National Platform for Disaster Risk Reduction



MINISTRY OF THE INTERIOR PUBLICATION 14/2012

MINISTRY OF THE INTERIOR Internal Security

National Platform for Disaster Risk Reduction

Helsinki, 2012

Ministry of the Interior Copy service Helsinki 2012

ISSN 1236-2840 ISBN 978-952-491-711-7 (paperback) ISBN 978-952-491-712-4 (PDF)

MINISTRY OF THE INTERIOR

DESCRIPTON

Date of publication 29.2.2012

Authors (name, chairman and secretary of the body)
National Cooperation Network for Disaster Risk
Reduction
Chairman: Pentti Partanen
Secretary: Taito Vainio

Authors (name, chairman and secretary of the body)
Publication
Commissioned by
Ministry of the Interior

Body appointed on
7 May 2010, SM028:00/2010

Name of publication

National Platform for Disaster Risk Reduction

Parts

Abstract

The Ministry of the Interior's Department for Rescue Services has been appointed the National Coordinator for the implementation of the Hyogo Framework for Action. The Hyogo Framework for Action was drafted by the Kobe Conference in 2005. The task of the National Coordinator is to report to the United Nations on the results of work to prevent disasters caused by natural hazards and mitigate their damage.

The Finnish Cooperation Network was appointed on 7 May 2010 to act as a cooperation body and to prepare a National Platform for Disaster Risk Reduction. The Cooperation Network consists of a steering committee and an expert committee, whose tasks are specified in the letter of appointment (Appendix 1). The Cooperation Network is a permanent body, while its members are appointed at regular intervals. The mandate of the current Cooperation Network extends from 7 May 2010 until 31 December 2015.

The Cooperation Network aims to reduce risk factors of disasters caused by natural hazards and to improve society's preparedness for disasters caused by natural hazards. Its purpose is to compile and draw on the work carried out by various parties to mitigate the damage of natural disasters and to achieve more effective cooperation in order to mitigate the damage of natural disasters. The Cooperation Network does not have independent competence. All actions required to reduce disaster risks will be carried out by decision of the competent authority or party. The aim of the Cooperation Network is to clarify the overall picture of preparedness for natural disasters and to identify areas that require further action or development.

This document is the Action Plan for Disaster Risk Reduction ("National Platform") prepared by the Cooperation Network. It mainly features activities carried out by the participating actors to promote disaster risk reduction. It also describes the actions of parties who are not represented in the Cooperation Network but who, despite this, are associated with disaster risk reduction.

The activities are categorised following the priorities for actions referred to in the concluding document of the Kobe Conference, as progress on national efforts is reported following these priorities. The priorities for action include:

- 1) ensuring that disaster risk reduction is a national and local priority
- 2) identifying, assessing and monitoring risks and enhancing early warning
- 3) building a culture of safety and resilience
- 4) reducing the underlying risk factors
- 5) strengthening disaster preparedness and effective response.

Aspects that various parties focus on developing have been collected under each priority for action. The National Platform, aims also to monitor the progress in each issue. In addition, the Cooperation Network aims to find issues for which there is a clear need for development.

Kevwords

Prevention, international assistance, disaster relief, accidents, rescue services, risk management

Other information

ISBN number for online version 978-952-491-712-4 (PDF) available at www.intermin.fi/julkaisut

Name of series and number of publicat Ministry of the Interior publi		ISSN 1236-2840	ISBN 978-952-491-711-7
Number of pages 55	Language English	Price 25 euros + vat	Confidentiality rating public
Distributed by Ministry of the Interior		Published by Ministry of the Interior	

Contents

1 National Cooperation Network for Disaster Risk Reduction	3
2 Organisation of the National Platform	3
3 Risks of disasters caused by natural hazards	4
3.1 Floods	
3.2 Storms	
3.3 Forest fires	
3.4 Drought	6
3.5 Exceptional temperatures	
3.6 Biological disasters	
3.7 Disasters caused by natural hazards abroad	7
4 Aims of the National Platform	7
5 Operative goals	8
5.1 Ensuring that disaster risk reduction is a national and local priori	ity8
5.1.1 Legislation	
5.1.2 Security Strategy for Society	
5.1.3 Internal Security Programme	
5.1.4 Government decision on the objectives of security of supply	
5.1.5 Adaptation to climate change	
5.1.6 Flood risk management	
5.1.7 Safeguarding the availability and distribution of household wa	
during disruptions	
5.1.8 Security planning	13
5.2 Identifying, assessing and monitoring risks and enhancing	
early warning	
5.2.1 Emergency Response Centre operation	
5.2.2 Government security network project (TUVE)	
5.2.3 VIRVE radio network	
5.2.4 Real-time radiation monitoring network	
5.2.5 On-call arrangements at the national, regional and local level	16
5.2.6 Early warning system for disasters caused by natural hazards	
(LUOVA)	
5.2.7 Developing weather warnings	
5.2.8 Flood warnings	
5.2.9 Roof snow load warning system	
5.2.10 Forest fire monitoring system	
5.2.11 Official notification transmission system	19

5.2.12 Citizens' portal for crisis communications	19
5.2.13 Preparedness for nuclear, biological and chemical disasters	
(NBC)	
5.3 Building a culture of safety	
5.3.1 Travel advice from the Ministry for Foreign Affairs	
5.3.2 Education, preparedness and campaigns	
5.3.3 Testing of plant engineering and household water hygiene skills	
5.4 Reducing underlying risk factors	
5.4.1 Flood risk management	21
5.4.2 National objectives for regional land use	
5.5 Strengthening disaster preparedness and effective response	
5.5.1 Rescue services and municipalities	
5.5.2 Developing and maintaining security of supply	
5.5.3 Accident Investigation	
5.5.4 Management and forming of a situational picture	
5.5.5 Traffic Information Centres of the Finnish Transport Agency	
5.5.6 National, regional and local preparedness exercises	
5.5.7 Promoting preparedness	
5.5.8 Training	
5.6 International activities	
5.6.1 Including the perspective of disaster risk reduction in key policy	
programmes	29
5.6.2 Mainstreaming disaster risk reduction in development	20
cooperation	
5.6.3 Bilateral and multilateral political dialogue	
5.6.4 Support for the UNISDR secretariat	
5.6.5 Multilateral organisations supported by Finland	30
5.6.6 Taking the gender equality perspective into account in disaster	
risk reduction	
5.6.7 EU and UN level political cooperation	
5.6.8 Assisting Finnish people abroad during disasters	31
5.6.9 Developing international technical assistance and rescue	
operations	
5.6.10 Coaching and training for development cooperation	
5.6.11 Developing global preparedness and risk reduction	
5.7 Key research projects	
5.8 International parties, conventions and cooperation networks	33
6 Other objectives	34
7 Monitoring and reporting of target achievement	34
8 Objectives of the National Platform	35
APPENDIX 1: Appointment decision	51

1 National Cooperation Network for Disaster Risk Reduction

The Ministry of the Interior Department for Rescue Services was appointed to coordinate the national implementation and monitoring of the Hyogo Framework of Action. The Hyogo Framework for Action (HFA) was prepared at the Kobe Conference in 2005. The United Nations General Assembly endorsed the HFA in 2005 as the common frame of reference of disaster risk reduction for national actors and the international community (UN General Assembly Resolution 60/195/2005). The tasks of the National Coordinator also include reporting on the efforts to prevent and reduce natural disasters to the United Nations.

The Kobe Conference set objectives aiming at sustainable development and, in this context, effective action for disaster risk reduction. The priorities of action cited in the concluding document include:

- 1) ensuring that disaster risk reduction is a national and local priority
- 2) identifying, assessing and monitoring risks and enhancing early warning
- 3) building a culture of safety and resilience
- 4) reducing the underlying risk factors
- 5) strengthening disaster preparedness and effective response

A global mid-term review of HFA implementation was completed under the coordination of the United Nations ISDR Secretariat (International Strategy for Disaster Risk Reduction) in 2010.

The Finnish Cooperation Network was established on 7 May 2010, and its task is to act as the Cooperation Network and to prepare a National Action Plan for Disaster Risk Reduction.

2 Organisation of the National Platform

The Cooperation Network consists of an executive committee and an expert committee, the tasks of which are specified in the letter of appointment (Appendix 1). The Cooperation Network is a permanent body, while its members are appointed at regular intervals. The mandate of the current Cooperation Network extends from 7 May 2010 until 31 December 2015.

The National Platform aims to reduce risk factors and to improve society's preparedness for disasters caused by natural hazards. Its purpose is to bring together and draw on the work carried out by various parties to reduce disaster risks and to achieve more effective cooperation in disaster risk reduction. The Cooperation Network does not have independent competence. All measures required to reduce disaster risks will be carried out by decision of the competent authority or party.

The Finnish National Platform will contribute to developing cooperation with the European Union, neighbouring countries of Finland and donors of development cooperation, and in this context, developing countries will be supported in their efforts to enhance their national and international cooperation regarding preparedness for disasters caused by natural hazards. The National Platform takes into account the impacts of climate change on the risk factors.

The basic principles of the National Platform include equality and gender equality.

3 Risks of disasters caused by natural hazards

The UN has classified natural disasters caused by natural hazards into three categories. This classification provides an excellent foundation for a systematic examination of the risks of disasters caused by natural hazards. In the table below, natural hazard risks have been categorised following the UN classification by disaster type.

Figure 1. Types of disasters caused by natural hazards

Hydrometeorological	Geological	Biological
- Floods	- Earthquakes	- Epidemics
- Storms (including	- Tsunamis	- Infectious animal and
thunderstorms and	- Volcanic eruptions	plant diseases
flashing)	- Landslides	- Insect infestations
- Extreme precipitation		- Damage caused by
(Rain, snow, ice storms,		poisonous or harmful
hail showers)		insects
- Drought		
- Exceptional temperatures		
- Forest fires		
- Depopulation		
- Avalanches		
- Landslides		

All disaster types listed in this table concern Finland, or Finnish people abroad, at some level of probability. In the early phases of the National Platform, it is essential to focus on those disaster types that concern Finland or, in a wider sense, Finnish people abroad. In Finland, the most likely types are hydrometeorological disasters with an emphasis on floods, storms, forest fires and problems caused by exceptional temperatures and drought. In addition to these, Finnish people abroad can be affected by earthquakes, tsunamis and volcanic eruptions.

3.1 Floods

Floods are divided into river floods, floods from the sea and flash floods. River floods, or the flooding of rivers and lakes, are usually caused by heavy rainfall and snow meltwater in Finland. Ice and slush dams may also result in a dramatic rise of river water levels locally. A sudden rise in the sea level following a storm causes floods in coastal areas. In urban areas in particular, damaging floods are also caused by heavy localised rainfall. The magnitude of a flood disaster may be greater if a coastal town is, for example, afflicted by several different flood types simultaneously.

