

Presented at the FIG Working Week 2017,
May 29 - June 2, 2017 in Helsinki, Finland

From SDI to an OGD Platform – challenges and opportunities

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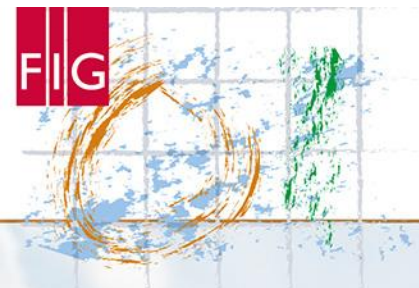


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Agenda

- Motivation for OGD
- From SDI to OGD – strategical issues
- From SDI to OGD – implementation issues
- Benefits and challenges



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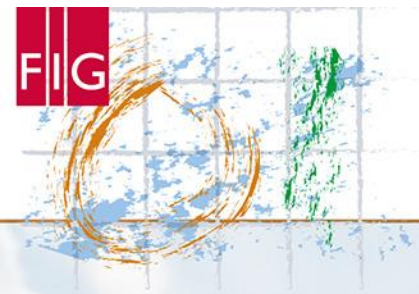


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Motivation for OGD in the Canton of Zurich

- *Goal of the legislation no 10:
“New technologies fosters the responsible use of data to simplify administration, reduces the burden for commercial organisation and provide a better transparency which is favourable for the society.”*
- *SDI is built up! For many topics the datasets are available 100 % coverage in the required quality. This is also true for cadstral data.*
- *Government has clearly stated that theses data sets should be made available.*



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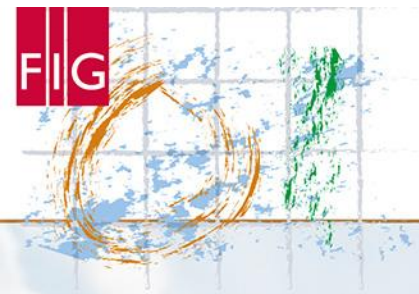


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Strategical issues – changing mindset

- Under the concept of OGD the influence of the data owner on the data usage ends irrevocably with the allocation of the data sets on the OGD platform.
- To achieve their support for OGD it must be revealed how the current rules are not enforceable, especially because many customers have already processed and refined data sets so that the trace to the original data set often get lost.
- The shift of responsibility must be clearly stated. Furthermore the potential and advantages of OGD have to be made visible.



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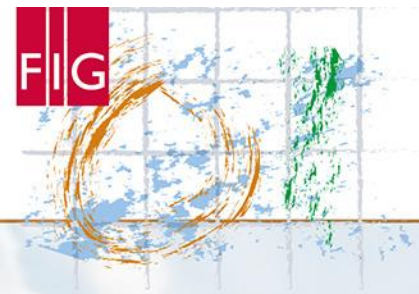


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Strategical issues – System Quality

Data product specification – sets the quality levels

- Data set quality:
 - Interlis for data models, data exchanges and automated validation
 - well established workflow and tools in decentralised environment
- Data processing quality
 - Transformations, updates, delivery etc. with certified algorithms
- Service quality (availability)
 - Hardware, software, people



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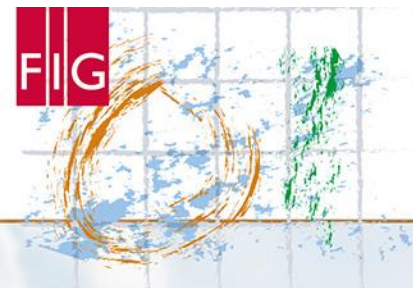


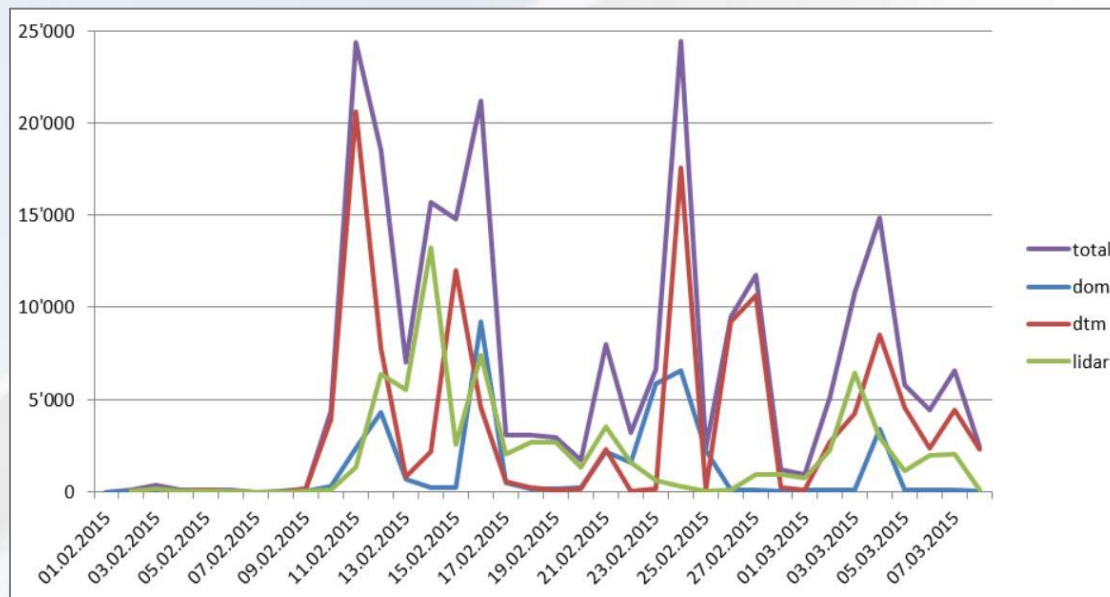
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Implementation issues – infrastructure and back-bone



