikkuna – the Geoportal in Finland

[Metadata service](#)

- Collected since 1985
- International standards including INSPIRE
- Today covers over 500 national datasets and over 50 service interfaces
- Implemented by applying the GeoNetwork open source code library developed further in the Nordic cooperation project.

Paikkatietoikkuna – the Geoportal in Finland

MAP WINDOW

- To compile map views and browse geographic datasets
- To search and open map layers one at a time or several transparent levels on top of one another
- To make your own maps and embed them on your own website or share a link with external users
- Interactive guidance in various situations.

Statistical data and services through Paikkatietoikkuna

- 24 map layers available by following Inspire themes
 - Statistical areas
 - Educational institutions
 - Production and industrial facilities
 - Population
- WMS service and links to WFS service (and Atom flows)
- Access to metadata with links to Statistics Finland's web pages and vice versa
- In Finnish, Swedish and English

Statistical data by themes already published

1) Statistical areas

- Regional Divisions Based on Municipalities: Major regions, Regions, Sub-regional units, Regional state administrative agencies, Centres for economic development, transport and the environment and Municipalities
- Statistics gridnet (1km x 1km)

2) Educational institutions (position, name of educational institution)

- Comprehensive schools and upper secondary general schools

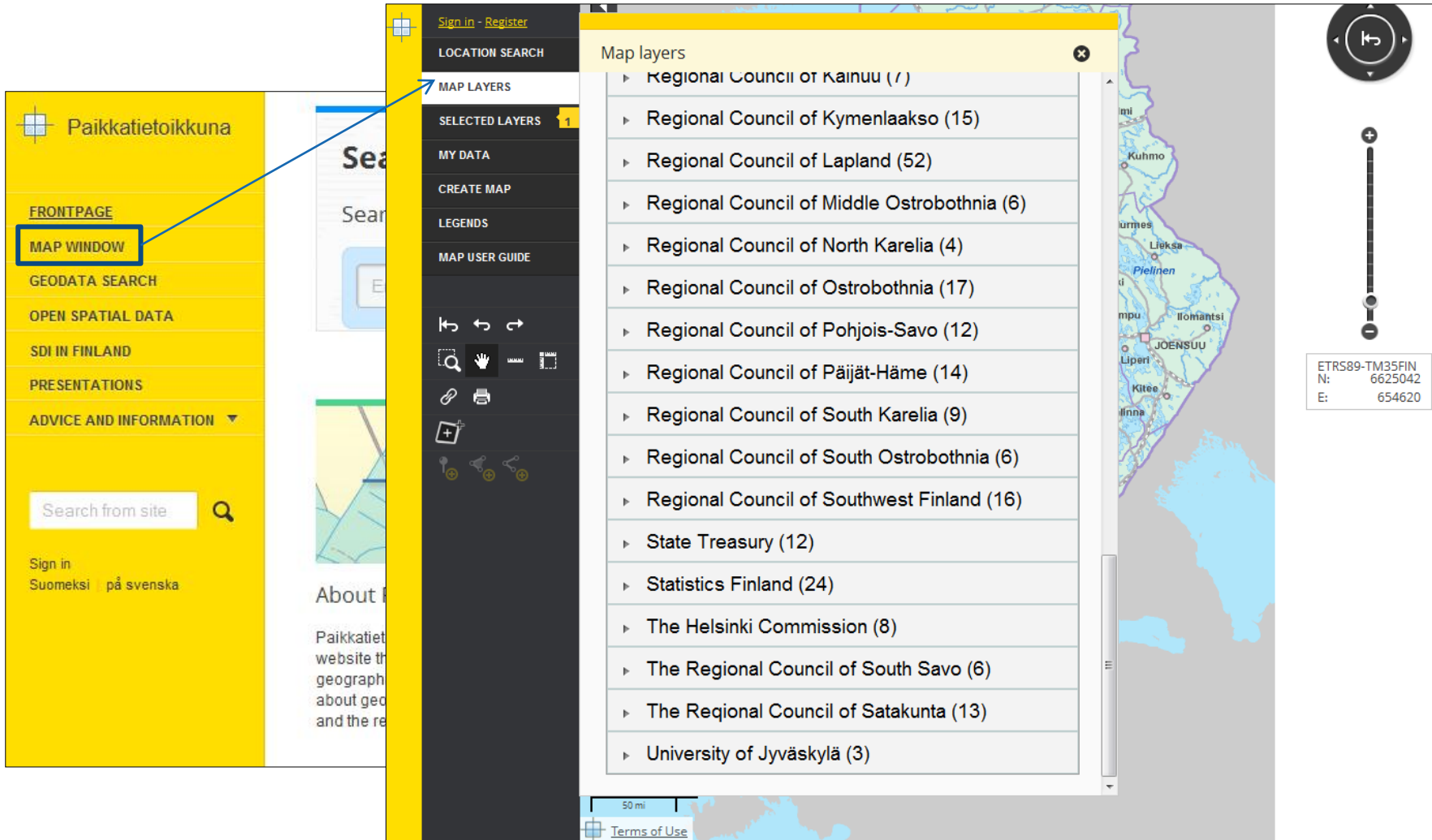
3) Production and industrial facilities (position, Industrial Classification level 2)

