



Fact Sheet

Monday, 4 September 2006

Federal Seismic Safety

The Federal Government is under no constitutional obligation regarding seismic safety in Switzerland. Prevention is the concern of the individual cantons. The Federal Parliament therefore decided in 2000 to apply appropriate building standards to federal buildings. It commissioned the Coordinating Office for Seismic Safety at the Federal Office for Environment FOEN to inspect and assess existing federal buildings in this respect.

Federal Guidelines

- **No Constitutional Clause.** The Federal Constitution, whereby it does provide for federal ruling in matters concerning natural hazards such as avalanches and flooding, does not empower the Federal Govt. with any authority regarding seismic safety (with the exception of a few categories, such as nuclear power stations, water reservoirs and airports). Proposals for including a constitutional clause to cover safety in the event of earthquakes have so far been rejected.
- **Earthquake-proofing of new federal buildings.** Following a decision by the Federal Parliament on 11 December 2000, applicable standards for seismic safety in the design and execution of new federal facilities are to be maintained.
- **Existing federal buildings.** On 12 January 2005 the Federal Parliament commissioned the UVEK (Federal Dept. of the Environment, Transport, Energy, and Communication), together with the EDI (Federal Dept. of the Interior), the EFD (Federal Dept. of Finance) and the VBS (Federal Dept. of Defence, Civil Protection and Sport) to prepare an instrument package which establishes seismic standards for all federal buildings. The aim is that, in the course of renovations, federal departments would assess and where necessary reinforce their facilities (earthquake-proofing).

Coordinating Office for Seismic Safety of the Federal Office for Environment FOEN

- **Creation of a Coordinating Office.** An initial remedial programme for seismic safety of existing federal buildings was launched by the Federal Parliament for the period 2001 to 2004, and created a Coordinating Office for Seismic Safety in what is now the Federal Office for Environment (FOEN).
- **Federal buildings inventory.** Over 300 federal buildings and 3000 national road network bridges have been systematically assessed and inventoried as part of this programme. This includes the Federal Parliament Building (see Box).

- **Information Sheet on earthquake-proofing.** The FOEN has also contributed to the financing of SIA Information Sheet 2018 for architects and engineers, which illustrates structural measures for earthquake-proofing existing buildings. The Information Sheet simplifies the assessment of requirements for proportionate earthquake-proofing, by providing the decision-making criteria which will create the basis for a cost-benefit calculation.
- **Inventorying continues.** The federal remedial programme will continue in the period 2005 to 2008, including an extension of the inventory to a further 500 federal buildings. On the canton level, on the other hand, only 2 percent of public buildings have been inspected.

Still much to do

- **Cantons challenged.** In the absence of a national solution, the cantons face a double challenge: they must integrate suitable seismic safety measures in their building regulations, as well as implement measures for earthquake-oriented renovation of old buildings. Apart from the Cantons of Valais and Basel-Stadt, no canton has included seismic safety measures in their building regulations.
- **Federal support.** On 21 April 2005, Federal President Moritz Leuenberger discussed seismic safety in Switzerland with the canton building directors. The federal government will support the cantons by making available training, further education and consultation services.
- **Increasing awareness within the public.** Since in Switzerland 95 percent of real estate is privately owned, it can be assumed that the vast majority of the buildings have not undergone a risk assessment. The public needs to become more aware of the issue. Most people, for example, are unaware that currently earthquake damage is not insured, as revealed by a survey commissioned by the Swiss Insurance Association SVV.
- **Earthquake simulator.** For the purpose of raising awareness, the Federal Office for Environment has created an earthquake simulator, which sees its debut at the Foire du Valais in Martigny at the end of September 2006, and should allow visitors to experience the effects of earthquakes firsthand. The Olma 2006 in St. Gallen will provide a second opportunity for the public to gain this experience.

Earthquake-safe federal buildings

The real estate portfolio of the federal government comprises more than 4000 civil buildings, housing of the order of 18,000 workplaces. Between 2001 and 2004 about 300 civil and military structures were given special attention in terms of their seismic safety. The structures covered are in the areas Basel Region, central Switzerland, Engadine, St. Galler Rheintal and Valais (higher earthquake risk designated zones), and belong to the category of important buildings which play a key role in maintaining social cohesion (lifelines).

Although it lies in a zone with medium earthquake risk, the Federal Parliament Building is being made seismically safer as part of the overall renovation work being carried out this year. The old, thick masonry is expected to withstand an earthquake, but some reinforcements are deemed necessary, particularly in the joints between the flexible wooden ceilings and the walls.

Information

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