3.2 Storms

A storm refers to a strong wind with speeds of 21 - 32 metres a second. A storm is only exceeded in strength by a hurricane (more than 32 m/s). The limit of a strong wind in weather forecasts is 14 m/s. Wind speed is calculated from the average wind speeds over 10 minutes. Storm winds may be associated with extensive depressions, or hurricanes and typhoons occurring further south.

Another type of storm is a thunderstorm which may, at least locally, be associated with tornados and downbursts as well as powerful flashing. These phenomena may even cause severe damage, for example to the built infrastructure and trees.

3.3 Forest fires

Forest fires are divided into fires in actual forest areas and other wildfires. Forest fires include fires in commercial forests and fellings and peatland fires. Other wildfires include grass, park, road margin, landfill, peat production area and peat stack fires. Some 60 per cent of wildfires are caused by careless human activity. Approximately 10 per cent of these fires are started by lightning.

Smoke and fine airborne particles originating from forest fires outside the national borders and drifting into Finland are another problem.

3.4 Drought

Many areas of Europe already suffer from problems caused by water scarcity and drought. This situation is expected to deteriorate further due to climate change and pressures increasing water consumption. Water scarcity and drought directly affect many vital functions of society that depend on water (drinking water, farming, tourism, energy and transport) and, indirectly, also the environment (biodiversity, water quality, forest fires and soil exhaustion). It has been recognised that water scarcity and droughts are two different issues: in the former case, water consumption is not in balance with the available water resources, and in the latter, the available water resources are significantly lower than the long-term average.

3.5 Exceptional temperatures

Exceptional temperatures refer to extended cold or hot periods, which may endanger human health and safety, damage power supply, communication, transport and water supply systems, other infrastructure and property and the environment, and which may disrupt industrial production.

Great snow loads combined with periods of extreme sub-zero temperatures can be considered particular problems in Finland. A heavy, dense and wet snow load in particular may cause problems for the power supply.

3.6 Biological disasters

Biological disasters caused by natural hazards may include infectious diseases, epidemics, and chemical and microbiological environmental risks.

Under the Communicable Diseases Act and Decree, the Vaccinations Decree (Rokotusasetus 421/2004), act on the International Health Regulations (IHR 2005; Laki kansainvälisestä terveyssäännöstöstä), the Health Protection Act (Terveydensuojelulaki 763/1994), the Food Act (23/2006) and the Zoonosis Centre Decree (Asetus Zoonoosikeskuksesta 1153/2006), the National Institute for Health and Welfare's Division of Health Protection has extensive duties in implementing the national monitoring of infectious diseases and acting as a national expert organ in the implementation of programmes to prevent infectious diseases, the early identification, investigation and prevention of epidemics, in chemical and microbiological environmental risks, and in the preparedness for crises caused by unexpected biological or chemical threats.

3.7 Disasters caused by natural hazards abroad

An average of 387 disasters unfold annually around the world (2000–2009). The majority of these are floods (173 cases or 45 per cent), and storms (105 cases, 27 per cent). Exceptional temperatures, landslides and droughts are the cause of some 20 disasters every year.

In 2010, disasters claimed the lives of more than 297,000 people and caused suffering to 217 million. Financial losses amounted to 124 billion. The geographical distribution of disasters was in line with the average for the decade: 35 per cent in Asia, 25 per cent in America, 18 per cent in Europe and Africa and 4 per cent in Oceania. It should be noted that statistical data is distorted by major individual disasters, such as the earthquakes in Haiti and Chile and floods in Pakistan in 2010 (source: EM-DAT: the OFDA/CRED International Disaster Database).

4 Aims of the National Platform

The aim of the National Platform is to reduce risk factors and to improve society's preparedness for disasters caused by natural hazards following the priorities for action.

Another purpose of the National Platform is to compile and draw on the work carried out by various actors engaged in disaster risk reduction and to intensify cooperation between national actors in order to improve preparedness for disasters caused by natural hazards.

The aim of the Finnish National Platform is also to develop cooperation in this field with the European Union and our neighbouring countries. The National Platform will contribute to supporting developing countries both bilaterally and through cooperation within the EU and the UN in their efforts to enhance their national and international cooperation in order to prepare for disasters caused by natural hazards. The National Platform takes into account the impacts of climate change on risk factors.

The strategic goals of the Cooperation Network include:

- 1. Increasing awareness and understanding of disasters caused by natural hazards, reducing the risks and the impacts of disasters caused by natural hazards at the local, regional and national level.
- 2. Developing the cooperation to reduce the risks of disasters caused by natural hazards between the authorities and other parties in Finland.

- 3. Reducing risk factors and more effective preparedness for natural hazards in Finland
- 4. Mainstreaming the perspective of disaster risk reduction in Finland's development policy and cooperation, supporting the associated international cooperation and participation in it at the EU and UN level.

International cooperation:

- 1. Playing an active part in discussing disaster risk reduction issues in EU contexts.
- 2. Taking the perspective of disaster risk reduction into account in the planning and implementation of development cooperation projects and in political dialogue with Finland's partner countries.
- 3. Exerting influence to ensure that multilateral organisations supported by Finland will increasingly take disaster risk reduction (DRR) issues into account. Finland's support to the UNISDR secretariat will be increased from its current level (EUR 600,000/ year) to one million euros in 2012, and an effort will be made to keep it at this level until 2015.
- 4. In various development cooperation projects, including local cooperation and inter-institutional development cooperation projects, taking the goals of disaster risk reduction into account.
- 5. Taking into consideration and developing synergies between crisis management under the EU's Common Security and Defence Policy and international rescue missions in line with comprehensive crisis management principles.
- 6. In the Cooperation Network members' activities in international networks and organisations, the HFA goals will be taken into account.

5 Operative goals

5.1 Ensuring that disaster risk reduction is a national and local priority

5.1.1 Legislation

Under the Emergency Powers Act, the government, state administrative authorities, state businesses and other state authorities as well as municipalities shall ensure, by means of emergency plans, prior preparation of emergency operations and other measures, that their duties will be performed with the least amount of disruption, even under emergency conditions.

In many places, the exceptional weather phenomena of recent years have resulted in major disruption to the normal functions of society, and to control these situations, it has been necessary to resort to measures specified in the emergency plans.

Under the Rescue Act, the owner and occupants of buildings and the business and industrial operators shall, for their part, prevent dangerous situations, prepare for the protection of persons, property and the environment in dangerous situations, prepare for taking such rescue action which they are capable of performing independently, and to take measures to ensure safe exit during fires and in other dangerous situations and to facilitate rescue operations.

The Rescue Act also contains provisions on the various authorities' duty to participate in rescue operations as stated in the regulations of the relevant authority or other legislation and the duty to work together in preparing the required rescue plans.

5.1.2 Security Strategy for Society

On 16 December 2010, the government adopted a resolution on the Security Strategy for Society. This strategy was prepared in wide-based cooperation, the participants in which included not only authorities but also representatives from the private sector and from NGOs. This resolution replaces the Government Resolution on Securing the Functions Vital to Society adopted in 2006.

The Resolution on Security Strategy for Society, which is based on a wide concept of security, gives a concrete expression to the principles, objectives and implementation criteria for Finland's security policy contained in the Finnish Security and Defence Policy Report 2009. The Strategy provides the common basis for preparedness and crisis management for all actors in society. It guides the preparedness of state authorities and provides a uniform basis for preparedness for municipalities, private sector organisations and NGOs.

The hazard models and examples of disruptions specified in the Security Strategy for Society cover both hydrometeorological and biological disasters caused by natural hazards natural. The hazard models and examples of disruptions are discussed at a general level. The aim of this strategy is to highlight external and internal factors that may disrupt the functioning of society and thus, for example, risk the safety of the population.

The Security Strategy for Society will be updated approximately every four years. An effort will be made by various actors to promote the principles of the latest Security Strategy as effectively as possible.

5.1.3 Internal Security Programme

A resolution on the second Internal Security Programme was adopted by the government on 8 May 2008. The objectives of this programme will run until 2015, and its results will be evaluated at the end of the government term. The Internal Security Programme contains a security project for cities, which was prepared in cooperation with 16 of the largest cities in Finland. A total of 44 per cent of the Finnish population live in these 16 cities.

According to the Government Programme of Jyrki Katainen's government, a third Internal Security Programme will be prepared. In line with the wide-based concept of security, the third Internal Security Programme should also focus on disaster risk reduction.

5.1.4 Government decision on the objectives of security of supply

The government sets the general objectives for the security of supply, specifying the required level of preparedness with a view to the minimum needs of the population, a vital industrial life and national defence. In the security of supply objectives, the main emphasis is on ensuring the functioning of society by securing the operating preconditions for key production and service systems in a modern internationalised, technical and networking operating environment. The foundation for this is that preparedness measures will maintain infrastructures that are necessary for the vitality and functional ability of the population and the functioning of society and critical production during serious disruptions in normal conditions and in emergency conditions, including a state of defence with no time limits.

The latest decision on the security of supply objectives (21 Aug 2008) defines priorities for development for the next few years. They are divided into safeguarding critical infrastructure on one hand (energy supply grids, information and communication systems, transport logistics, financial systems, water supply and other civil engineering systems, infrastructure construction and maintenance), and critical production on the other (food supply, energy supply, health care, production supporting national defence, import production), with individual and sector-specific objectives specified for each.

5.1.5 Adaptation to climate change

Adaptation to climate change refers to the environment and people adapting to or preparing for changes in the climate that are expected to take place or that have taken place, including extreme weather events, either by minimising their harmful effects or exploiting the advantages. This adaptation may be proactive, planned or reactive. Finland's National Strategy for Adaptation to Climate Change was prepared in 2005. Its

aim is to enhance and increase our ability to adapt to climate change and to reduce the costs caused by climate change to society. It describes the impacts of climate change and possible adaptation measures in 15 sectors. The proposed measures run as far as until 2080, and they are divided into immediate, short-term and long-term actions. The general objective is that detailed analysis of the impacts of climate change and specifying adaptation measures will be mainstreamed as part of ordinary planning, implementation and monitoring in various sectors.

The Adaptation Strategy was first evaluated in 2009. The evaluation set out to map the extent to which the actions proposed in the strategy had been launched in each sector. The evaluation indicated that the most far-reaching results in the implementation of the Adaptation Strategy had been reached in water resource management, in which adaptation to climate change has been well integrated as part of policy-making. The strategy implementation has also progressed well in the transport sector and in farming and forestry, while in most other sectors it is only in its early phases. The strategy will be updated in 2011-2013.