- Production and industrial facilities with over 10 employees

Data in theme 4

- 4) Population (population total, population by gender, population by age group: 0-14, 15-64, 65-)
- Population by statistical area
 - Population grid data 1 km x 1 km

The website [Paikkatietoikkuna](https://paikkatietoikkuna.fi), MAP WINDOW search by data providers or by theme



The screenshot displays the Paikkatietoikkuna website interface. On the left, a yellow sidebar contains navigation links: FRONTPAGE, MAP WINDOW (highlighted with a blue box and an arrow pointing to the map window), GEODATA SEARCH, OPEN SPATIAL DATA, SDI IN FINLAND, PRESENTATIONS, and ADVICE AND INFORMATION. Below these links is a search bar labeled 'Search from site' and a 'Sign in' button with language options 'Suomeksi' and 'på svenska'.

The main content area features a map window titled 'Map layers' with a list of data providers and their associated counts:

- Regional Council of Kainuu (7)
- Regional Council of Kymenlaakso (15)
- Regional Council of Lapland (52)
- Regional Council of Middle Ostrobothnia (6)
- Regional Council of North Karelia (4)
- Regional Council of Ostrobothnia (17)
- Regional Council of Pohjois-Savo (12)
- Regional Council of Päijät-Häme (14)
- Regional Council of South Karelia (9)
- Regional Council of South Ostrobothnia (6)
- Regional Council of Southwest Finland (16)
- State Treasury (12)
- Statistics Finland (24)
- The Helsinki Commission (8)
- The Regional Council of South Savo (6)
- The Regional Council of Satakunta (13)
- University of Jyväskylä (3)

On the right side of the map window, there is a vertical scale bar and a coordinate box showing ETRS89-TM35FIN, N: 6625042, and E: 654620. The bottom of the interface includes a scale bar (0 to 50 miles) and a 'Terms of Use' link.

Geodata Search - Paikkatietokkuna

Paikkatietokkuna

FRONTPAGE
MAP WINDOW
GEODATA SEARCH
OPEN SPATIAL DATA
SDI IN FINLAND
PRESENTATIONS
ADVICE AND INFORMATION

Sign in
Suomeksi på svenska

Metadata Catalogue

Free text search from all metadata

Statistics Finland

Search works only with Finnish search terms

Advanced search

Name ... choose ...	Responsible party ... choose ...
Type ... choose ...	Region identifier ... Whole Country ...
Inspire theme ... Choose ...	Keyword ... choose ...
Topic category ... choose ...	Spatial data service type ... choose ...

Search results (results 7)

Sort:

Virhe sivulla.

Käynnistä Tammilehto-Luo... 3 Resurssien... 4 Microsoft O... 3 Micr



http://www.paikkatietohakemisto.fi/catalogue/ui/metadata.html?lang=en&metadataresourceuid=a901d40a-8a6b-4678-814c-79d2e2ab13

Metadata

INSPIRE JHS XML Geographic Extent

Väestöruutuaineisto 1 km x 1 km

Number of population by 1 km x 1 km grids. The number of population on the last day of the reference year (31 only inhabited grids. The statistical variables of the data are: Total population (vaesto), number of men (miehet (ika_0_14), 15-64 year-olds (ika_15_64), and aged over 65 (ika_65_)). A grid identifier is expressed using a na coordinates (idD_nro (num)) and INSPIRE's standard identification code (grd_id (char)). The data also contains corner of a grid (xkoord, ykoord (num)). The data describes the population distribution independent of adminis The data is suitable for examination of population distribution and making various spatial analysis.

