

## **Contents**



**PLANAT - The Swiss National Platform** 



**PLANAT - A Swiss Success Story** 



**PLANAT - The Concept** 



**PLANAT - How It Operates** 



**PLANAT – Vision and Strategy** 



PLANAT - The Action Plan

## Imprint

Mandate

PLANAT Swiss National Platform for Natural Hazards SDC Swiss Agency for Development and Cooperation

A joint Swiss contribution of PLANAT and SDC to the First Session of the Global Platform for Disaster Risk Reduction, Geneva, Switzerland June 5 to 7, 2007

Author

IDRC, Walter J. Ammann, Flüelastrasse 11, 7260 Davos, Switzerland www.idrc.info

Layout and design Printed by kommunikativ, Heidi Roth, 7247 Saas, Switzerland Druckzentrum Schütz AG, 8143 Stallikon, Switzerland

Distribution

PLANAT Secretariat, c/o Federal Office for the Environment FOEN

3003 Berne, Switzerland planat@bafu.admin.ch www.planat.ch

IDRC Davos, Switzerland, June 2007

Swiss landscape, Binntal, Canton Valais Cover photo: NaturPanorama.ch

## Starting position (in the mid-1990s in Switzerland)

- Only loose contacts and minor interaction existed between the key players in disaster risk reduction.
- Preventive measures had in the past been planned and realized aiming at building a defense against hazards and not with the awareness of a risk culture.
- Safety is also in Switzerland affordable only to a certain extent, and not every hazardous situation can be eliminated. Setting priorities for risk reduction measures was difficult due to a lack of policies, tools and risk awareness.

## Steps taken

- Some members of an already existing Swiss IDNDR committee took action and met in 1995 to discuss the idea of a common platform. They identified existing governmental and civil organizations and assessed if the dialogue could be anchored therein or benefit from existing networks.
- The group was enlarged by additional government officials and professionals, motivated to take action within their own domain and to promote the idea of a common platform. Opposition against the idea of a uniform platform could therefore be limited.
- Efforts were taken to increase the risk awareness of the Federal Government and to create readiness for a national platform.

#### Who was involved?

- High-level officials of Federal and Cantonal agencies related to disaster risk reduction
- Professionals in the domain of natural hazards
- Representatives of scientific institutions and insurances

#### Questions to be answered

- Is a platform the most effective way to increase efficiency in disaster risk reduction?
- What are the common goals in disaster risk reduction and what synergies can be used?
- Are the stakeholders ready to participate in common efforts even if their interests are affected and their future influence would have to be shared with colleagues?
- Who should take the lead for further steps?

## What conditions facilitated the task?

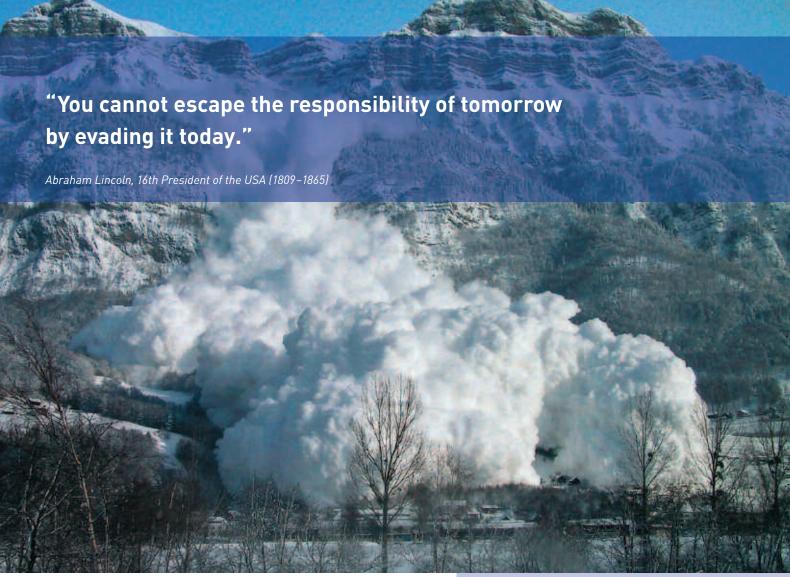
- Since the mid-1980s, a couple of severe catastrophes (flood, windstorm) had occurred, which revealed the need to cooperate. It became more obvious that a platform was needed to address emerging threats and strategic questions, to look for synergies in the disaster risk reduction process and to bridge gaps between all governmental levels.
- The first meeting was organized as an informal gathering where participants did not have to commit to anything.
- Commitment could be increased step-by-step.

