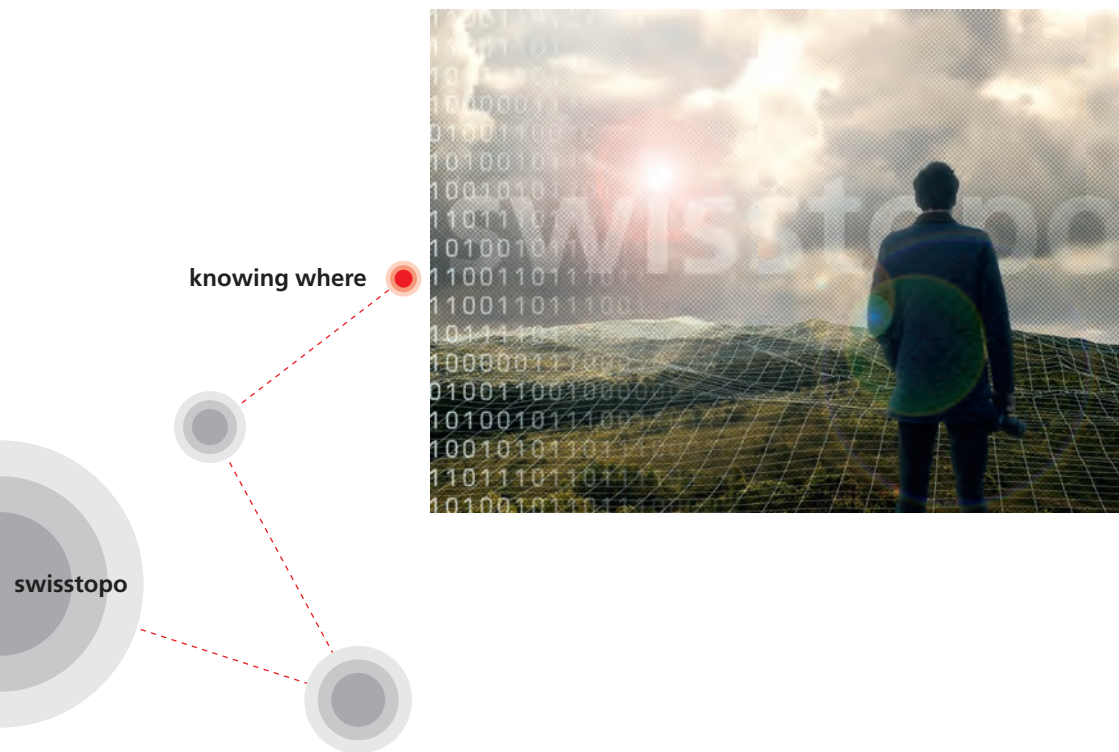


Strategic focus for 2020



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Confederation

Federal Office of Topography swisstopo
www.swisstopo.ch

Introduction

The importance of geographical and geological information

Geoinformation is a vital part of any modern country's national infrastructure. It is just as important as traffic and communication networks and is growing in significance as an economic factor.

Nowadays, the idea of trying to make transparent, traceable decisions in matters of politics, economics and society without this information is out of the question. Natural patterns and processes, and those shaped by humans, have limited space in which to unfold. Modelling and analysing them would be impossible without geoinformation. Official bodies must also provide reliable geoinformation, firstly to ensure a properly functioning democracy in which citizens can participate in making important political decisions, and secondly to contribute to the social development expected in any modern state.

In addition, detailed knowledge of the ground below our feet is becoming increasingly important. Activities such as extracting raw materials, storing radioactive waste, producing energy and building underground infrastructure are completely dependent on precise geological data.

The importance of the Federal Office of Topography

The Federal Office of Topography swisstopo plays a vital role as Switzerland's geoinformation centre. It is responsible for collecting, managing and publishing official spatial geodata. This work is based on the legal framework set out in the Swiss Geoinformation Act (GeolA).

swisstopo measures Switzerland, recording and documenting its landscape and underground structure. It offers a wide range of products, including maps whose quality and accuracy have afforded them an excellent reputation both in Switzerland and abroad. Other significant offerings include altitude and landscape models, aerial photographs, ortho-photos, geological data and maps, as well as Internet, smartphone and tablet applications. The Swiss Federal Government's map viewer, map.geo.admin.ch, is one such application.

swisstopo is also responsible for coordinating geoinformation and geology at the federal level, heads up the Institute for Military Geology and is the national point of contact for satellite image data. It also oversees official surveying activities and the register of restrictions on property rights under public law. It works with cantons, local government authorities and the private sector to harmonise Switzerland's geodata.

The data and products provided by swisstopo are built on the core objectives of ensuring that official geoinformation complies with current legislation, that information from various time periods is available over the long term, and that data is kept up to date.

In order to ensure long-term success and to provide a service that responds to people's needs and benefits Switzerland as a whole, swisstopo must take into account social, political and technological developments.

Vision

The activities of the Federal Office of Topography swisstopo are underpinned by this vision:

Geoknowledge – for a Changing Society

Our information society is changing into one based on knowledge – including spatial knowledge, which geoinformation helps us to build. We publish all the data we collect, setting the bar at a new level. We are the first port of call for spatial knowledge in Switzerland, and “swisstopo” has become synonymous with “geoknowledge”.