Abstract

Hierarchy level

Linkage

Identifier

Language

Topic category

Keyword

Date

Lineage

Equivalent scale

Specification

Access constraints

Other constraints

Classification

Use limitation

Organisation name

Electronic mail address

Date stamp

Series

<http://geo.stat.fi:8080/geoserver/vaestoruutu/wms?>, http://geo.stat.fi:8080/geoserver/vaestoruutu/vaestoruutu/vaki2011_1km/wms?, http://geo.stat.fi:8080/geoserver/vaestoruutu/vaestoruutu/vaki2010_1km/wms?, http://geo.stat.fi:8080/geoserver/vaestoruutu/vaestoruutu/vaki2005_1km/wms?, http://geo.stat.fi:8080/geoserver/vaestoruutu/vaestoruutu/vaki2005_1km/wms?, <http://tilastokeskus.fi/tup/rajaointapalvelut/inspire.html>, <http://geo.stat.fi:8080/geoserver/vaestoruutu/vwfs>

FI.1000191

Suomi

Society

Population distribution, Väestömäärä, Väestöruutu, Grid, Population distribution, Statistical units

2005-12-31 (Publication), 2010-12-31 (Publication), 2011-12-31 (Publication), 2012-12-31 (Publication)

The data are based on the population included in the Population Register on 31 December. The data have been coordinates in the centre of the building. The population data is aggregated by 1 km x 1 km grids using the low location reference. The data serie contains the statistical reference years: 2005, 2010, 2011

1:1000

Tietotuotemäärittely: Väestöjakauma, KOMISSION ASETUS (EU) N:o 1089/2010, annettu 23 päivänä marraskuuta 2010, neuvoston direktiivin 2007/2/EY täytäntöönpanosta paikkatietoaineistojen ja -palvelujen yhteentoimivuuden osasta

License

Ei muita rajoitteita.

Unclassified

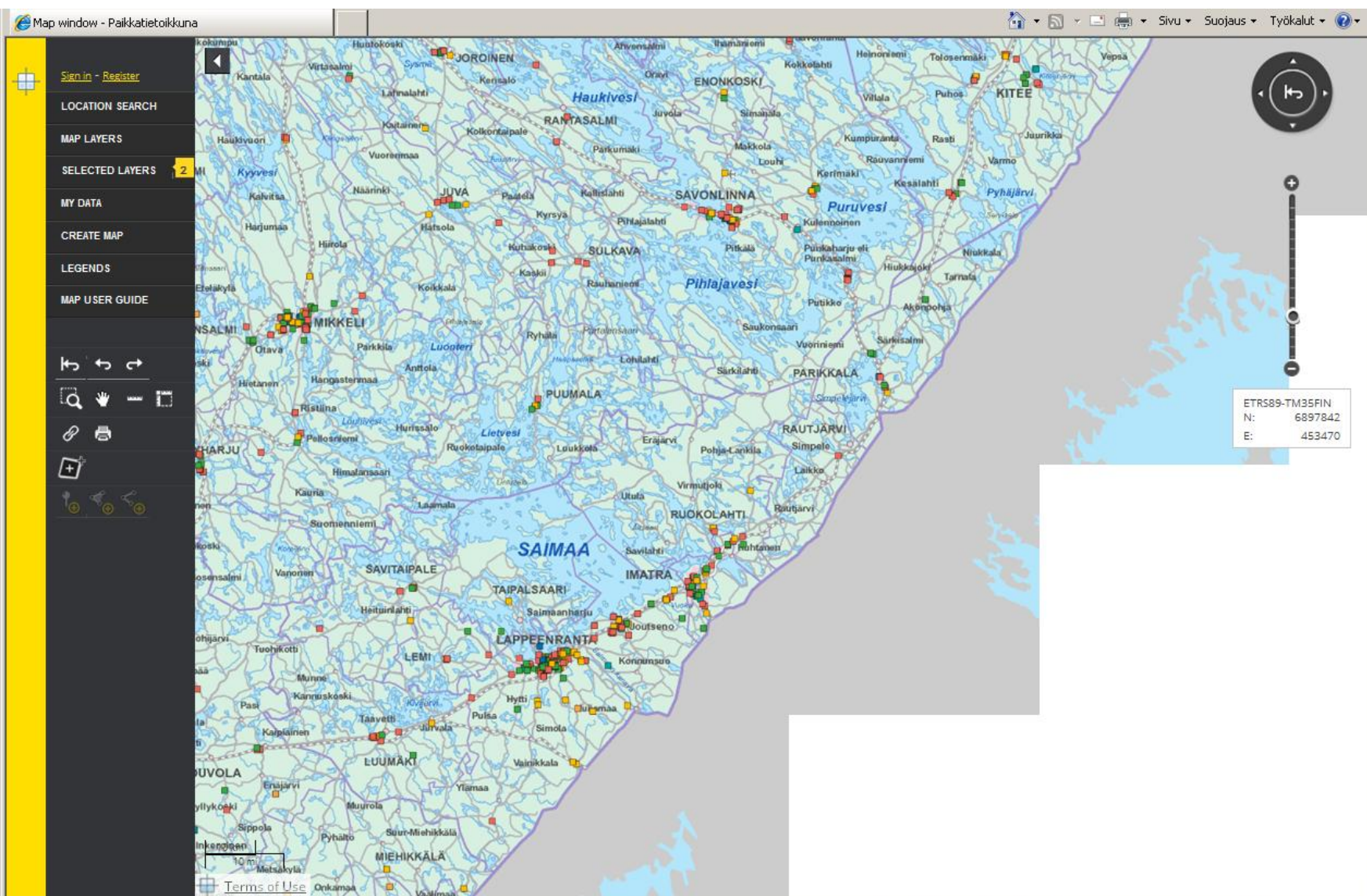
http://tilastokeskus.fi/org/lainsaadanto/copyright_en.html