## Lessons learned

- The process takes time and the participants need to be highly motivated.
- An earlier integration of representatives of other important fields (e.g. critical infrastructures, industries, weather services, media) would have facilitated future tasks.

#### References

- UN/ISDR (2005): Hyogo Framework for Action 2005–2015: Building the Resilience of Nations and Communities to Disasters (HFA).
   For download at: www.unisdr.org/eng/hfa/docs/ Hyogo-framework-for-action-english.pdf
- UN/ISDR (2006): Guiding Principles: National Platforms for Disaster Risk Reduction. For download at: www.unisdr.org/eng/country-inform/ci-quiding-princip.htm
- UN/ISDR (2007): Guidelines National Platforms for Disaster Risk Reduction. UN/ISDR Secretariat, Geneva, Switzerland
- PLANAT Swiss National Platform for Natural Hazards. www.planat.ch



The Schattenbach avalanche track – a threat for Walenstadt, Canton St. Gallen. A huge powder snow avalanche occurred on February 7, 2003.

Photo: Canton St. Gallen

The Hyogo Framework for Action 2005–2015: Building the Resilience of Nations and Communities to Disasters defines as one of its strategic goals the "development and strengthening of institutions, mechanisms and capacities to build resilience to hazards" and recommends the creation of national platforms for disaster risk reduction as a multi-sectoral coordination mechanism. Already in 1997 Switzerland has created this national platform, based on its long-standing experience with natural hazards, and related to the IDNDR Yokohama Strategy of 1994.

## Results

With this document and the additional folder, Switzerland would like to reflect the ten years of experience with its national platform PLANAT and to share it with the international community.

The Swiss experience shows that a dedicated team effort and the interaction of key players from line ministries, disaster management authorities, academia, civil society and other sectors involved with disaster reduction are much more important than financial resources, institutional means or even legal matters.

# PLANAT – A Swiss Success Story

## Starting position

- The preparatory meetings strengthened the stakeholders' will to take further steps towards a national platform.
- A high-level official of a Federal agency was ready to take the lead for further steps.

## Steps taken

- The mandate of the future platform had to be discussed and defined.
- The thematic focus of the future platform had to be defined.
- Gender perspectives and language minorities had to be considered for the platform membership.
- Platform members representing the Cantons, the insurances, research, and the private sector had to be carefully selected.
- An acronym and a logo for the platform had to be developed.
- The request for the Federal Government to initiate the platform had to be prepared.
- The launch of the platform (brochure, press release) had to be prepared.

#### Who was involved?

• All people involved in the preparatory discussions.

## Questions to be answered

- What are the chances of a national platform what problems might arise?
- What kind of questions and problems should be discussed on the platform?
- How can synergies be used between the various stakeholders?
- What are the target specifications of a national platform?
- Should the platform primarily be restricted to prevention, mitigation and preparedness or should it cover the whole disaster risk reduction circle, including intervention, response and recovery?
- What organizational framework is needed to run the platform efficiently?
- Who will take the lead of the platform?

## What conditions facilitated the task?

- Federal Government and key representatives of governmental agencies were very supportive of the platform idea.
- The idea of a platform was recognized as a chance and win-win situation for all stakeholders involved and not perceived as a threat.
- Full commitment of all members of the preparatory group to become a member of the platform was essential.
- Support of a governmental agency secretariat to prepare meetings.

