Long-term preservation of geospatial data – Journeys through time with the Swiss National Map series

Geospatial World Forum 2014 – Swiss Day
May 8th, 2014

Urs Gerber, Federal Office of Topography swisstopo
Introduction

Long-term preservation of geospatial data

Journeys through time with the Swiss National Map series

Conclusion
From up-to-date geospatial data
to increasing awareness of the significance of older versions
and usefulness of time series
Long-term preservation of geospatial data

Pioneer phase of creating geospatial data

Today:
Long-term preservation of geospatial data

Federal Act on Geoinformation 2008:

EuroSDR archiving working group
Long-term preservation of geospatial data

Activities in Switzerland

2009 – 2010
Preliminary Study

2011 – 2013
Concept

Activity EuroSDR

2010 – 2013
16 fundamental Principles

Archiving of geodata
A joint preliminary study by swisstopo and the Swiss Federal Archives

Project Ellipse
Concept for the archiving of official geodata under federal legislation

Concept report

Deutsch / Français / English

EuroSDR archiving working group
Principal: Jonathan Holmes
Status: Ongoing

Publications
The group has published a third version of the paper “GI+100: Long term preservation of digital Geographic Information — 16 fundamental principles” as agreed by National Mapping Agencies and Archives for consultation with the NMA and Archive communities. Version three of the document is available here.

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Idea: obvious, when all maps are already existing

Federal Act on Geoinformation (Geoinformation Act):

Cultural heritage of national significance:

Publish the “treasure” in the form of a web service

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Data – Swiss official map series

- **Dufour map – TK100**
  - **Year**: 1838, 1844, 1864, 1939
  - **First Edition**: 1838
  - **Revision**: 1844, 1864, 1939

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1:100,000 Topographic map (Dufour map)

- 25 sheets
- established the good reputation of Swiss cartography
Data – Swiss official map series

Siegfried map – TA25/50
- Year: 1870 - 1926 - 1949

Dufour map – TK100
- Year: 1844 - 1864 - 1939

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1:25,000 / 1:50,000 Topographic Atlas
(Siegfried map)

- Publication of the original surveys of the Dufour map
- 462 / 142 sheets

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Data – Swiss official map series

- **National map – NM25/50/100/…**
  - Year: 1938, 1979, 2013

- **Siegfried map – TA25/50**
  - Year: 1870, 1926, 1949

- **Dufour map – TK100**
  - Year: 1844, 1864, 1939

First Edition | Revision

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1:25.000 National Map

- 249 sheets
- the present map series
# Map production of swisstopo since 1838

<table>
<thead>
<tr>
<th>Map series</th>
<th>Scale</th>
<th>Code</th>
<th>from</th>
<th>until</th>
<th>Updated until</th>
<th>Sheets</th>
<th>editions</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Map</td>
<td>250.000</td>
<td>GM250</td>
<td>1867</td>
<td>1898</td>
<td>1945</td>
<td>4</td>
<td>40</td>
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<tr>
<td>Overview Map</td>
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<td>1878</td>
<td>1895</td>
<td>1972</td>
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<td>1965</td>
<td>–</td>
<td>today</td>
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<td>1992</td>
<td>1994</td>
<td>–</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

A total of more than 7600 maps

Data from 2010

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Play

Compare two periods

General Functionality

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Journeys through time with the Swiss National Map series
Journeys through time with the Swiss National Map series

http://s.geo.admin.ch/59c27f075
Journeys through time with the Swiss National Map series

http://s.geo.admin.ch/339e28b3d
Journeys through time with the Swiss National Map series

http://s.geo.admin.ch/50b753429
Further development

• Yearly update of map data
• Small scales 1:200,000, 1:500,000, 1:1 Mio.
• Additional techniques to compare periods
• Migration/integration to the map viewer of the Swiss Federal Geoportal (map.geo.admin.ch)
Conclusion

Central elements:

Costs:
Conclusion

Best conservation / preservation measure

= use and make geospatial data available
Thank you very much for your attention!