Statistics Finland

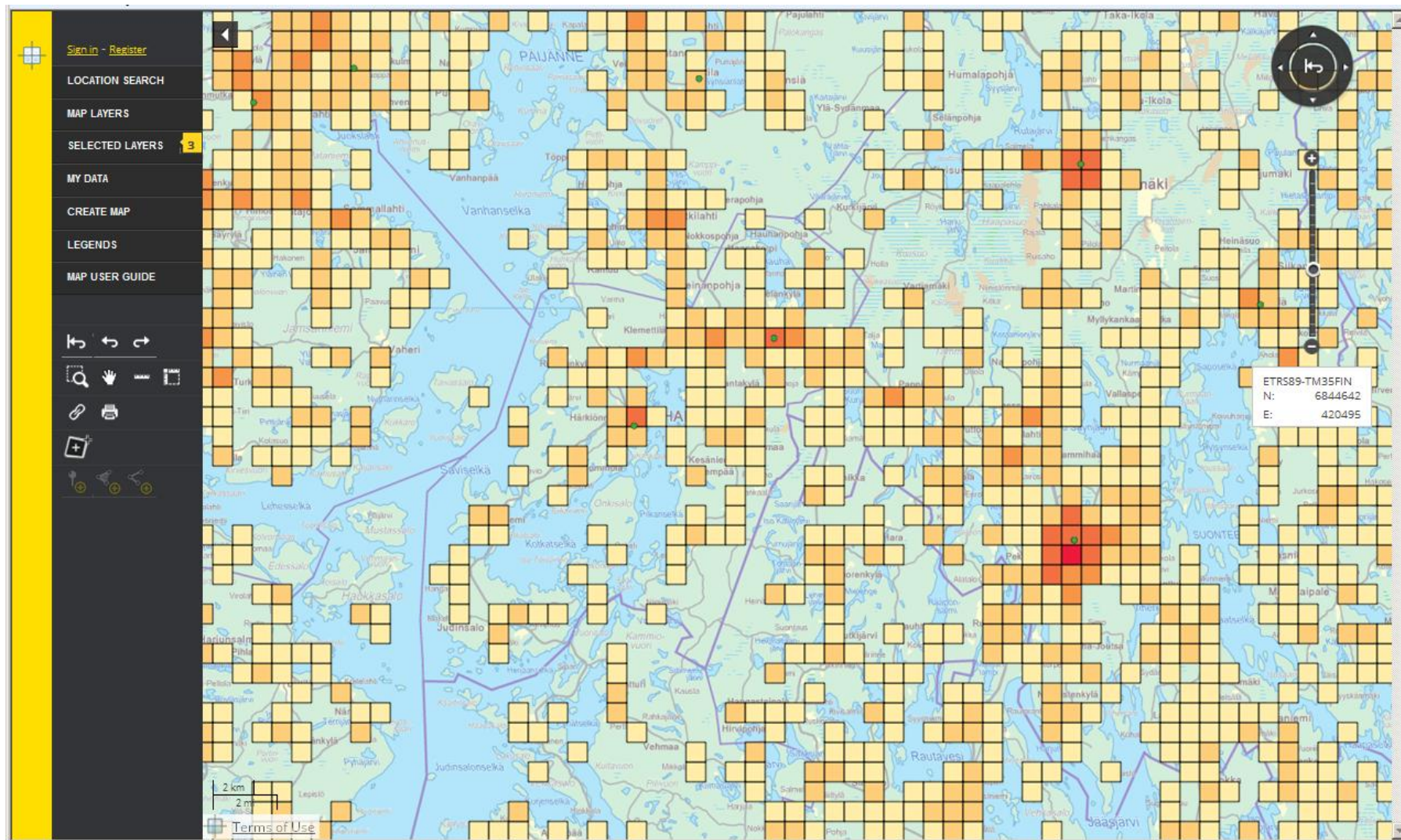
inspire@stat.fi