#### Lessons learned

- The members of the preparatory group should be identical with the platform members to ensure and maintain full commitment for the platform's goals.
- The maximum number of members should not be maintained from the beginning, so to have a possibility to include further stakeholders at a later stage.
- Creating an acronym and a logo helps to increase identification with the platform.
- Including in an early stage representatives from weather services, media, critical infrastructures or industries as platform members might have been useful especially when looking for public-private partnership models.
- The restriction of the thematic focus to prevention and mitigation made it easier to gather the responsible governmental agencies in a platform but slowed down the process of looking at the whole risk circle and of integrating response and recovery into the integral risk management process.



International exchange of experiences between PLANAT members and CWRC. Wuhan, China, April, 2006.
Photo: Florian Widmer. PLANAT

## References

• PLANAT Swiss National Platform for Natural Hazards. www.planat.ch



Heavy rain falls caused flooding of parts of the city of Berne on August 22, 2005. Photo: Simone Hunziker, PLANAT/FOEN

The Swiss National Platform for Natural Hazards PLANAT was established as a common effort of a number of stakeholders to support a paradigm shift in handling natural hazards: from a defense against danger mentality to risk awareness. PLANAT should act on a strategic level (e.g. development of a vision and strategy to cope with risks due to natural hazards) and as a coordinator among the various stakeholders. PLANAT as a coordinating institution will not become active on an operational level.

## **Results**

A dedicated team effort and the interaction of key players from line ministries, disaster management authorities, science, civil society and other fields concerned with disaster reduction made it possible to create PLANAT as a strategic, consultative body to the Federal Government. The Federal Government constituted PLANAT as an extra-parliamentary commission in late 1997. No additional legal base was required for this step as existent regulations for Federal commissions could be applied.

The primary focus is on sustainable prevention and mitigation; a link to intervention, response and the risk transfer with insurances exists through the members of the platform representing these fields. PLANAT shall increase national leadership and commitment to the sustainability of disaster risk reduction.

As a national forum for discussion and coordination between the different fields and stakeholders PLANAT facilitates information and knowledge sharing as well as technology transfer, thus encouraging and enhancing collaboration and coordination to increase the knowledge and skills on disaster risk prevention and reduction. PLANAT provides policy guidance, harmonizes strategies and coordinates activities to improve the implementation of disaster risk reduction activities, reveals gaps, identifies synergies and starts a risk dialogue with the general public.

## Starting position

• To link a platform made up of a variety of public and private stakeholders to the Federal Government as an advisory group was achieved by creating an extra-parliamentary commission. This was possible within the existent legal framework for commissions.

## Steps taken

- The institutional and organizational setup of the platform had to be clarified and the final selection of the platform members and of the steering committee members had to be prepared.
- Agreement on future activities, a budget and the allocation of the permanent secretariat to a governmental agency had to be arranged.

#### Who was involved?

- Experts, temporarily involved, for clarification of legal and administrative aspects of the platform.
- The Federal Ministry for Environment, Transportation, Energy and Communication DETEC to which the platform was planned to be attached institutionally.
- The Federal Office for the Environment FOEN, to which the platform should be attached formally.

#### Questions to be answered

- What is the most appropriate institutional and organizational framework to effectively run a platform (steering committee, working groups, secretariat)?
- Where should the platform be anchored?
- What type of activities should be supported by the platform?
- What budget would be needed to run the platform and where would the money come from?

## What conditions facilitated the task?

- An open, constructive and supportive atmosphere in all preparatory meetings.
- The allocation of the presidency and the secretariat to one governmental agency was unanimously accepted.
- Several governmental agencies were ready to support the platform's strategic project activities with additional resources out of their own budget.

## Lessons learned

- Creating the platform in an institutional framework, in which the legal framework already existed enormously facilitated the implementation of the platform.
- The nomination of the platform members by the Federal Government was important to give the platform a high recognition.
- The limitation of the platform membership to four years with the possibility for re-nomination for another four years is positive as then routine cannot set it quite so easily and as new members are likely to bring new ideas as well.
- Limiting the number of members to 20 keeps it manageable (see also member list on www.planat.ch).
- To run the platform with a steering committee and a permanent secretariat turned out to be very efficient. The steering committee consists of six people and meets in three times a year for half a day.
- Small working groups have been successfully created, taking care of permanent tasks such as for example communication and information, or the furthering of specific topics such as the working group on safety who was responsible to prepare a draft of a vision and a strategy.