Number of tiles downloaded per day after release of lidar data and products as OGD data sets



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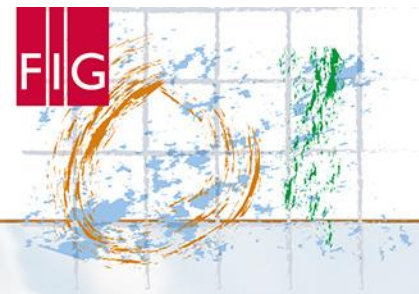


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Implementation issues – Data services

- Traditional **make-to-stock** production has several disadvantages:
 - Lack of efficiency: many data sets are produced which are never used;
 - Lack of timeliness: the significant processing time for the to-stock production leads to periodical extracts (once per month);
 - Lack of scalability: the launch of new formats or products is time-consuming.
- will provide intelligence and flexible capacity (cope with peak requests):
Tools for data extraction, transformation and delivery for **on-the-fly** generation of requested data.



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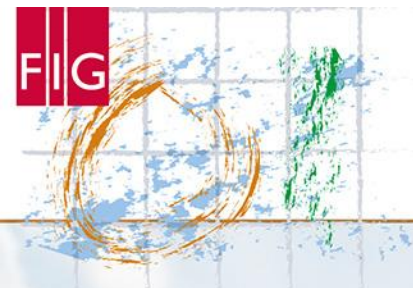


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Implementation issues – Processing services (value added)

Geocoder
A PEN BY geoadmin

```

HTML
CSS
JS
// Center the map on the location
var center = [1000000, 450000];
map.setView(center, 15);

// Create a background layer
var lyr1 = ga.layer.create('ch.swisstopo.pixelkarte-farbe');

// Add the layers in the map
map.addLayer(lyr1);

// Geocode a location
map.geocode('Wabern');

```

REFRAME allows you to perform coordinates transformations in planimetry and/or altimetry.

1. Coordinates file:

Input file: [i](#)

Durchsuchen...

Keine Datei ausgewählt.

Supported file formats: text with separator, LTOP, DXF, ESRI Shape, INTERLIS 1, Adalin OneOne, Topobase .K. Refer to help for details: [i](#)
Maximal file size: 25 Mb. Zip compression can be used.

2. Define the planimetric transformation:

Change planimetry

	Reference frame i
Input:	Projected coordinates LV03 (CH1903) v
	Coordinates format: i Military (Berne = 600/200 km) v
Output:	Projected coordinates LV95 (CH1903+) v
	Coordinates format: i LV95 (Berne = 2'600/1'200 km) v



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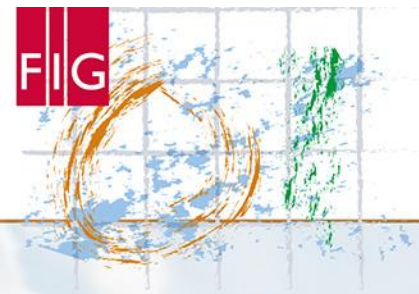


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Benefits for customer

- Elimination of costs for data procurement;
- No licensing – unlimited re-use and re-distribution;
 - Expect customer to use more up-to-date datasets and therefore minimize errors due to outdated information.
- Increased number of data sets made available to public – and reduced processing time from weeks to minutes;
- Broad access possibilities to data – if other organisation will act as distributor;
- Standardisation of data content and format.



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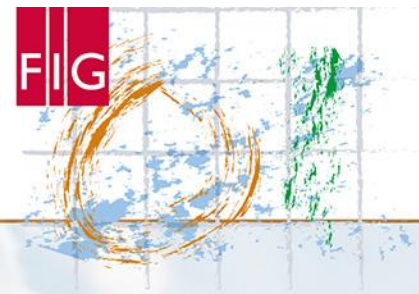


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Challenges for current «data provider»

- Currently data provisioning generates turnover of 2.6+ mio / year, mainly by cadastral organisations on municipal level;
- Expect to be reduced by 60 % after establishment of OGD;
- New products and value added services required for private sector:
 - Tailored products and additional data: DTM, 3D buildings, utility cadastre;
 - Consultancy services to support construction approval processes;
 - Combination with Cadastre2014 services (Cadastre on public law restrictions).
 - Get in touch with more customers;
- Benefit for providing encompassing municipal spatial data infrastructures.



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Thank you for your attention.



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