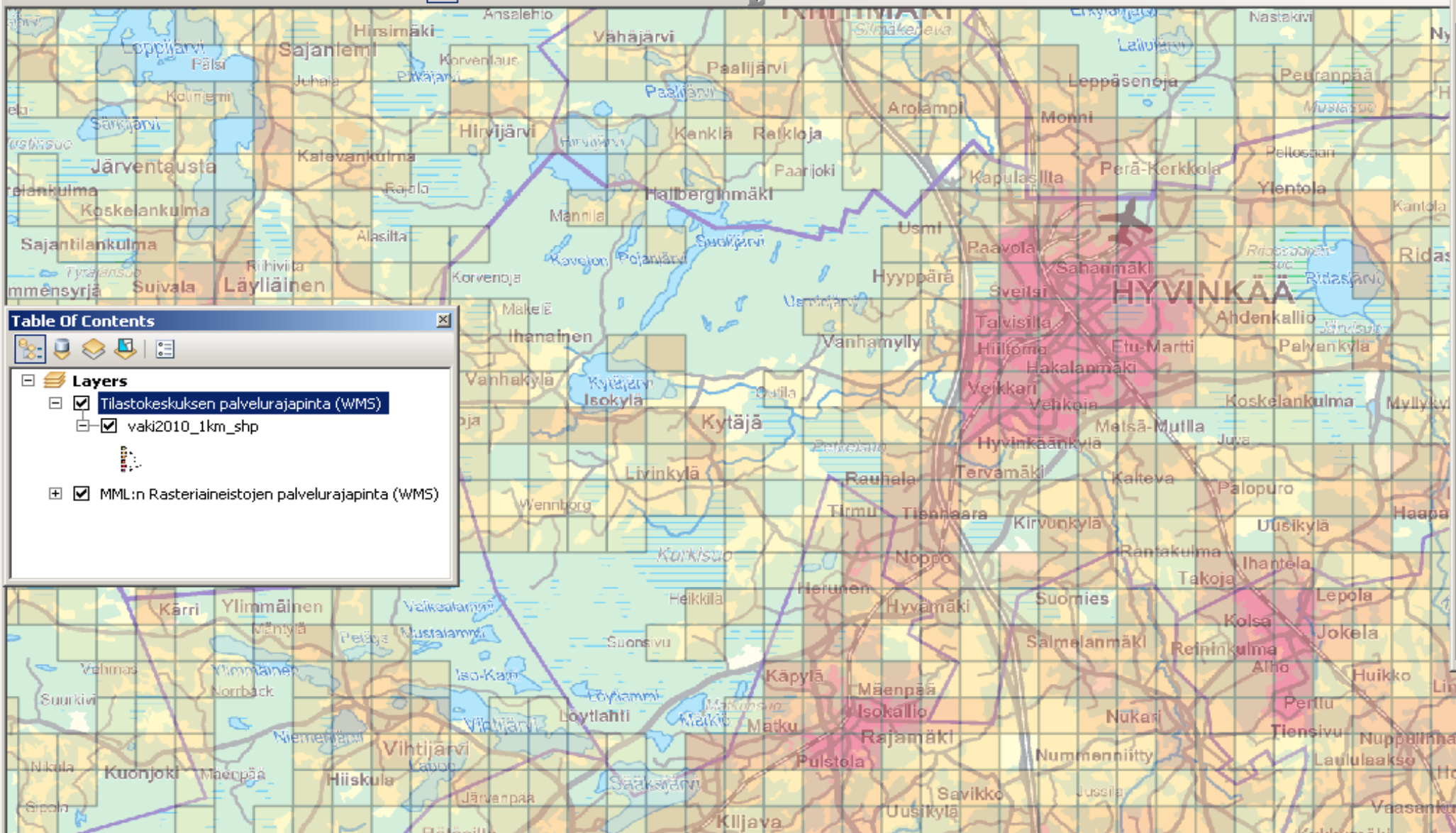
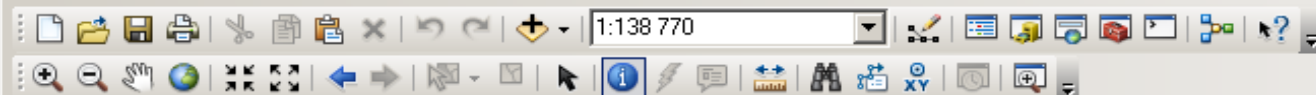
2013-05-31T09:33:36