Excursion of PLANAT members to study the effects of forests to protect against rockfalls (Weesen, Canton St. Gallen, May 11, 2004). Excursions combined with plenary sessions provide in-depth professional discussions and deepen the PLANAT team spirit.

Photo: Simone Hunziker, PLANAT



Rockslide in Randa, Canton Valais. May, 1991. Photo: Andreas Götz, PLANAT/FOEN

To be able to create and run a national platform, it was necessary to clarify its institutional setup. Members of the platform had to be selected and nominated. A budget and the allocation of the resources had to be defined. Finally, organizational issues had to be considered.

PLANAT has been created as an extra-parliamentary commission and is as such a consultative body to the Federal Government with no direct link to the Swiss Parliament. It has no executive and legislative power and is not active on an operational level. PLANAT is formally attached to the Federal Ministry for Environment, Transportation, Energy and Communication DETEC. The secretariat is hosted at the Federal Office for the Environment FOEN to secure a close link to the actual president, who is a deputy director general of the FOEN. In future, the presidency and the permanent secretariat might also be hosted by another Federal agency.

PLANAT has a regular, annual line budget of the FOEN, which is used to cover running costs for administrative support, as seed money for strategic projects and for some additional crosscutting activities. PLANAT has an annual budget of CHF 440 000 (equal to USD 350 000). As a rule, governmental institutions whose primary focus the respective issue is finance strategic projects. However, not money is the most important thing, but the will to move into the same direction.

The PLANAT president relies on a six-member steering committee to discuss current business and to prepare the three annual plenary sessions. PLANAT has a permanent secretariat with an executive secretary and a public relations manager. As part of a democratic process, the PLANAT plenum discusses all relevant matters. PLANAT has initiated and mandated actually three working groups (communication, safety, international relations) consisting of PLANAT members. Additional external experts and resources may be involved and mandated for specific tasks and projects.

## Starting position

• The Federal Government had approved bylaws and guidelines how to run the platform.

## Steps taken

- A permanent PLANAT secretary (full-time) and a public relations specialist (part-time) were hired to run the daily business of the platform.
- Future goals, activities and targets for working groups had to be defined, members nominated and the lead as well as the organizational structure had to be approved.
- PLANAT was made known to other governmental offices, not represented in PLANAT, to the Parliament, to the private sector and to the general public with PLANAT reports and folders and the PLANAT web site www.planat.ch.
- Contacts to the UN/ISDR system had to be established.
- The PLANAT Science Award committee had to be established.

#### Who was and is involved?

- The operational phase needs the strong commitment of all PLANAT members but specifically of the president, the permanent secretariat and the steering committee.
- PLANAT members have to be ready to accept temporary commitments.

## Questions to be answered (to be asked periodically)

- Are adaptations necessary in running PLANAT be it the secretariat, the steering committee or the platform itself?
- Does the platform meet the requirements and the members' expectations?
- How to cooperate best with neighboring countries and with the UN/ISDR system?
- What activities support the platform's goals?
- How to raise public risk awareness?