A Climate Change Adaptation Research Programme (ISTO, 2006-2010) was completed as part of the Adaptation Strategy implementation. This research programme produced information needed to plan practical adaptation measures. In addition, the Ministry of the Environment and the Ministry of Agriculture and Forestry have prepared their own action plans for adaptation to climate change. The action plan of the Ministry of the Environment was completed in 2008 and updated in 2011. The updated action plan covers 2011 and 2012 and its measures are related to themes such as regional land use, construction and housing. The action plan of the Ministry of Agriculture and Forestry covers the 2011-2015 period, and it contains measures relevant to farming and forestry, fisheries and game husbandry as well as rural policy. Both of these action plans prepared by the ministries propose actions related to water resources and water supply management. In addition, the Ministry of Transport and Communications commissioned studies on preconditions for adaptation regarding various modes of transport and prepared practical examples of adaptation situations that have already been actualised.

The mandate of the Finnish Meteorological Institute includes producing forecast and warning information directly associated with weather, and through the LUOVA system, with other natural disasters. The Institute's mandate also includes research and development activities relevant to these themes, particularly from the perspective of climate change. Information disseminated by the Finnish Meteorological Institute on research outcomes and other activities maintains the awareness of the general public and other actors of disaster risks and ensures that reducing these risks remains a priority for various parties.

The Association of Finnish Local and Regional Authorities is involved in the climate work of municipalities through their climate campaigns, and it helps by disseminating

information about climate change and the good practices of municipalities, as well as by developing tools for controlling climate change and preparedness for it.

The Board of the Association of Finnish Local and Regional Authorities adopted a climate policy on 2 June 2010. Through its policies, the Association wishes to support municipalities and regions in making the decisions that are necessary for the climate while also informing state administration policy-makers of the municipalities' needs regarding preconditions for climate work.

According to these policies, the municipalities will prepare for the consequences of climate change and take them into account in the preparedness and security plans of various sectors.

To support policy-making in municipalities, the Association of Finnish Local and Regional Authorities is planning a guide on controlling and preparing for climate change. This guide is due to come out by the end of 2011.

5.1.6 Flood risk management

The raising probability of severe flooding and long periods of drought will increase the need for preparedness in the future. For improved flood risk management, we must focus on risk assessment, analysis and planning. In risk assessment, biological disasters caused by natural hazards, including contaminated animals and plants and their destruction, will also be taken into consideration. Compared to other urban structures, landfills, and in particular landfills containing hazardous waste, may spread hazardous substances to the environment in the event of a flood. In addition to preparedness for traditional river floods, the preparedness for risks caused by rising sea levels and floods caused by heavy rainfall must be improved. The EU Floods Directive, which guides flood risk management, was transposed to become part of Finnish legislation in the shape of the Flood Risk Management Act (620/2010). Nuclear power plants are included as special sites in the assessment of coastal flood risks under the Flood Risk Management Act. This assessment was carried out in spring 2011 and will be repeated every six years.

The implementation of this Act is guided and overseen by the Ministry of Agriculture and Forestry together with the Ministry of the Interior, the Ministry of Transport and Communications and the Ministry of the Environment. Responsibility for implementing the Act and the Decree issued under it is assumed by the Centres for Economic Development, Transport and the Environment (ELY Centres), municipalities, rescue authorities, Regional Councils, the Finnish Environment Institute and the Finnish Meteorological Institute. Flood risk management is coordinated with water resources management, which is within the mandate of the Ministry of the Environment. The Finnish Environment Institute is developing a flood information system that will serve the planning and reporting of flood risk management.

5.1.7 Safeguarding the availability and distribution of household water during disruptions

The availability of household water may be disrupted in a water supply network due to disasters caused by natural hazards or other reasons. In sparsely populated areas, the availability and quality of a household water supply based on private wells may deteriorate, particularly following long periods of drought. The obligations of organising water supply and planning its development imposed on municipalities by the Act on Water Services (119/2001) apply both in normal conditions and during disruptions. In its final report (working group memorandum MMM 2010:6), the working group on reviewing the Act on Water Services proposed, however, that the provisions be made more detailed in order to methodically secure the availability and distribution of household water in all conditions. The aim of drafting the review of the Water Services Act is that the amendments will enter into force in 2013.

Under section 8 of the Health Protection Act, municipal health protection authorities shall, together with other authorities and agencies, prepare in advance for emergency and safety measures that are required to prevent, investigate and eliminate health hazards. This is particularly relevant to emergency preparedness of plants supplying household water. Section 8 of the Health Protection Act also imposes the duty to prepare a plan for securing the quality of household water during disasters and emergencies on the National Supervisory Authority for Welfare and Health (Valvira). Based on the plan prepared by Valvira, emergency preparedness of plants providing household water will be one of the priorities for the national supervision programme of environmental health in 2011-2015.

In order to ensure a safe supply of household water, all persons in Finland who work at plants supplying household water and whose actions at work may affect water quality must pass an examination in plant engineering and household water hygiene skills.

5.1.8 Security planning

Security planning takes place at the national, regional and local level. The Internal Security Programme specifies national goals for security work at the strategic level. The drafting of the third Internal Security Programme also includes the preparation of regional implementation plans under the direction of the Regional State Administrative Agencies. The actual planning, however, takes place at the local level in municipalities as well as by private companies and other agencies.

Local level security planning was launched at the turn of the millennium, and it is now a key part in the implementation of the Internal Security Programme. The aim of security planning is to promote the safety of citizens through a partnership approach between various local level actors. Participants in this cooperation comprise authorities, NGOs and private sector organisations. Local security plans have been prepared in the majority

of municipalities either as a plan covering a single municipality, or a joint one for several municipalities. As security planning is about safety in a wide sense, it should also cover preparedness for natural disasters.

NGOs contribute the citizens' perspective on what they see as threats to local level security planning. NGOs are involved nationally in local security planning, and they engage in dialogue with the authorities on how to prevent these threats and the role NGOs play in preventing them.

Training provided by the Finnish National Rescue Association and implemented by its local members together with the rescue services reaches approximately 12,000 security officers annually who work in buildings that are subject to the duty to prepare emergency plans. This promotes the safety of the living environment, especially in urban areas, as well as enhancing cooperation between the authorities and citizens through emergency planning.

5.2 Identifying, assessing and monitoring risks and enhancing early warning

5.2.1 Emergency Response Centre operation

The operation and information systems of the Emergency Response Centres will be reformed and the centres will start operating as a network by 2015, ensuring that they can support each other at peak times and in emergency conditions. A key objective of the Emergency Response Centre reform is to ensure the reliability and speed of the ERC Administration's operation. A network-based operating model will also safeguard the operations of authorities relying on ERC services and facilitate the appropriate deployment of the authority's resources. The new ERC information system will enable cooperation between centres at peak times without special arrangements and thus enhances the crisis resilience of the entire chain of assistance.

The shared ERC operations and information system of the authorities will form a functional whole, making it possible to use shared systems, such as a joint field command system. Specifications of the new information system package were drawn up in cooperation with the ERC Administration, rescue services, police, social and health care services and the Border Guard. The solution combines the functionalities required for the command systems of Emergency Response Centres and other authorities using the system into a single, integrated package. The new properties and improved usability of the information system will facilitate real-time information flows between the various systems, the creation of a shared situational picture for the authorities, joint use of databases and other inter-authority cooperation and shared use of resources.

5.2.2 Government security network project (TUVE)

The aim of the Government Security Network project (TUVE) is to plan and implement a dedicated, secure communications network of a high level of preparedness for the highest levels of government and more than 30,000 security authority users.

In addition to the ministries, users of the secure network would also include key state authorities for public order and safety, national defence, rescue missions and civil defence, such as the defence forces, the police, rescue authorities, the Border Guard and the Emergency Response Centres.

The TUVE network and services will also be available for other actors who play a key role for security in society.

5.2.3 VIRVE radio network

The VIRVE radio network is a key part of the rescue and security authorities' management system. It offers a channel for secure inter-authority communications. The talk groups specified in the system efficiently support operative management. Situational picture data and instructions can be transmitted simultaneously to all those taking part in an operation.

The authorities actively use the services of VIRVE in discharging their daily duties. VIRVE is operated and its services are provided by State Security Networks Ltd. under the supervision of the Ministry of the Interior. However, VIRVE users can be found in several ministries and various rescue and security authorities. Their total number is approximately 31,000.

The operations of the security authorities require efficient and secure radio communications that may not be accessible to outsiders; furthermore, official communications should not be obstructed in the event that commercial services become jammed. The most important form of using VIRVE is a voice group call, but in addition, data transmissions are also showing strong growth.

A five-year investment programme in 2008–2012 will secure the VIRVE network's operating capacity well into the future. This programme aims to improve the availability of VIRVE services and the coverage and capacity of the network. VIRVE's network of centres will also be modernised, the network's software levels will be upgraded and its data transmission properties improved. The goal is that VIRVE as a whole will be an up-to-date and reliable official TETRA communication network that will remain in use after 2020. A particular aim is ensuring VIRVE's coverage across the entire country and indoors, along with its reliability during disruptions and in emergency conditions.

5.2.4 Real-time radiation monitoring network

The Finnish radiation monitoring network comprises 288 measurement stations. These stations continuously measure external radiation in the environment and transmit the results to an information system maintained by the Radiation and Nuclear Safety Authority via the data communication service offered by VIRVE. The use of VIRVE guarantees that transmissions will also be possible in difficult conditions. Local sensors measure radiation at one-minute intervals, and the results are transmitted as ten-minute averages to the Emergency Response Centre in each region and, simultaneously, to the national monitoring system.

5.2.5 On-call arrangements at the national, regional and local level

To ensure that the state leaders and central government authorities are kept informed continuously, a 24/7 government situation centre was set up in September 2007. The government situation centre has the duty to alert the government, permanent secretaries and heads of preparedness and to call them to councils, meetings and negotiations at exceptional times required by a disruption or a crisis.

The ministries have the duty to submit the situational picture for their entire administrative branch to the government situation centre and notify the centre of any security incidents in their field of activity. In urgent situations, the government situation centre also receives incident reports of security incidents directly from the authorities. In addition, the government situation centre follows public sources and receives situational awareness information in its role as the national focal point for certain institutions of the European Union and other international organisations. The situational picture compiled by the government's situation centre is communicated to the highest levels of government and the ministries' preparedness organisations, which pass the information on to individual ministries and their administrative branches.

In addition to the government situation centre, each ministry usually has on-call arrangements in place. The officials on call at the ministries can be reached by telephone 24/7. These officials and preparedness staff at the ministries are responsible for informing the management of their own administrative branches and the required partners.