MAP WINDOW, selected layer; Production and Industrial facilities

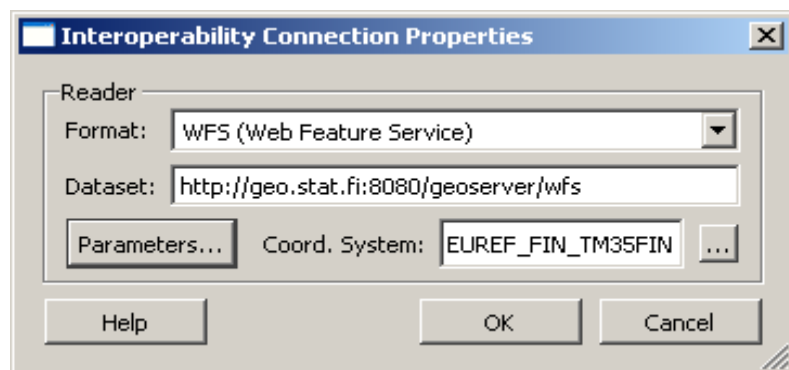


MAP WINDOW, selected layer; Population grid data 1km x 1km, 2012



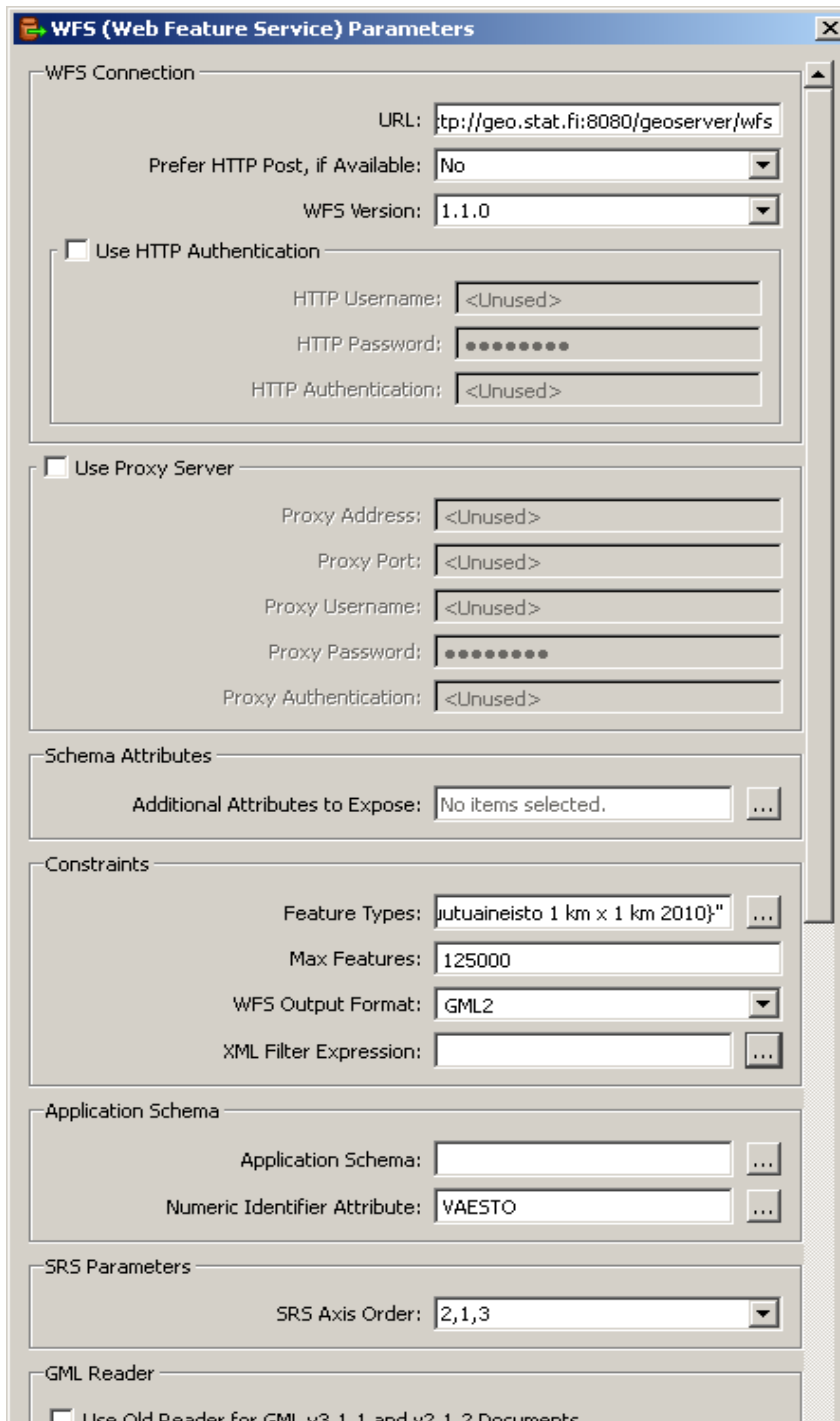


WFS interface service