## What conditions facilitated the task?

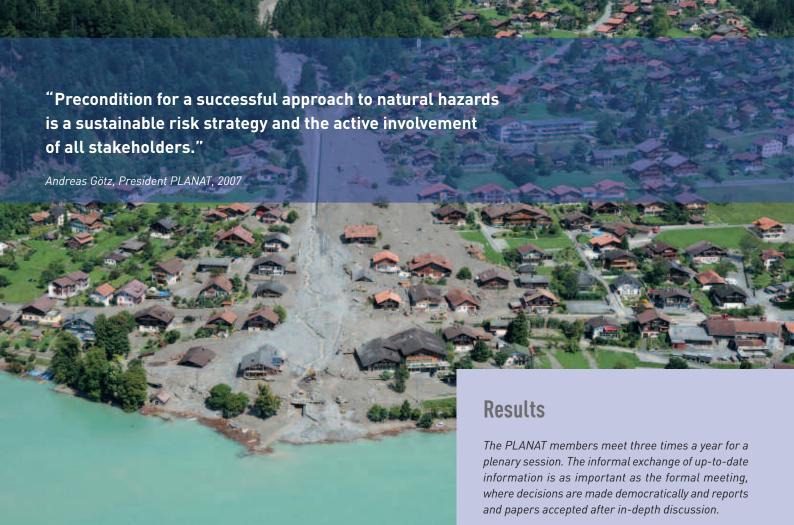
- An ongoing open, constructive and supportive atmosphere in all the meetings
- A permanent deepening of the corporate team spirit and an improved common understanding.
- Governmental offices who continue to support the platform's strategic project activities with additional resources from their own budget.

#### Lessons learned

- A permanent secretariat facilitates the running of the daily business.
- An Internet platform, open for other institutions and associations which
  might not be able to run a web site at their own expenses, is highly appreciated and supports the continuously growing influence of PLANAT in
  Switzerland.
- PLANAT members are not reimbursed for their membership activities.
   They receive an attendance fee and the travel expenses. This system has proved to be useful and is a clear sign of commitment for the platform.
- The PLANAT Science Award is highly recognized, but it only gets a limited number of applications. The thesis advisors might have to be informed better and integrated into the decision making.



PLANAT members on a thematic excursion to the Trift glacier, related to the consequences of climate change, Canton Berne, 2006. Photo: PLANAT



In summer 2005, the village of Brienz, Canton Berne, has suffered two major debris flow events with fatalities and heavy damage to settlements.

Photo: © Swiss Air Force

Running a national platform requires clear guidelines for the tasks and responsibilities of the PLANAT assembly with the plenary sessions, the steering committee, the presidency, the permanent secretariat, the working groups and of each individual member. Not only formal aspects are important. To create the right environment for fruitful discussions and a culture, which supports the high level of commitment of each individual platform member, also informal, social aspects are important and have to be considered and carefully planned.

The steering committee meets three times a year for half a day. Together with the president, it has responsibilities for strategic questions, in consultations for drafted federal laws, regulations and guidelines, and it prepares the agenda for the plenary sessions. Over the last 10 years, PLANAT has been asked several times to comment on drafted federal laws. The steering committee also supervises and guides the working groups and the strategic projects such as defining a vision and a strategy. Contracts for strategic projects are commissioned to private consulting companies based on the evaluation of tenders. Companies may only submit a tender after passing a pre-qualification process.

The working groups are established either for a limited time period to answer specific questions, such as the working group on safety which drafted the vision and strategy, or as a permanent group with a continuous mandate, such as the groups responsible for communication and information respectively for international cooperation. The groups consist of four to six PLANAT members and may be complemented by temporary, external members.

The permanent secretariat puts great effort into the communication with its members and with professionals and the general public. It runs the web-based platform "Natural Hazards in Switzerland," which is open to other interested groups (see www.planat.ch).

For the promotion of young scientists, PLANAT once a year awards the PLANAT Science Award to the best PhD thesis related to a topic around risk and natural hazards from a Swiss university.



The PLANAT strategy includes the risk concept, the strategic controlling and the risk dialogue.
[Accord. to Ammann, 2006]

#### References

- PLANAT (2004): Protection against Natural Disasters Vision and Strategy (in French, German and Italian only). See also www.planat.ch/shop.php? navID=25&view=detail&shopProductID=367&userhash=24898424&l=d
- PLANAT (2005): Executive Summary "Protection against Natural Hazards in Switzerland – Vision and Strategy." See also www.planat.ch/shop.php? navID=25&view=detail&shopProductID=501& userhash=24898424&l=e
- Ammann, Walter J. (2006): Risk concept, risk management and risk governance. In: RISK 21 Coping with risks due to natural hazards in the 21st century. Eds.: Ammann, W. J.; Dannenmann, S.; Vulliet, L.; Taylor and Francis, London, 2006, pp. 2–23.