Various on-call arrangements also exist at the regional level in the Regional State Administrative Agencies (AVI) and Centres for Economic Development, Transport and the Environment (ELY).

Regional rescue services maintained by the municipalities are also ready to cope with situations caused by natural disasters round the clock. Rescue services have also set up

situation centres that, depending on the region, work round the clock or become operational when necessary. The rescue services have full-time personnel, personnel working on contract and the requisite equipment at their disposal. The rescue services are alerted through the Emergency Response Centres.

5.2.6 Early warning system for disasters caused by natural hazards (LUOVA)

The early warning system for disasters caused by natural hazards (LUOVA) consists of various information systems and round-the-clock operative weather and safety monitoring. In LUOVA, information analysed by experts employed by the various agencies is compiled into warnings and a situational picture. LUOVA produces up-to-date, analysed information rapidly, and issues warnings of disasters caused by natural hazards that threaten Finnish citizens, the infrastructure and the functioning of the economy. In addition to the Finnish Meteorological Institute, information is contributed to the system by the Finnish Environment Institute SYKE (warnings of river floods) and the University of Helsinki Institute of Seismology. The development of the LUOVA system will continue in 2011 to ensure that the operative use of the system can begin in early 2012.

5.2.7 Developing weather warnings

The Weather and Safety Centre of the Finnish Institute of Meteorology prepares weather warnings for the Finnish land and sea areas 24 hours a day. During 2011, the existing warnings system will be upgraded and extended. For the warning period concerning the following 24 hours, alerts of high and low sea levels, wave heights, severe sub-zero temperatures and heatwaves will be introduced. Most of the new warnings will have three levels, making it easier to assess the ensuing risks and the impact of the predicted event. A completely new warning period will also be introduced in 2011, which will be used to provide advance information about dangerous or harmful weather conditions approaching Finland up to 3-5 days prior to the event. The new warning period will follow the current 24 hour warning period, and most of its warnings will also have two or three levels. The new warning period will cover the following events: heat wave, sub-zero temperatures, heavy rainfall, wind at sea, wind on land, thundery outbreaks, sea level, wave height and traffic weather.

The Finnish Meteorological Institute supports preparedness by producing advance warnings of weather events tailored for the security authorities. The advance warnings aim to describe the impacts of weather events on the functioning of society and operations of the rescue authorities in particular.

5.2.8 Flood warnings

Situational awareness of floods is currently produced by various parties, depending on the type of flood: the Finnish Meteorological Institute produces forecasts related to floods caused by heavy rainfalls and rising sea levels, and the Finnish Environment Institute issues forecasts concerning river floods.

The flood situation monitoring of the Finnish Environment Institute will be developed to meet the needs of systems such as LUOVA. The objective is that in case of a flood, the officer on call at the Finnish Environment Institute updates the relevant situational picture in cooperation with the Centres for Economic Development, Transport and the Environment and responds to enquiries about the flood situation through a helpline.

The European Flood Alert System (EFAS) produces flood forecasts and alerts covering the entire continent. The Finnish Environment Institute has been a member of EFAS from the beginning of 2011. The test site for EFAS forecasts is the Torniojoki, a river which is not fed by lakes and whose water levels are unregulated. The alerts produced by the EFAS system do not currently reach the standard of our national models, as the EFAS does not take regulation and the impact of lakes into account. However, it is important to continue cooperation with EFAS, and the usability of the forecasts produced by it must be evaluated.

5.2.9 Roof snow load warning system

The roof snow load warning system has been part of the Finnish Environment Institute's Watershed Simulation and Forecasting Model since the winter of 2008-09. It alerts regional authorities of rated snow loads on roofs being exceeded by e-mail and through a website. In the development efforts that were completed for winter 2010-11, the alerts were more specifically targeted at buildings with large roof areas that are frequented by a great number of people and for which the threshold of issuing a snow load alert was lowered because of observed roof collapses in buildings. Such sites included sports and shopping centres. The alert threshold for one-family and terraced houses was increased closer to the critical roof load which the roofs are designed to carry and which is approximately 3-4 times the rated values. More specific procedures and content for information activities concerning roof loads were also developed, for example guidelines for property owners, in cooperation between the Ministry of the Environment and the Finnish Environment Institute.

5.2.10 Forest fire monitoring system

The forest fire monitoring system consists of forest fire warnings, air patrolling and a satellite monitoring system. Air patrolling begins as a forest fire warning enters into force, whereas the satellite warning system operates on a continuous basis.

The forest fire satellite warning system jointly developed by the Ministry of the Interior, VTT Technical Research Centre of Finland and the Finnish Meteorological Institute is the only operative forest fire alert system in the world. The satellite observes thermal radiation from the Earth and is able to distinguish hot sites from surrounding soil areas with a normal temperature. When the satellite observes a possible forest fire, the system will automatically alert the Emergency Response Centre closest to the observation site in under 30 minutes. The satellite monitoring system can reliably detect fairly large fires, or in practice, those exceeding three hectares.

5.2.11 Official notification transmission system

A national transmission system for official notifications and emergency announcements via the radio and television network is in place in Finland. The Ministry of Transport and Communications has the duty to support the building and maintenance of electronic warning and alert systems. These systems work via the public service radio and TV channels (Yleisradio Oy) and on the most important commercial radio and TV channels. For example, notifications may be issued when the country is threatened by an exceptionally violent storm or other dangerous weather event that develops rapidly.

There are plans to clarify the practice of issuing emergency announcements. A working group on this matter is drafting a bill on alerts, under which the current emergency announcements would be replaced by alerts.

5.2.12 Citizens' portal for crisis communications

Plans are under way to establish a crisis portal for citizens. This portal would disseminate information communicated by the authorities, citizens, NGOs and the media. In normal conditions, the portal will offer citizens basic information and instructions to be followed in a crisis. Additionally, the portal will have links to more detailed information found on the websites of competent authorities. In a time of crisis, the website would also contain interactive sections through which citizens and NGOs could supply the authorities with additional information, and receive information released by the authorities. The system is technically ready for commissioning. The administrative framework regarding its maintenance is being prepared.

5.2.13 Preparedness for nuclear, biological and chemical disasters (NBC)

When Parliament ratified the International Health Rules (IHR) in 2007, Finland committed to maintaining 24/7 NBC preparedness. Due to a lack of resources, NBC work has been organised by means of networking and centralising existing knowledge. EU obligations associated with NBC activities requiring laboratory capacity are also imposed on Finland.

5.3 Building a culture of safety

5.3.1 Travel advice from the Ministry for Foreign Affairs

Travel advice consists of country-specific bulletins on travel safety issued by the Ministry for Foreign Affairs. Travel advice is published on nearly 200 countries in which Finland has representation or where the foreign missions can otherwise obtain reliable information.

The travel advice provides information to support travellers' personal decisions. Travel advice where travel to a certain area or country is not recommended is only issued for a justified reason.

5.3.2 Education, preparedness and campaigns

The rescue services play a key role in security communications. In this task, the rescue services are supported by NGOs. Education, advice and campaigns should be developed to also encompass sections dealing with disasters caused by natural hazards. It is particularly vital to clarify the responsibilities of all parties during disaster and damage mitigation.

National campaigns of the rescue services implemented in cooperation with the Ministry of the Interior Department for Rescue Services, municipalities, schools, rescue services and rescue sector NGOs include the 112 theme day, the Nou Hätä! campaign for 7th–9th grade students and the Pellekaija Pum campaign for children aged between five and nine. Other national campaigns implemented in cooperation with various actors include an accident theme day and a campaign aiming to prevent accidents in the home. In addition to national campaigns, the rescue services engage in educational activities in their own areas.

These campaigns are not directly associated with action during disasters caused by natural hazards. National campaigns and the daily safety communications of the rescue services should also take into account disasters caused by natural hazards and disruptions caused by them. The aim is that people also know how to act in case of possible disasters, for example if the electricity is down or the water supply is cut for an extended period. The Ministry of the Interior and the rescue services could, together with NGOs, encourage independent preparedness for disasters.

The societal impact that the Finnish National Rescue Association (SPEK) aims for in the field of preparedness and civil defence is a crisis resilient society whose capacity to cope with disruptions is based on cooperation between the public sector, civil society and the private sector. A precondition for this is that individuals and communities have adequate capacity to cope with disruptions during normal conditions and in emergencies.

Action during wide-ranging and long-term power cuts and preparedness for flood damage are examples of situations for which SPEK wishes to develop preparedness. The aim is to promote the independent preparedness of the population by means of media releases and training. The objective is to increase citizens' awareness of hazardous situations, disasters and disruptions and to impart to them a capacity to act appropriately during such events. In the future, information will be specifically targeted at safety officers who work on premises subject to a duty to prepare an emergency plan. One-family houses not subject to this duty are deemed a special group.

Disasters caused by natural hazards and preparedness for them are also part of the instructor training for SPEK preparedness instructors and course leaders.

Finnish Red Cross is increasing awareness of coping with natural hazards and security risks, including power cuts in the winter or during storms, or dehydration in hot weather. The work includes health advisory services, befriending activities, first aid team activities and cooperation with schools. In befriending activities, particular attention is focused on the capacity of lonely older people to survive in emergencies.

5.3.3 Testing of plant engineering and household water hygiene skills

By taking examinations in plant engineering and household water hygiene skills, the competence of those working in water supply plants can be increased, and a capacity to act appropriately in special situations can be imparted to them.

5.4 Reducing underlying risk factors

5.4.1 Flood risk management

A coordination group established by the Ministry of Agriculture and Forestry plans, monitors and schedules the implementation of different phases of flood risk management. The tasks of the coordination group also include specifying common principles for the objectives of flood risk management and controlling guidance provided for preparing flood risk management plans for rivers and coastal areas.

By the end of 2011, flood risks will have been assessed and major flood risk areas will have been listed. For these areas, flood hazard and flood risk maps will be prepared by the end of 2013, and flood risk management plans will be completed by the end of 2015. These plans will propose measures for reducing risks, including improved flood

forecasts and warnings, guidance in regional land use, planning of rescue operations, holding back of floodwaters or flood protection structures.

5.4.2 National objectives for regional land use

On 13 November 2008, the government made a decision to review the national objectives of regional land use planning. The principal theme of this review was responding to the challenges of climate change.

The national objectives for regional land use planning state that:

In regional land use planning, existing or expected adverse environmental impacts and exceptional natural conditions will be identified and their impacts prevented. Regional land use creates preconditions for adaptation to climate change.