Strategic focus

Overview

Using its vision and activities as a starting point, swisstopo has highlighted the following five key strategic focal points:

1. swisstopo will strengthen its position as the centre of expertise for geoinformation and georesources.
2. swisstopo will publish comprehensive, up-to-date geographical reference data for Switzerland that meets the necessary quality requirements.
3. swisstopo will make available its official digital data and products in accordance with the principles of open government data.
4. swisstopo will improve the usability of its data and products.
5. swisstopo will work with its partners to round off its offer of geographical reference data in Switzerland.

Implementing these strategic focal points will enable swisstopo to provide an even more effective, efficient and budget-conscious service.

We will look more closely at these focal points below.

National centre of expertise for geoinformation and georesources

swisstopo will strengthen its position as the centre of expertise for geoinformation and georesources.

swisstopo...

- ... will strengthen its position as a competent, reliable specialist service provider in the field of geoinformation, in particular for the Swiss Federal Administration;
- ... will place greater emphasis on its role as a “geodata broker” for the entire Federal Administration and for partner organisations;
- ... will expand its skills and abilities in the areas of positioning and localisation;
- ... will take on the leading role of managing the establishment and operation of the National Geodata Infrastructure;
- ... will ensure that all spatial and land-related legal information is published in one place;
- ... will coordinate and promote the introduction of the register of restrictions on property rights under public law in all cantons;
- ... will strengthen its leading role in the area of managing underground data and its uses, potential and resources;
- ... will step up its activities and research in the field of georesources and repositories, in particular in the Mont Terri rock laboratory;
- ... will optimise the distribution of tasks within the federal government in collaboration with cantons and other partners with the aim of improving efficiency and effectiveness.



Up-to-date reference data

swisstopo will publish comprehensive, up-to-date geographical reference data for Switzerland that meets the necessary quality requirements.

swisstopo...

- ... will define the requirements for keeping each individual topic up to date, taking into account user needs;
- ... will provide the necessary resources for keeping information better up to date;
- ... will publish data in a consistent cycle;
- ... will use the existing system of reporting to the authorities and partner organisations and will create further efficient reporting systems.



Open Government Data (OGD)

swisstopo will make available its official digital data and products in accordance with the principles of open government data.

swisstopo...

- ... will make its official data and products freely available online at no cost;
- ... will amend the relevant legislation to allow broad use of its data and products while ensuring that the origin of the data remains visible;
- ... will ensure that the quality of its data and products is maintained in the long term.



Improved, future-proof usability

swisstopo will improve the usability of its data and products.

swisstopo...

- ... will gear its products towards future generations and their user behaviour;
- ... will provide data and products that meet international requirements;
- ... will provide basic geodata that can be easily linked to other attribute data (linked data);
- ... will make its data and products compatible with augmented reality applications;
- ... will provide high-quality 2D and 3D visualisations for various platforms;
- ... will ensure that changes over time in the real world are documented in the reference data;
- ... will improve the economic relevance of its data and products.



Filling in the gaps in Switzerland's geographical reference data

swisstopo will work with its partners to round off its offer of geographical reference data in Switzerland.

swisstopo...

- ... will add addresses and street names to its reference data;
- ... will complete the reference data with navigable geo-information (routing information);
- ... will add geometrically referenced, terrestrial photos to its reference data;
- ... will provide the geometric framework for country-wide monitoring of the changes in the Earth's surface;
- ... will provide 3D geological models of the ground below the Earth's surface;
- ... will work with the authorities and partner organisations to ensure that use of the area below ground is documented.



Glossary

Term	Definition
Up to date	Data that is correct and complete at a specific point in time in terms of defined quality features. The degree to which a piece of information is up to date is measured on the basis of the time difference between a change in the real world and the point when this change is reflected in the product.
Augmented Reality	Augmented reality is the computer-aided augmentation of one's perception of reality. More specifically, augmented reality means overlaying computer-generated information or virtual objects on images or videos.
Geodata broker	A "geodata broker" is an intermediary who, operating centrally, purchases geodata for the Federal Administration from external suppliers and makes it available to customers in accordance with their wishes.
Georesources	The four basic categories of georesources are groundwater (protection and use, drinking water supply), mineral resources (extracting materials such as metals, rock, earth, oil, gas, coal), energy production (extracting energy from hot water, geothermal probes) and the space for using, storing (infrastructure, access routes, tunnels) and disposing of materials.
Consistency	The completeness and the geometric and semantic accuracy of the representation of real objects at a specific point in time in terms of defined quality features. Consistency conditions exist both within and between products.
Linked Data	In the World Wide Web, linked data is freely available data that is identified by a Uniform Resource Identifier (URI), through which it can be accessed directly via HTTP and can also refer to other data via URI. The data that is linked together creates a worldwide network. A URI is an identifier consisting of a string of characters that is used to identify an abstract or physical resource.
Open Government Data	Open Government Data (OGD) is official data that is provided to the public free of charge and in a machine-readable format. Official data is data that is collected, created, managed, processed and stored by the official bodies of all public authorities.