## Starting position

• PLANAT was mandated in 2000 by the Federal Government to develop a comprehensive and interlinked strategy for an improved protection against natural hazards in Switzerland.

## Steps taken

- A working group was appointed by PLANAT to draft a vision and a strategy.
- In several workshops and meetings, a draft vision was prepared, and got submitted to a formal plenary discussion. PLANAT approved the vision in summer 2001.
- In subsequent workshops and meetings, the strategy was drafted based on the vision by the same working group. Their chairman periodically informed the steering committee and the plenary assembly.
- Vision and strategy were approved by PLANAT at the plenary session in November 2002, the Federal Government confirmed the approval on August 20, 2003.

#### Who was involved?

- A working group of PLANAT members and external experts 20 people in all.
- An expert to support the chairman in drafting the strategy and an experienced journalist to review the drafts to make them readable for politicians and the general public.
- The PLANAT steering committee and the plenary assembly.

## Questions to be answered

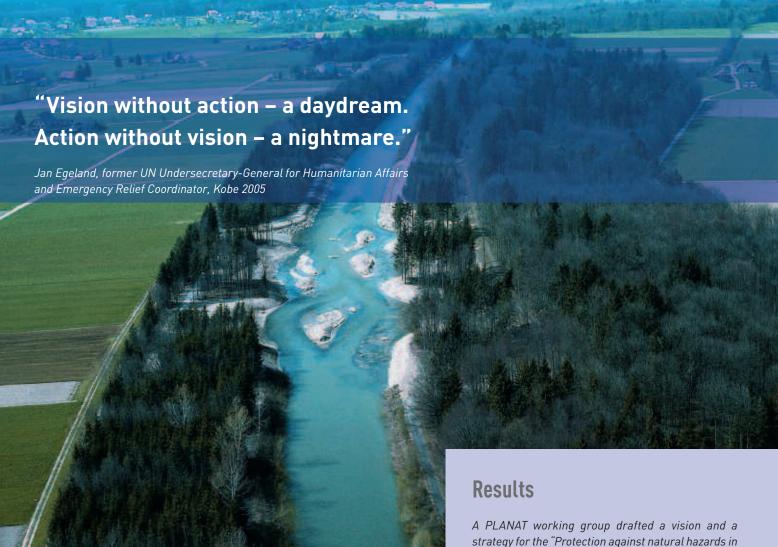
- What are the key messages in a vision and what do they imply for the strategy?
- How can a consensus on the strategy be reached across various agencies and institutions?
- What priorities have to be set in the action plan?

## What conditions facilitated the task?

- The stepwise elaboration, discussion, revision and approval of the documents.
- The capacity of all people involved to understand that a paradigm shift will only be feasible with the common base of a vision and a strategy.

## Lessons learned

- When drafting the strategy, clear figures of the expenditures for disaster risk reduction measures in the public and private sector were not available. It was therefore not possible to already formulate firm conclusions and goals for the future repartition of available respectively necessary resources. Therefore, the strategy had to be adopted according to an improved insight into effective expenditures and cost-benefit analysis.
- Risk management involves multiple functions and institutions, such as
  forestry, water supply, land use, building regulations, public safety, police,
  ambulance services, fire fighters, departments of works, civil defense,
  and the military; they all have to be integrated, each with its own responsibilities and interests.
- Numerous uncertainties can increase future risks. Among the most important factors that have to be considered, monitored and periodically checked are mobility, vulnerability, leisure activities, sociopolitical changes and changing climate and weather patterns.
- Risk communication and risk dialogue with all stakeholders and the public have to start very early.



Renaturation of the river Emme at Aefligen-Utzensdorf, Canton Berne. The river Emme is known for heavy floods. The ecological improvement between the river dams still guarantees the protection function.