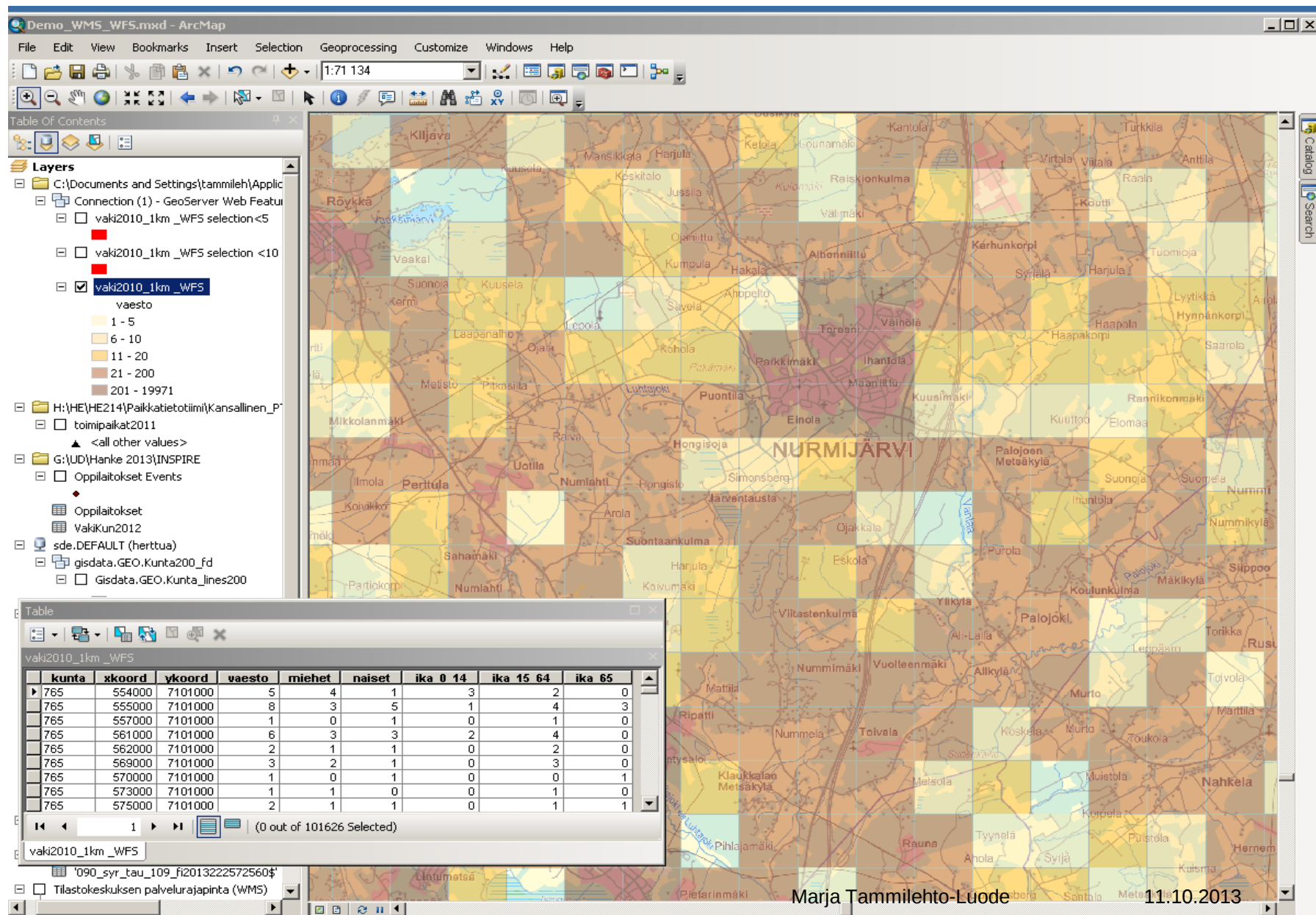
Interoperability Connection Properties

Reader
Format: WFS (Web Feature Service)
Dataset: http://geo.stat.fi:8080/geoserver/wfs
Parameters... Coord. System: EUREF_FIN_TM35FIN
Help OK Cancel