In regional land use, flood risk areas pinpointed by official studies should be taken into account, and an effort should be made to prevent risks ensuing from flooding. In regional land use planning, new buildings should not be located in flood risk areas. An exception to this rule may only be made if, based on needs and impact assessments, it can be proven that the flood risks can be controlled and the building project is in line with sustainable development. If necessary, regional land use plans must provide alternative land use solutions for activities that are particularly vital for the functioning of communities and that are associated with significant risks of environmental damage or personal injury.

Master plans and detailed plans should make provision for increasingly frequent storms, heavy rainfalls and floods in urban areas. An adequate distance must be left between activities causing adverse health effects or disaster risks and sensitive activities. Plants that present a risk of major disaster, transport routes of hazardous substances and chemical rail yards serving these must be located at an adequate distance from residential areas, areas reserved for general activities and environmentally sensitive sites.

According to the climate policies of the Association of Finnish Local and Regional Authorities, the aim is that municipalities take the impacts of climate change and the requirement of preparedness into account in planning and construction. In the Helsinki Metropolitan Area, for example, strategies for adapting to the impacts of climate change have been drawn up, and the municipalities are responsible for implementing the measures.

5.5 Strengthening disaster preparedness and effective response

5.5.1 Rescue services and municipalities

Disasters caused by natural hazards always take place in a given municipality. In terms of preparedness and disaster response, it is vital that the municipal authorities are ready to act. Rescue services play a particularly important role, as they will assume general command if a disaster occurs.

In extensive disasters, several authorities and other parties take part in rescue operations. Under the Rescue Act, parties taking part in rescue operations must have plans for participating in rescue operations. Each party prepares the required plans independently, but the rescue authority coordinates the drawing up of the plans, launches the planning process and advances it.

A particular aim is that the rescue services, and the municipalities and other parties taking part in rescue operations in the area of each rescue service, have emergency plans in place that make it possible to act in all security situations. Another aim is that all parties are familiar with the plans.

The municipalities, together with the authorities and NGOs, should survey vulnerable groups, for example older people living alone and the physically disabled.

5.5.2 Developing and maintaining security of supply

The purpose of the Act on Safeguarding Security of Supply (Laki huoltovarmuuden turvaamisesta 1390/1992) is to safeguard activities that are necessary for maintaining the population's livelihood, the national economy, national defence and the associated technical systems in emergency conditions and during similar serious disruptions. The general goals for security of supply are set by the government (decision 539/2008).

Developing security of supply and coordinating preparedness measures are within the mandate of the Ministry of Employment and the Economy. The ministries develop security of supply in their own fields of activity. The National Emergency Supply Agency, the tasks of which are specified in a government decree (455/2008), safeguards the development and maintenance of the security of supply. The task of the National Emergency Supply Agency is to promote, monitor and coordinate the authorities' capacity to control the national economy in emergency conditions and to promote preparedness and contingency planning in individual sectors and agencies for serious disruptions in normal conditions and action during emergencies. The decision-making body of the National Emergency Supply Agency is a board appointed by the Ministry of

Employment and the Economy. The task of the board is to direct the operation of the National Emergency Supply Agency.

The Council for Security of Supply works in connection with the National Emergency Supply Agency, along with sectors and pools that work similarly to committees as permanent cooperation organs with wide-based representation of various actors in society and the public and private sectors. The task of the pools is to specify critical production/activities in their own fields and to develop the preparedness of their fields for serious disruptions and emergency conditions. The pools organise annual training programmes and seminars for critical actors together with the National Emergency Supply Agency. The National Emergency Supply Agency and the Finnish Red Cross work together to store relief supplies, including tents, blankets and water containers for unexpected domestic needs, for example evacuations in case of a disaster caused by natural hazard.

The National Emergency Supply Agency maintains emergency and security supplies for serious disruptions and emergencies. In stocking the supplies, various potential hazards are taken into account, as is the government decision on the objectives of safeguarding security of supply. In addition, mandatory reserve supplies are used in the interest of the security of supply. Decisions on using the state's emergency supplies are made by the government.

In 2010, the National Emergency Supply Agency introduced the HUOVI portal it developed for the security of supply organisation. This portal offers tools for assessing and developing the continuity management of business activities and operating networks of companies critical for the security of supply in case of disruptions. The portal also offers working areas for the confidential exchange of information and cooperation. This portal will produce a situational picture of the standard of continuity planning in companies and preparedness.

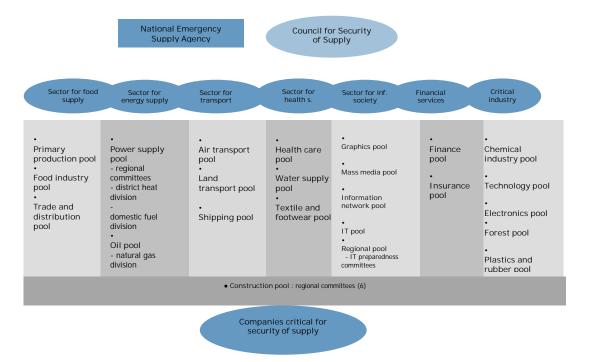


Figure 2: Public-Private Partnership in security of supply

5.5.3 Accident Investigation

Accident investigations are carried out by the Accident Investigation Board Finland (OTKES). An investigation establishes the course, causes and repercussions of the accident and examines the rescue operation. In particular, the investigation sets out to establish if safety requirements were adequately observed in the design, manufacture, construction and use of the equipment and structures that caused or were exposed to the accident or hazard. In addition, the investigation examines if the supervision and inspection activities of equipment and structures were appropriately arranged and completed, or if any shortcomings might be pinpointed in safety regulations and provisions. In addition to the immediate cause of the accident, the investigation particularly strives to highlight factors and background factors that contributed to the incident, which may for example be found in the organisation, instructions and working methods.

The final outcome of the accident investigation is an investigation report, at the end of which safety recommendations are issued to the competent authorities and other parties. The safety recommendations are a summary of the investigators' ideas of how similar accidents could be avoided in the future. The Accident Investigation Board monitors the implementation of these recommendations. The sole purpose of an accident

investigation is to improve safety: investigations do not give an opinion on issues of guilt and responsibility, or liability for damage.

The Accident Investigation Board also investigates major natural disasters and actions taken in connection with these.

5.5.4 Management and forming of a situational picture

In terms of the management system, a key objective is that management and other actions required by a situation can successfully continue throughout disruptions and in emergency conditions. A precondition for this is that the management, situational picture and communication systems are compatible and that operating plans are up-to-date. Preconditions for success include organised situational picture activities at the local, regional and national level.

The aim is to establish regular situational picture activities at the local, regional and national level and to support the forming of a situational picture by the local and regional government while improving the prerequisites of business and private sector organisations for preparing for disruptions and increasing their crisis resilience through regular situational picture activities.

Setting up regular situational picture activities in regional government is a challenging goal because of the inter-administrative nature of these efforts, technical requirements and the need for funding. All areas of responsibility of the Centres for Economic Development, Transport and the Environment should be intensively involved in this work in order for the situational picture activities to extensively serve these centres.

At the local level, bodies such as rescue services have set up situation centres that can be turned into command centres if necessary.

5.5.5 Traffic Information Centres of the Finnish Transport Agency

Traffic Information Centres play a vital role during disruptions that affect transport. The Traffic Information Centres have a significant role in transmitting the situational picture, assisting in the operations of authorities, guiding citizens' actions, issuing warnings and taking corrective measures.

5.5.6 National, regional and local preparedness exercises

Extensive government preparedness exercises are arranged roughly every four years. Their purpose is to test the activities referred to in community safety strategy and the leadership capacity of the state administration, with view to events during emergency conditions.

Information and Logistics (TIETO and KULJETUS) preparedness exercises are organised in alternative years as large, national refresher exercises of roughly one week in duration. These exercises are about the activities of the authorities during various disruptions.

Nuclear accident drills must be organised at nuclear power stations every three years at the minimum.

The National Emergency Supply Centre pools organise exercises at regular intervals.

The duties of the Regional State Administrative Agencies include organising regional preparedness exercises. These exercises also involve disruptions caused by natural disasters. The Centres for Economic Development, Transport and the Environment organise exercises focusing on flood control and burst dams.

The Finnish Red Cross regularly arranges large-scale national preparedness exercises, the participants in which include the entire organisation at all its levels, authorities and other partners.

The rescue services organise major disaster drills locally.

5.5.7 Promoting preparedness

One task of the Regional State Administrative Agencies is to support the planning of preparedness arrangements in municipalities. In 2011, a plan on guiding preparedness will be prepared, and the division of labour will be agreed upon with the cooperating parties.

Under the Rescue Act, rescue services have the duty to support the emergency planning of a municipality in the rescue services' area if this has been agreed upon with the municipality. Many rescue service areas have already introduced procedures for supporting the municipalities' preparedness and emergency planning.

In its policies on preparedness in municipalities and developing rescue activities adopted by the Board of the Association of Finnish Local and Regional Authorities, the Association stresses the need to develop cooperation between rescue services and municipalities in issues relevant to preparedness and emergency planning. The policies also state that municipalities should take the consequences of climate change into account in their own plans for preparedness.

The policies on preparedness and developing rescue operations of the Association of Finnish Local and Regional Authorities highlight the need to develop regional emergency planning. The need for regional emergency planning has also become

topical in the areas of certain rescue services when dealing with the storms of 2010 and 2011 and extensive power cuts caused by snow loads.

The disaster preparedness of the Finnish Red Cross focuses on developing regional and local cooperation to ensure that in more extensive disasters or crises, the overall resources can be rapidly and flexibly deployed. Agreements with authorities are a key part of effective disaster preparedness.. The focus is on promoting the conclusion of agreements, in particular at the local level.

A significant part of rescue service duties in Finland are carried out by the voluntary sector. The voluntary sector has a strong involvement in maritime rescue, search and rescue (SAR) and fire brigade activities. National and extensive voluntary fire brigade activities and the associated training significantly increase local preparedness to act, also with natural disasters in mind. The fire brigade training includes courses on dealing with damaged trees and exercises in coping with flood damage. In total, some 15,000 people are active in the emergency response divisions of fire brigades, while the total number of members in fire brigades is some 40,000.

The Voluntary Rescue Service (Vapepa) is an umbrella organisation of 50 organisations coordinated by the Finnish Red Cross. Some 20,000 volunteers and 1,200 emergency response teams are involved in Vapepa. The Finnish Red Cross works as the contact organisation for Vapepa and coordinates the activities in terms of general rescue activities by volunteers. Voluntary sea and inland waterway rescue operations are coordinated by the Finnish Lifeboat Institution, and voluntary air rescue operations by the Finnish Air Rescue Society. The task of Vapepa is, in particular, to support the authorities in missions that require a high number of rescue personnel. In these situations, Vapepa works on request, for example complementing and supporting the police and the rescue and social and health care authorities.