Photo: © document

The vision statement outlines the platform's view on dealing with risks due to natural hazards. It concentrates on the future, is a source of inspiration, provides clear decision-making criteria and is valid for the next decade. In order to become really effective, an organizational vision statement must become assimilated into the organizations culture and must be followed by a strategy, indicating the direction for the overall work to be accomplished. The strategy covers a ten-year period and is followed by an action plan, designed to achieve the PLANAT goals with the stepwise implementation of strategic projects. PLANAT has the responsibility to communicate the vision and strategy regularly and to encourage others to craft their own personal vision and strategy compatible with the platform's overall vision.

A PLANAT working group drafted a vision and a strategy for the "Protection against natural hazards in Switzerland." The resulting vision and strategy paper is a 40-page document. It is based on a clear principle: it positions natural hazards in an overall context alongside with other risks (namely technical, ecological, economic, and social). Decisions about safety and the protection of people as a social challenge have to be taken in this overall context and, while keeping sustainability in mind, examines them from economic, ecological and social points of view.

The strategy relies on the fundamental solidarity of the people of the whole country when dealing with catastrophes and encourages the development of a comprehensive risk consciousness. This is done by setting limits on the amount of effort put into preserving life, livelihoods, goods, and lifelines (aims of protection). It applies integrated risk management to deal with natural hazards. A risk-based management instead of a purely hazard-related approach is the key for the future.

The analysis and the assessment of risks, as well as the risk reduction measures all have to be based on a transparent and systematic framework – the risk concept. In our complex world with interdependent systems, an integral risk management must reach across disciplines and departments to allow better planning and reduction of the most pressing risks the society faces. The risk situation and the costs and benefits of measures need to be checked periodically (strategic controlling). A continuous risk dialogue is of vital importance for the public risk awareness and for the acceptance of the necessary measures.

## **Starting position**

- On August 20, 2003, the Federal Government approved the vision and strategy report on "Protection against Natural Hazards," prepared by PLANAT. Subsequently, PLANAT was mandated to establish the action plan, to report by the end of 2004 on the accomplished work and to draw up a "to do list" for a next phase starting in 2005.
- On May 18, 2005, the Swiss Federal Government took note of the PLANAT action plan and progress report and mandated PLANAT with the execution of the proposed projects. PLANAT has to report again in 2008.

## Steps taken

- The Federal Government's mandate for the time period 2003–2005 was split in three projects and mandated by PLANAT to a private consulting company (to roughly estimate all public and private expenditures for the protection against natural hazards), to a research institution (to evaluate basic principles and methods and to propose a risk concept) and to the existing PLANAT working group on communication (on how to communicate the strategy to stakeholders and to the public). The steering committee monitored the projects very closely.
- An executive synthesis report of all three projects was made and discussed in a special PLANAT plenary session. In 2005 the Federal Government approved the action plan for the next phase up to 2008.
- For this next step, PLANAT evaluated and mandated an external project manager with the overall management of the various projects. The project orders are placed to private companies or research institutions.

#### Who was and is involved?

- The PLANAT steering committee and the plenary assembly.
- PLANAT working group on communication, project teams and external advisory groups.

## Questions to be answered

- What kind of risk approach is best suited for dealing with natural hazards?
- How can the levels of safety be defined and consensus be achieved?
- How can the risk culture be implemented in all sectors and at all levels?
- What priorities have to be set in a next action plan?

## What conditions facilitated the task?

- The stepwise elaboration of projects and the periodic reporting on project progress in the steering committee and in the plenary sessions.
- The assignment of an external general project manager.
- To work with specific mandates with a concise and firm project management and not only with working groups.