WFS (Web Feature Service) Parameters

WFS Connection
URL: http://geo.stat.fi:8080/geoserver/wfs
Prefer HTTP Post, if Available: No
WFS Version: 1.1.0
☐ Use HTTP Authentication
HTTP Username: <Unused>
HTTP Password:
HTTP Authentication: <Unused>
☐ Use Proxy Server
Proxy Address: <Unused>
Proxy Port: <Unused>
Proxy Username: <Unused>
Proxy Password:
Proxy Authentication: <Unused>
Schema Attributes
Additional Attributes to Expose: No items selected.
Constraints
Feature Types: jutuaineisto 1 km x 1 km 2010}"
Max Features: 125000
WFS Output Format: GML2
XML Filter Expression:
Application Schema
Application Schema:
Numeric Identifier Attribute: VAESTO
SRS Parameters
SRS Axis Order: 2,1,3
GML Reader
☐ Use Old Reader for GML v3.1.1 and v2.1.2 Documents



Implementation of INSPIRE at Statistics Finland

- The INSPIRE project 10 Sept 2012 – 6 June 2013
- The data are on Statistics Finland's own server published in the Geoserver interface
- [SF's web page](#) about Inspire data and links to the national geoportal incl. some [embedded viewing services](#)
- The main service via [MAP WINDOW](#) of the Geoportal in Finland
- All services are based on open source code
- All data are free-of-charge
- Σ 120 working days

Statistics Finland's web pages


Statistics Finland

[Etusivu](#) | [Förstasidan](#)
[Index](#) | [Site map](#)

[Home](#)
[Statistics](#)
[Metadata](#)
[Data collections](#)
[Products and services](#)
[News](#)
[Statistics Finland](#)

[Etusivu](#) > [Products and services](#) > [Regional and geographic information services](#) > [Interface services](#)

Products and services

- Interface services**
 - [Inspire data](#)
 - [Additional information](#)

Interface services

Statistics Finland offers geographic data for view (e.g. map, data feed). Information can be selected and viewed via Statistics Finland's web application maintained by the National Land Survey. When using the data in one's application via Statistics Finland's internet-based technological access connection, by means of which the data is downloaded from Finland's map server and download the data requires access to software that makes request in practice, this means GIS-software or some similar software.

The data and services are integrated with other data and services in the national infrastructure. The Inspire directive (2007/2/ E) and the Data Infrastructure in Finland (725/2009) define the requirements for the services.

Last updated 4.9.2013

Products and services

- Interface services**
 - [Inspire data](#)
 - [Additional information](#)

Inspire data

You can find the descriptions (Metadata) for Inspire data under [Geodata search](#) in Paikkatietoikkuna. You can view the data in the [Map window](#) in Paikkatietoikkuna or download them to your application using the address links given in the data descriptions or for some datasets also with the Atom feed. The same descriptions and links can also be found in the table below.

The Inspire datasets offered by Statistics Finland are as follows:

Data descriptions in the spatial data directory	Interface services	
Statistics grid 1 km x 1 km		Atom feed (RSS)
Municipality-based statistical areas	WMS WFS	
Population by statistical area	WMS WFS	
Educational institutions	WMS WFS	
Production and industrial facilities	WMS WFS	
Population grid data 1 km x 1 km	WMS WFS	Atom feed (RSS)

[Terms of Use for the data](#)

The following shows map views from Paikkatietoikkuna, containing examples of geographic data published by Statistics Finland.

Future developments

- Yearly updates of data
- More data via Paikkatietoikkuna
 - EU-harmonised ETRS-LAEA grids (now only ETRS-TM35FIN grids)
- Further development of the “MAP WINDOW”
 - To make better usable for statistical data
 - To integrate (NSI and NMA data), to visualise and to allow some spatial analysis
 - Use of open source components
 - Authorisation at the service level
- Joint project, “Spatial Statistics on Web” in 2014-2015
 - between Statistics Finland and the National Land Survey of Finland
- Partly financed by an EU Grant

Thank you for your attention!