The Ministry of Agriculture and Forestry and regional Forestry Centres have prepared emergency plans in cooperation with the rescue authorities and electricity companies for storm damage. The Forestry Centres are on call for requests for executive assistance by the rescue authorities. The National Land Survey of Finland and the Finnish Forest Research Institute have engaged in cooperation to stand by for rapid surveying of damage. This will promote a fast response to damage, which facilitates limiting further damage, for example damage caused by insects. Taking the more frequently occurring storms into account in forest management has also been studied.

The safety officers of premises with a duty to prepare an emergency plan form a reserve independent protection troop for the rescue service as a civil defence organisation during emergency conditions. The safety officers of residential buildings take part in training and safety work of individual buildings on a voluntary basis. SPEK also strives to promote the use of this resource during disruptions in normal conditions in its own and its members' activities. There are at least 70,000 residential buildings subject to a

duty to prepare an emergency plan in Finland. Taking offices and other business premises into account, this number is considerably larger.

Voluntary rescue dog teams play a key role as a reserve for rescue services in emergency conditions. In addition, rescue dogs are used in normal conditions to support the police in search missions through the Voluntary Rescue Service (VAPEPA). Rescue dogs are also part of Finland's international rescue service reserve. The storms of summer 2010 showed that dogs trained to search ruins may also be needed in connection with storm destruction.

5.5.8 Training

Training intended for the various administrative branches and parties involved in the activities should be developed to increase understanding of the entire process of and responsibilities for tasks associated with natural disasters. This includes risk identification, maintaining a situational picture and actual measures in various situations.

The Emergency Services College plays a key role in preparedness training for the rescue services and various branches of local government.

5.6 International activities

Finland has been active in supporting its partner countries in reducing risks of disasters caused by natural hazards for an extended period, for example in the field of meteorology. Finland has also supported the work of the UNISDR secretariat for a number of years. Finland's activities are based on the recommendations of the Hyogo Framework for Action. The development policy objectives and actions regarding DRR included in the National Platform are also based on an evaluation of links between disasters caused by natural hazards, climate change and poverty carried out in 2009, and its follow-up. Furthermore, the EU General Affairs and External Relations Council meeting of Development Ministers adopted in spring 2009 a nationally binding EU strategy on supporting developing countries in reducing disaster risks. The Council gave a mandate to the continuation of its implementation programme in spring 2011.

5.6.1 Including the perspective of disaster risk reduction in key policy programmes

The perspective of disaster risk reduction will be included in the government's new Development Policy Programme and other development policy strategies, sectoral policies and action plans that are under way.

5.6.2 Mainstreaming disaster risk reduction in development cooperation

Disaster risk reduction will be mainstreamed in the planning and implementation of general budget support and sectoral programmes, projects and programmes including NGO cooperation, local cooperation and institutional development cooperation. The perspective of disaster risk reduction will be introduced as a quality criterion for projects and as part of planning the evaluation and management of overall risks in development cooperation projects.

Project design and implementation guidelines for development cooperation will be updated. In addition to mainstreaming, priority areas producing Finnish added value will be identified, including in the field of meteorology and relevant regional projects.

Finland also requires that multilateral UN organisations and international financing institutions supported by Finland will take disaster risk reduction into account in their work.

5.6.3 Bilateral and multilateral political dialogue

Work to prevent natural disasters and mitigate their effects will be brought up also in country programme negotiations and general budget support and sectoral support dialogue.

In this respect, guidelines will be reviewed, and an analysis of disaster risk reduction will be included in the work plans of Finnish Embassies.

5.6.4 Support for the UNISDR secretariat

A multiannual financing agreement was concluded with the UNISDR secretariat in 2011. The agreement covers the period 2011-2013. The commitment to increase financing to the ISDR during the agreement period was taken into consideration when preparing the budget for 2012.

5.6.5 Multilateral organisations supported by Finland

Mainstreaming disaster risk reduction will be promoted in multilateral organisations supported by Finland.

5.6.6 Taking the gender equality perspective into account in disaster risk reduction

The possibilities of taking part in a suitable international organisation project aiming to reduce disaster and climate change risks from the perspective of women and girls will be examined. Alternatively, a similar bilateral pilot project will be implemented.

5.6.7 EU and UN level political cooperation

Finland will play a proactive role in EU and UN level policy work aiming to reduce disaster risks, and in cooperation with aid providers.

Within the limits of available resources, Finland will proactively take part in the position formulation of donors at the EU and UN levels.

5.6.8 Assisting Finnish people abroad during disasters

The anticipation of disaster risks and assistance provided to Finnish people abroad through consular services will be developed.

Cooperation with Nordic and EU countries will be intensified (COCON), lead state activities and preparedness planning, exercises and training will be developed, and Finland will take part in crisis exercises of the above-mentioned parties.

Regarding medical evacuation, a national cooperation group has been appointed, which will draw up a framework for continuous deployability of medical evacuation, cooperation between various actors and operational responsibilities.

5.6.9 Developing international technical assistance and rescue operations

According to the Government Programme, Finland's ability to take part in international crisis management will be reinforced, and basic preconditions for participating in international assistance provision of the rescue services will be secured by ensuring the adequacy of personnel and other necessary resources in the Crisis Management Centre.

An average of 150-170 experts from Finland are posted annually to civilian crisis management and international rescue tasks. These experts will work in operations carried out under organisations such as the EU, OSCE, UN and NATO.

Decisions on Finland's participation in civilian crisis management and the extent of this participation will be made by the Ministry for Foreign Affairs for each individual mission (including secretariat functions). The Ministry of the Interior together with the

Ministry for Foreign Affairs will coordinate these activities to find a suitable level of participation and competence, and assume responsibility for fulfilling national commitments and for developing the national capacity for civilian crisis management. In addition, various administrative branches will take part in drafting decisions on participating in civilian crisis management and capacity building. The Ministry of the Interior's Department for Rescue Services makes decisions on Finland's participation in international rescue missions.

The aim of the rescue services is that they can give and receive international rescue service assistance in observance of requirements specified by the UN and the EU while meeting Finland's international obligations. Another objective is developing rescue service modules intended for international assistance missions for the review exercise of 2012. The objective is to create a Heavy USAR Module, an ICT module, a Light Base Camp module and an OSOCC module in Finland. In this context, staff will be recruited and trained to use these modules, and operative plans will be updated.

Finland will take part in organising international assistance, for example through the EU Civil Protection Mechanism, and as regards receiving international assistance, Host Nation Support activities will be developed in line with EU policies.

Finland will contribute rescue services competence to EU civilian crisis management operations. With a view to this, the aim is that disaster risk assessments should be included in the planning of crisis management operations under the Common Security and Defence Policy.

The Emergency Response Units (ERU) of the Finnish Red Cross include four health stations, a general hospital, a surgical hospital and an evacuation hospital with staff, a logistics unit, a relief supply distribution unit as well as professionals of the fields of water, sanitation and communications together with their equipment.

The Finnish Red Cross takes part in developing international needs assessments. The Field Assessment and Coordination Team (FACT) is a multidisciplinary team of experts, whose task is to assess the overall need for assistance and to coordinate the assistance operation of the International Federation of Red Cross and Red Crescent Societies in cooperation with the local national societies and other actors, ensuring that relief reaches the beneficiaries efficiently and safely. A team with special training can be sent to a target area within 12-24 hours. A total of 45 Finnish Red Cross aid workers have received FACT training, and Finnish experts are regularly deployed on evaluation and coordination team missions.

The Finnish Red Cross annually sends some 200 aid workers to disaster relief and development cooperation tasks. These members of the Finnish Red Cross' personnel reserve work in their tasks under the International Federation of Red Cross and Red

Crescent Societies (IFRC), the International Committee of the Red Cross (ICRC) or the Finnish Red Cross.

5.6.10 Coaching and training for development cooperation

Risks ensuing from disasters caused by natural hazards and climate change will be introduced as part of coaching and training for development cooperation.

Disaster risk reduction (DRR) has already been included in basic development cooperation training. Other training programmes and content as well as assessment instructions will be updated in a similar manner. Training will also be organised for project implementers, including public sector actors involved in development cooperation.

5.6.11 Developing global preparedness and risk reduction

The Finnish Red Cross continues to take an active role in the development of global preparedness and risk reduction activities of the International Federation of Red Cross and Red Crescent Societies.

The international programmes of the Finnish Red Cross support the national Red Cross and Red Crescent societies and communities in preparing for disasters, coping with disasters caused by natural hazards and reducing the risks to which they are exposed in a number of Asian, African and Latin American countries.

5.7 Key research projects

Parties involved in the Cooperation Network take part in a number of research projects on adaptation to climate change or disaster risk reduction. The table below illustrates key research projects of parties involved in the Cooperation Network that are under way.

5.8 International parties, conventions and cooperation networks

A number of international parties need to be notified of natural disasters to make it possible to organise the required international assistance as quickly as possible. Agreements have also been concluded and various cooperation networks created to speed up the provision of international assistance.

Members of the Cooperation Network may be part of an international cooperation organisation or activity that has interfaces with the HFA objectives. In the field of meteorology, for example, Finland is a member of the World Meteorological

Organization (WMO) working under the UN, whose purpose is to engage in the overall development of weather-related issues. The aims of the activities include improving weather forecasts and alerts and producing climate data in order to reduce the impacts of natural disasters.

The EU GMES programme (Global Monitoring for Environment and Security) progressed to its first operative phase of implementation as the EU regulation 911/2010 entered into force on 23 November 2010. One thematic area of the GMES programme is the management of emergencies, in which particular use is made of global monitoring techniques. In the future, Finland will actively exploit the GMES services in order to reduce disaster risks, and the Cooperation Network will be one channel for disseminating information regarding further use of the GMES services. Additionally, a pan-European system of weather alerts, METEOALARM, has been implemented to increase the general public's awareness of weather risks all over Europe. Finland and the Finnish Meteorological Institute are actively involved in METEOALARM activities.

6 Other objectives

The Cooperation Network aims to develop preparedness and to increase citizens' awareness of arrangements in place to prevent disasters caused by natural hazards and of the responsibilities of various parties. In addition to regular meetings, the operating modes of the network may include thematic seminars organised every one to two years, as well as coordination of jointly agreed research and study projects.

7 Monitoring and reporting of target achievement

The National Platform drafted by the Cooperation Network will be updated each year. A concise annual report will be prepared on the activities. In addition, country reports recommended by the United Nations will be drawn up every two years.

The executive committee of the Cooperation Network meets twice a year. The expert committee meets three times a year or as necessary.