#### Lessons learned

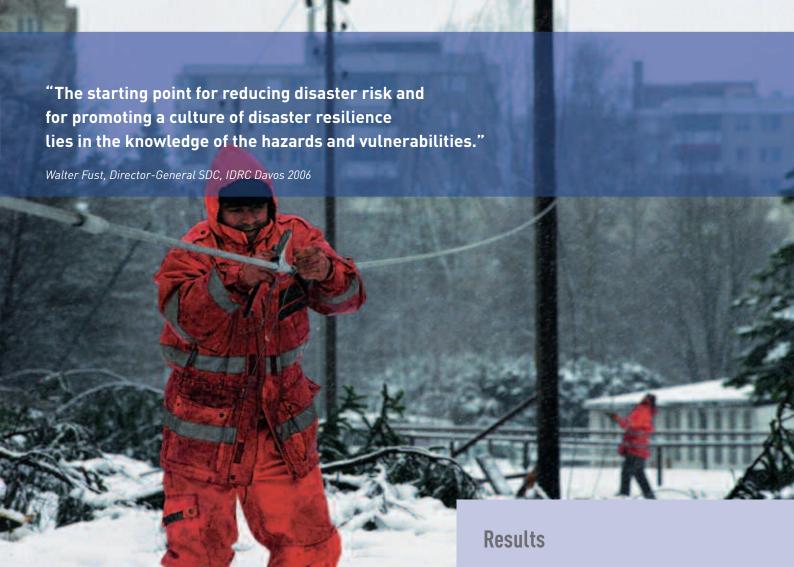
- Clear numbers about what it costs for whom to deal with risks was an important condition to proceed with other projects.
- In the future, the challenge of dealing with risks will be the constant change. Numerous uncertainties such as climate change can increase risks in the future. Therefore, strategies for dealing with risks due to natural hazards will have to be adapted periodically.
- A continuous, comprehensive risk dialogue is of vital importance for the
  public understanding and for risk awareness, but also for the acceptance
  of the necessary investments for risk reduction measures, thus transforming risk management to become transparent, understandable and a
  matter of public trust.



PLANAT as a (co-)organizer of conferences and workshops stimulates the risk dialogue with all potential stakeholders.
Photo: PLANAT

#### References

- PLANAT (2004): Activity Report 2001–2003 of PLANAT. See also www.planat.ch/ressources/ planat\_product\_de\_369.pdf
- PLANAT (2004): Legal Aspects in the context of hazard mapping. Study Lüthi, R. (in French, German and Italian only). See also www.planat.ch/ ressources/planat\_product\_de\_368.pdf
- PLANAT (2005): PLANAT Synthesis Report (in French and German only). See also www.planat.ch/ ressources/planat\_product\_de\_543.pdf
- PLANAT (2006): Risk communication and natural hazards. Study Siegrist, M.; Gutscher, H. (in German only). See also www.planat.ch/ressources/planat\_ product\_de\_784.pdf



The winter storm Lothar of December 26, 1999, caused 17 deaths and enormous economic losses (destruction of houses, interruption of roads, high-voltage power lines and other critical infrastructures).

Photo: Keystone

The strategy paper suggested an action plan, offering a variety of measures to deal with natural hazards in Switzerland. The action plan had to be prioritized and segmented into terms of 2–3 years. Before starting to implement these measures, a set of basic principles had to be clarified as a basis for a strategic reorientation: a review of all public and private expenditures to cope with natural hazards on all levels, a methodological approach to define how to cope with risks (the risk concept) and a comprehensive communication concept.

A nationwide evaluation of risks and resources, done for the first time, brought insight in the overall risk pattern of Switzerland and the repartition of expenditures to cope with natural hazards. A consistent risk concept has been developed, in line with technical risk-handling procedures. The concept has set clear guidance on how to analyze and assess risks, thus enabling to handle risks as a complex, mental construction. Dealing with risks always leads to the fundamental questions: How safe is safe enough? What can happen? What is acceptable to happen? And what needs to be done?

Methodologically sound approaches were developed for the assessment of risks, particularly for the risk aversion, and for the estimation of direct and indirect damages. In order to achieve a comparable level of safety from the risks due to natural hazards all over Switzerland, uniform limits had to be set, covering life and limb, property, and important infrastructure.

To successfully influence the public attitude and understanding of risks, a comprehensive risk dialogue is required. This must be part of a targeted communications concept. All stakeholders participate in wideranging dialogue and consensus building.

Guidelines for practitioners are elaborated or in preparation, e.g. a guideline for project quality assurance support, or to demonstrate the practicability of the PLANAT risk concept when applied to different natural hazards.

