Summary of Audit Results

Audit Scope: Implementation of the Federal Strategy for Geoinformation

The Swiss Federal Audit Office (SFAO) performed an audit on the coordination of Geographic Information (GI) and Geographic Information Systems (GIS) at swisstopo.

The main goal of the audit was to assess the extent to which the objectives of COGIS (Coordination, Geographic Information and Services) had been achieved as of the end of 2006. In particular, the audit was to provide insight on the coordination, quality and organisation of this complex "undertaking". Primarily, the audit was to determine if, based on the present state of knwoledge, the COGIS objectives and the development of a National Spatial Data Infrastructure (NSDI) could be achieved within the time frame and financial constraints set by the Federal Council in the "Federal Strategy for Geoinformation" approved on 15th June 2001.

On 16th June 2003, the Federal Council approved the COGIS Implementation Concept based on the strategy. Within the constraints of the 2003 federal austerity programme, the Federal Council authorised the development of a National Spatial Data Infrastructure (NSDI), with the provision of cost-neutrality, i.e. that no additional funding be required. This meant that the work planned had to be distributed over two legislative periods, 2004-2007 and 2008-2011, and had to be financed from the existing swisstopo budget by means of expenditure cuts in other areas.

Legal Framework

The new Federal Law on Geoinformation (Geoinformationsgesetz, GeolG), dated 5th October 2007 comes into force on 1st July 2008. Against the background of this new legislation, the role of the inter-departmental GI + GIS Coordination Group needs to be reviewed at federal level, and the rules of procedure must be modified.

Organisation of geographic data within the Confederation and in the cantons

With regard to the Federal Administration, the COGIS initiative is well-organised and communication is good on all levels. However, representatives of the Confederation are not satisfied with the level of coordination with the cantons on a national level, achieved by means of the Conference of Cantonal Centres for Geographic Data Coordination GIS (CCGEO) within the e-geo.ch organisation. The original concept intends CCGEO to be the COGIS interlocutor on a cantonal level. However, in many cantons, the current CCGEO representatives don't carry sufficient weight, as far as the cantonal specialist centers are concerned. The result is that the CCGEO today is unable to fulfil its role due to a lack of authority within the cantons. From the point of view of the interviewees, e-geo.ch is not effective enough as an instrument of implementation. This is mainly due to the fact that there is disagreement between the Confederation and the cantons, as well as among the cantons themselves, with regard to sovereignty, delivery policy, conditions of use, and the pricing of geographic data. The new law means that the federal authorities will have to actively assure leadership with regard to the development of the NSDI. With the integration of the COGIS Office into swisstopo, the SFAO recommends that the directives, organisation and funding of e-geo.ch be

¹ "Undertaking" refers to all projects and sub-projects concerned with the coordination of geographic information and GIS applications throughout Switzerland.

brought into line with the new law.

Data Harmonization as Prerequisite for a more Extensive Use of Geographic Information

The COGIS initiative also aims to achieve data harmonization which is regarded as a technical and institutional prerequisite for a wider political and commercial application of geographic data. Data harmonization is still far from being complete. Therefore, in accordance with the new law and the objectives defined by COGIS, the harmonization of geographic information needs to proceed swiftly under the guidance of swisstopo and other federal authorities concerned. Existing regulations which hamper this process need to be reviewed and, where necessary, modified.

Access to shared geographic services promises maximum potential synergy. Therefore, the migration of geographic services to web technology and an NSDI infrastructure need to be prioritized and planned based on an enhanced inventory of federal geographic information data.

Possible Risks during Implementation

In the Implementation Concept, the main goals were defined as the guaranteed provision of, and the "simple, low-cost access" to, all basic geographic information in close cooperation and consultation with the cantons. These goals, considered primarily tasks of the Confederation, have yet to be achieved, even though the COGIS group has already defined, or has planned to define standardisation, and has provided the cantons and other communities with the NSDI basic structure. Based on the information gathered, it is yet uncertain if all goals will be reached by 2011. The following have been identified as possible risks to the successful realisation of the goals:

- Limited annual financial framework,
- Scarce human resources; should the COGIS Offices not have the necessary personnel available at the right time, some Federal offices will approach third parties to carry out the implementation. There is then no guarantee that the COGIS harmonization plans will be taken into account.
- Lack of harmonization on a national level,
- The current pricing policy for geographic data is based on the principle of cost-neutrality and, because of this, it is partly perceived by the market as being too stringent. As such, it is an impediment to the rapid spread of the COGIS initiative throughout Switzerland.

Pricing Policy Harmonization

Experts perceive the current pricing policy as being too expensive or rather the conditions of use as being overly restrictive. The current heterogeneous pricing, along with the restrictions on data usage, are delaying not only NSDI harmonization, but also the comprehensive use of geographic data as well as the further deployment of GIS applications.

A rapid harmonization of pricing and utilization policies requires an improved cooperation between the Confederation and the cantons, along with the involvement of the private sector. The objectives can only be achieved if all parties concerned are prepared to make concessions. The new Geographic Information Law, *GeolG*, as well as the Ordinance on Geographic Information, *GeolV*, are a perfect opportunity for swisstopo, or rather the Confederation, to press ahead with the implementation of these objectives.

Great Economic Benefit from Integrated Geographic Information Systems

The economic benefit of integrated geographic information systems resulting from synergies and simplified processes and the ensuing benefits for the Swiss economy should far exceed any

COGIS expenditure. A swift harmonization of geographic information is key to an economically extensive application of these data.

Given its current organisational structure, the COGIS Office is well prepared with regard to the harmonization of geographic information within the Confederation. So far, given the available resources and the complex environment, the COGIS office, or rather swisstopo, has shown great commitment, working well and in a goal-oriented manner. Despite COGIS being on the right path, there is still need for action, as there are still certain risks.

Basically, the swisstopo agrees with the SFAO recommendations. The status of both the COGIS unit and e-geo.ch will be legally reinforced and this should give them both a better standing within the Federal administration and before the public. Details of the financial arrangement for the e-geo.ch participants still need to be determined. The rate of the implementation is not just dependent on the new Geographic Information Law and its ordinances, planned to come into force on 1st July 2008. Swisstopo considers it also dependent on the "dedication of the stakeholders" in both the Federal Offices and the cantons, and, just as importantly, on the "resources made available" for geographic information projects within the Federal Offices and COGIS. Further information about COGIS and e-geo.ch is available on the following web pages:

- http://www.swisstopo.ch
- http://www.e-geo.ch

The enclosures contain a large number of hyperlinks leading to web sites concerned with geographic information.