The Cooperation Network's key documents are:

- The National Platform
- A Concise Annual Report
- A report to the UN (every 2 years)

8 Objectives of the National Platform

Strategic objectives:

Increasing awareness and understanding of natural hazards and reducing disaster risks and impacts at the local, regional, national and global level Developing actors and cooperation with a view to reducing disaster risks among the authorities and other interested parties in Finland Reducing risk factors and more effective preparedness for natural hazards in Finland

Priority 1

Ensuring that disaster risk reduction is a national and local priority

Ensuring that disaster risk reduction	<u></u>	01: 4:	a.	D 6 11
Action	Responsible party and actors	Objective	Stage	Reasons for delays
Legislation Emergency Powers Act	Ministry of Justice, state authorities, state enterprises, municipalities	New Emergency Powers Act	Government Bill 3/2008 passed by the previous Parliament and the new Parliament in 2011	
- Rescue Act	Ministry of the Interior	New Act in 2011	Act entered into force on 1 July 2011	
2. Security Strategy for Society	Security and Defence Committee, all ministries, NGOs	New strategy	Strategy adopted on 16 Dec 2010	
3. Internal Security Programme	Ministry of the Interior. Ministry for Foreign Affairs, Ministry of Agriculture and Forestry, Ministry of Social Affairs and Health, Ministry of Transport and Communications, Ministry of Justice, Regional State Administrative Agencies, municipalities, NGOs, private sector	Continuing the implementation of the second Internal Security Programme, drafting the third one	Implementation of the second Internal Security Programme is under way, the third one will be completed on 2 May 2012	
4. Adaptation to climate change	Ministry of Agriculture and Forestry	Review and reform of the National Adaptation Strategy	Review completed in 2011, reform to take place in 2012-2013	

Action	Responsible party and actors	Objective	Stage	Reasons for delays
5. Flood risk management	Ministry of Agriculture and Forestry, Finnish Environment Institute, ELY Centres, municipalities, rescue services, Regional Councils, Finnish Meteorological Institute.	Implementation of the EU Directive by 2016	Significant flood risk areas mapped by 20 December 2011, flood groups appointed in 2012, preparation of flood risk management plans to be launched	
6. Safeguarding the availability and distribution of household water in special conditions	Ministry of Social Affairs and Health, Ministry of Agriculture and Forestry, water supply pool, municipalities, water supply plants, the defence forces, Finnish Red Cross.	Review of the Act on Water Services. Preparing and updating plans for special situations under the Health Protection Act. The Huovi portal maturity analysis	2011 - 2014	
7. Preparation of a national household water security plan (WSP)	Ministry of Social Affairs and Health	WSP model completed in 2015	Under way	
8. Security planning. Citizens' perspective and prevention of hazards	Ministry of the Interior, municipalities, Finnish Red Cross, Finnish National Rescue Association, private sector	Security plans completed and up-to-date at all levels	Under way	

Action	Responsible party and actors	Objective	Stage	Reasons for delays
9. Emergency Response Centres	Ministry of the Interior, Ministry of Social Affairs and Health, Emergency Response Centre Administration	Shared ERC operation and information system of the authorities will form a functional entity enabling the use of shared systems, such as a joint field command system.	The ERC regions of Lapland and Oulu merged in 2011 KEJO system procurement in 2012 Information system procurement for TOTI in 2011	
10. Government Security Network project TUVE	Government, security authorities, defence forces	Security Network to be introduced in 2013	Government Bill on the Government Security Network to be completed in 2011	
11. VIRVE radio network for the authorities	Prime Minister's Office, State Security Networks Ltd	Improving coverage indoors and reliability of Virve	Under way	
12. Automatic radiation monitoring network	Finnish Radiation and Nuclear Safety Authority STUK	Maintaining and developing the radiation monitoring network	Under way	
 13. On-call arrangements Government Situation Centre On-call arrangements of ministries Rescue services River flood situation monitoring 	Prime Minister's Office All ministries All rescue services Regional State Administrative Agencies, ELY Centres Finnish Environment Institute	Developing on-call arrangements	Under way	
14. LUOVA	Finnish Meteorological Institute, Ministry of Transport and Communications, Ministry of Agriculture and Forestry, ELY centres, Finnish Environment Institute, Ministry of the Interior, University of Helsinki	Operative use of LUOVA	Piloting to conclude in 2011, operative use to begin in 2012	

Responsible party and actors	Objective	Stage	Reasons for delays
Finnish Meteorological Institute	Developing and maintaining weather warnings	Under way	
Finnish Environment Institute, Finnish Meteorological Institute	Flood alerts through LUOVA	LUOVA flood warnings in operative production in 2012, testing completed in 2011	
Finnish Environment Institute, ELY Centres, Finnish Meteorological Institute	Introducing warnings	Planning completed in 2011, introduction in 2012	
Ministry of the Interior, Finnish Meteorological Institute, VTT Technical Research Centre of Finland	Satellite monitoring, air patrols, forest fire warnings	Under way	
Ministry of Transport and Communications	Communicating alerts to the public	Under way	
Prime Minister's Office	Introduction of the portal	Technically complete	It is not clear who will be responsible for portal content and how
National Institute for Health and Welfare, Finnish Institute of Occupational Health, Finnish Nuclear and Radiation Safety Authority, defence forces	Maintaining NBC preparedness	Under way	now
	Finnish Meteorological Institute Finnish Environment Institute, Finnish Environment Institute Finnish Environment Institute, ELY Centres, Finnish Meteorological Institute Ministry of the Interior, Finnish Meteorological Institute, VTT Technical Research Centre of Finland Ministry of Transport and Communications Prime Minister's Office National Institute for Health and Welfare, Finnish Institute of Occupational Health, Finnish Nuclear and Radiation Safety	Finnish Meteorological Institute, Finnish Environment Institute, Finnish Environment Institute, Finnish Meteorological Institute Finnish Environment Institute, ELY Centres, Finnish Meteorological Institute Ministry of the Interior, Finnish Meteorological Institute, VTT Technical Research Centre of Finland Ministry of Transport and Communications Prime Minister's Office National Institute for Health and Welfare, Finnish Institute of Occupational Health, Finnish Nuclear and Radiation Safety Developing and maintaining weather warnings Flood alerts through LUOVA Introducing warnings Catellite monitoring, air patrols, forest fire warnings Communicating alerts to the public Introduction of the portal	Finnish Meteorological Institute, Ministry of the Interior, Finnish Meteorological Institute, VTT Technical Research Centre of Finland Ministry of Transport and Communications Prime Minister's Office National Institute for Health and Welfare, Finnish Institute of Occupational Health, Finnish Nuclear and Radiation Safety Developing and maintaining weather warnings Flood alerts through LUOVA flood warnings in operative production in 2012, testing completed in 2011 Under way Under way Under way Under way Under way Under way Technically complete

Building a culture of safety Action	Responsible party and actors	Objective	Stage	Reasons for delays
22. Travel advice from Ministry for Foreign Affairs	Ministry for Foreign Affairs	Developing travel advice	Under way	Reasons for delays
23. Education and campaigns o 112 theme day o Nou Hätä! o Pellekaija Pum o Accident theme day o Campaign to prevent accidents at home o Giving a face to assistance	Ministry of the Interior, municipalities, NGOs, schools, rescue services	Promoting safety through campaigns and education	Campaigns are organised annually, or they are otherwise permanent in nature while their themes are selected annually	
24. Testing of plant engineering and household water hygiene skills	National Supervisory Authority for Welfare and Health (Valvira)	Improving capacity to act appropriately in special situations relevant to household water	Under way. The test will be reformed in spring 2012.	
Priority 4 Reducing underlying risk factors				•
Action	Responsible party and actors	Objective	Stage	Reasons for delays
25. Planning of flood risk management, flood risk mapping, flood protection measures	Ministry of Agriculture and Forestry, Finnish Environment Institute, ELY Centres, Regional Councils, municipalities and other authorities and actors	Implementation of the EU Directive by 2016	Significant flood risk areas listed by 20 December 2011, flood groups appointed in 2012, preparation of flood risk management plans will be launched	
26. Regional land use objectives	Ministry of the Environment, regions, municipalities, ELY Centres	Identifying expected environmental nuisances and exceptional natural conditions and preventing their impacts	Adaptation strategy for the impacts of climate change in Helsinki Metropolitan Area completed in 2011	

Action	Responsible party and actors	Objective	Stage	Reasons for delays
27. Emergency plans and vulnerable	Rescue services and	Up-to-date and working	Under way	Ţ
groups	municipalities	emergency plans		
28. Developing and maintaining security of supply	National Emergency Supply Agency	Developing security of supply	Crisis communication instructions for water supply plants Guide for organising backup water distribution in 2011 Waste management emergency and contingency planning instructions 2011 Agreement between National Emergency Supply Agency and Finnish Red Cross on storage of relief supplies. Finnish Red Cross has used products in the store for a number	
			of overseas disasters. Emergency supply storage arrangements for energy supply, food supply, health care and other critical production. Framework agreement on the availability of hoisting, clearing and earth moving equipment in cases of accidents (Ministry of the Interior/National Emergency Supply Agency/construction pool).	
			Ministry of Defence publication "Extended power cuts and securing the activities of society", impacts of power cuts on activities from the citizens' perspective (involvement of National Emergency Supply Agency)	
29. Accident Investigation	Accident Investigation Board Finland	Based on investigations, recommendations issued to various parties	Investigation report on the storms in July-August 2010 completed in September 2011	

Action	Responsible party and actors	Objective	Stage	Reasons for delays
30. Management and forming of a situational picture	All ministries, Regional State Administrative Agencies, ELY Centres, municipalities, rescue services	Forming a situational picture at the local, regional and national level	Prime Minister's Office appointed Rauno Saari as rapporteur for situational picture activities. The work was launched on 1 October 2011, to be completed on 29 February 2012, and an effort will be made to introduce changes from early 2013	
Central administration situational picture	Prime Minister's Office, Ministry of the Interior, Ministry for Foreign Affairs, Ministry of Defence			
o Inter-administrative situational picture of regional government	Regional State Administrative Agencies, ELY Centres		Issuing instructions on producing a regional situational picture of security and supervising implementation	
 Situational picture of local and regional government 	Regional State Administrative Agencies, ELY Centres, municipalities			
Supporting the preparedness of business life and private sector companies through situational picture activities	National Emergency Supply Agency, Regional State Administrative Agencies, companies, NGOs	HUOVI portal was introduced for companies critical for security of supply and the security of supply organisation from 2010. This portal supports the contingency planning of companies during disruptions and exchange of information within the organisation.	Situational awareness available in 2011-2012 Introduction and development of the portal to be continued. Users also include NGOs	
31. Situational picture for transport, warnings, supporting authorities	Traffic Information Centres	Producing a situational picture for transport and supporting authorities	Under way	

Action	Responsible party and actors	Objective	Stage	Reasons for delays
32. National and regional exercises	All ministries, regional administrative authorities, municipalities, NGOs, Emergency Services College	Carrying out exercises	Under way	
33. Promoting preparedness	Ministry of the Interior, Regional State Administrative Agencies, municipalities, Emergency Services College, NGOs	Developing preparedness	Under way	
34. Training	All sectors	Preparedness capacity building	Under way	
International activities				_
Action	Responsible party and actors	Objective	Stage	Reasons for delays
35. Emphasising the perspective of disaster risk reduction	Ministry for Foreign Affairs (coordinates preparation)	Including the perspective of disaster risk reduction in the government's new Development Policy Programme and other relevant policies	Mainstreaming in development cooperation in 2011	
36. Minimising natural disaster risks	Ministry for Foreign Affairs, other ministries involved in development cooperation, state institutions, higher education institutions, etc., project implementers (including NGOs and the private sector)	Mainstreaming disaster risk reduction	Underway in 2011	
37. Bilateral and multilateral political dialogue	Ministry for Foreign Affairs	Mitigating and preventing damage caused by natural disasters	Guidelines will be renewed so that an analysis of disaster risk reduction will be contained as part of the work plans of embassies	

Action	Responsible party and actors	Objective	Stage	Reasons for delays
38. Supporting ISDR Secretariat	Ministry for Foreign Affairs	Support for the UN's ISDR Secretariat will be made multiannual and increased within the scope of development cooperation appropriations	Multiannual funding commitments to conclude agreements introduced in 2011	
39. Multilateral organisations that Finland is involved in or supports	Ministry for Foreign Affairs, other actors	Mainstreaming disaster risk reduction will be promoted in multilateral organisations supported by Finland.	Under way	
40. Taking the gender equality perspective into account in disaster risk reduction	Ministry for Foreign Affairs	Possibilities of taking part in a suitable international organisation's project aiming to reduce the natural disaster and climate change risks from the perspective of women and girls will be examined. Alternatively, a similar bilateral pilot project will be implemented.	Under way	
41. EU and UN level political cooperation	All administrative branches in their areas of responsibility	Proactive participation in EU and UN level policy formulation aiming to reduce disaster risks and cooperation between donors as well as the position formulation of donors .	Under way	

Action	Responsible party and actors	Objective	Stage	Reasons for delays
42. Assisting Finnish people abroad in natural disasters	Ministry for Foreign Affairs, Ministry of Social Affairs and Health, Ministry of the Interior, Prime Minister's Office, Government	Evacuation of Finnish people in a disaster unfolding abroad	A national cooperation group is preparing a plan for medical evacuations	
43. Capacity to take part in international crisis management	Ministry of the Interior, CMC	Including the assessment of natural disaster risks in the planning of civilian crisis management operations under the Common Security and Defence Polic	Under way	
 44. International technical assistance and rescue operations Taking part in the EU mechanism Developing HNS activities Developing rescue operation modules 	Ministry of the Interior, CMC	Rescue services must have adequate capacity for giving and receiving international assistance	Development targets to be specified in 2012	
45. Coaching and training for development cooperation	Ministry for Foreign Affairs	Disaster risk reduction (DRR) has been included in basic training for development cooperation.	Other training programmes and content as well as evaluation guidelines will be updated in a similar manner.	
46. Developing global preparedness and risk reduction	Finnish Red Cross	 Participation in IFRC's global development of preparedness and DRR Implementing disaster preparedness and risk reduction projects in Asia, Africa and Latin America 	Ongoing Ongoing	

Key research projects	Party	Theme	Schedule	
Multi-source system for flood forecasting (FLOODFORE)	Finnish Environment Institute, Tekes, Ministry of Agriculture and Forestry, Vaisala Oyj, Inergia Oy, Astrock Oy, Astropolis-tieto Oy, Kemijoki Oy, Metsäteho Oy, Metsäteho Oy, Meteorological Institute, VTT Technical Research Centre of Finland	Developing flood forecasts	2008-2011	
Multinational Experiment 7 (MNE 7). A NATO led multinational research and testing programme	Ministry of Defence Finland will take part in the cyber section led by the Security and Defence Committee, and the marine section led by the MVE	Securing the availability of shared global resources (Maritime, Air, Space, Cyber)	2011 - 2012	
3. Heavy Rainfall Warning System RAVAKE	Finnish Meteorological Institute, Tekes	Developing a method for forecasting heavy rainfalls	To conclude at the end of 2012	
4. CRISMA - an EU project beginning on 1 March 2012	Finnish Meteorological Institute	Developing crisis management in natural disasters	To begin in 2012, to be tested during the Barents Rescue 2013 exercise	
5. KASTU2 project	Finnish Meteorological Institute, Tekes	Development project on the health risks of smoke from forest fires and warning systems	To conclude in 2012	
6. Detailed flood mapping in the lower reaches of Torniojoki river valley (Detaljerad översvämningskartering i nedre delen av Torneälv)	Finnish Environment Institute, EU INTERREG project (Sweden participates)	Flood mapping	2009-2012	

Key research projects	<u>Party</u>	Theme	Schedule	
7. Developing flood-related communication and interaction (UR-FLOOD)	Finnish Environment Institute, Macaulay Land Use Research Institute, Scotland; University College Dublin, Ireland; C.I.R.P.A Centro Interuniversitario di Ricerca in Psicologia Ambientale, Italy; Collingwood Environmental Planning, England	Recommendations for developing communications about floods based on surveys in various countries and a pilot brochure on preparing for floods in Rovaniemi	Concluded in 2011 Planning of the development project for water situation and flood warning service launched in 2011	
8. A development project for a water situation and flood warning service	Finnish Environment Institute, Ministry of Agriculture and Forestry, Ministry of Transport and Communications, Ministry of the Environment, Finnish Meteorological Institute, ELY Centres	Developing warning services	Under way	
9. Nuclear safety research project SESA-14	Institute of Seismology	The Institute of Seismology takes part in developing the LUOVA system. The Institute also takes care of official warnings and alerts assigned to it.	Under way	
10. Chemical weed control	MTT Agrifood Research Finland, Plant Production Research	Environmental risks caused by the use of glyphosate: routes of the substance in clay soils and emissions in water systems (GlyFos)	Under way	
11. Impacts of climate change on mould species in cereals	MTT Agrifood Research Finland	Impact of climate change on the interaction of Fusarium species in oats and barley	Under way	

Key research projects	Party	Theme	Schedule		
12. Adapting cereals to climate change	MTT Agrifood Research Finland	Adaptation of barley to climate change through genetic resources and genomics	Under way		
13. Storm damage and preparedness	Finnish Forest Research Institute, Joensuu unit	Preparedness for storm damage - tools for air patrolling	Under way		
14. Early warning and safe cereal production	MTT Agrifood Research Finland, Plant Production Research	Control of toxin producing Fusarium moulds and early warning systems to secure safe cereal production (SAFECEREAL)			
International actors, conventions and a of disruptions	International actors, conventions and networks that must be alerted of disruptions				
Theme	Responsible party	Who to alert	Stage		
1. Hazardous plant pathogens	Finnish Food Safety Authority Evira	Europhyt (EU) EPPO (European and Mediterranean Plant Protection Organization), which notifies IPPC (International Plant Protection Convention under the FAO)	Under way		
2. Veterinary diseases	Ministry of Agriculture and Forestry	OIE (World Organization for Animal Health) European Commission	Under way		
3. Rabies	Finnish Food Safety Authority Evira	WHO (Rabnet)	Under way		

Theme	Responsible party	Who to alert	Stage	
4. Reporting to the WHO under IHR	National Institute for Health and Welfare THL	Following IHR system instructions, notified if the criteria of a 'Public Health Event of International Concern (PHEIC) are met	Under way	
5. European Union Early Warning and Response System (EWRS)	National Institute for Health and Welfare THL	System maintained by the European Centre for Disease Prevention and Control (ECDC), which is notified of threats relevant	Under way	
		to infectious diseases following the system's criteria, as well as information associated with coordinating their prevention		
6. Real-time communication on epidemic intelligence information in European Union	National Institute for Health and Welfare THL	EPIS (Epidemic Intelligence Information System) administrated by the ECDC used to collect and communicate real-time epidemic information	Under way	
7. European Union programme of cooperation on preparedness and response to biological agent attacks (RAS-BICHAT)	Ministry of Social Affairs and Health	A system for the coordination of attacks administered by the European Union and its Health Security Committee	Under way	
8. Batches of feed and food that are hazardous to health	Finnish Food Safety Authority Evira	EFSA, European Commission and member states (RASFF, Rapid Alert System for Food and Feed)	Under way	

Theme	Responsible party	Who to alert	Stage	
9. Hazardous foods	Finnish Food Safety Authority Evira	WHO (INFOSAN)	Under way	
10. Influenza virus findings	National Institute for Health and Welfare THL	Reported to WHO	Under way	
11. Cases of measles and rubella	National Institute for Health and Welfare THL	Reported to WHO	Under way	
12. Vibrio cholerae O1 and O139	National Institute for Health and Welfare THL	Reported to WHO	Under way	
13. Participation in the ECDC disease monitoring and laboratory networks	National Institute for Health and Welfare THL	FWD ECDC EU-IBIS DIPNET DIVINE EARSS EISS ESAC ESSTI EUVAC.NET EWGLI IPSE PulseNet Europe: Subtyping network for salmonella, EHEC and listeria in feed and food in the EU countries	Under way	
14. Acute health hazards in the EU	National Institute for Health and Welfare THL	EHEC and listeria subtyping network	Under way	
15. Participation in EFSA monitoring mechanisms for zoonoses, their causes and antimicrobial drug resistance	Finnish Food Safety Authority Evira	Annual summary from EFSA and ECDC to European Commission	Under way	

Theme	Responsible party	Who to alert	Stage	
16. Epidemics carried by household water and foods	Finnish Food Safety Authority Evira	Annual summary to European Commission	Under way	
17. Epidemics carried by water	Ministry of Social Affairs and Health	UN/ECE and WHO/Euro	Under way	
18. Disaster in Finland	Ministry of the Interior	EU, UN, Estonia, Russia, Sweden, Norway	Under way	
19. Flood warnings	Finnish Environment Institute	Following instructions issued by the Transboundary Water Commission, Russia is notified of all accidents. A similar procedure is in place with Sweden and Norway regarding floods	Under way	
20. Finnish weather warnings	Finnish Meteorological Institute	Sent to the European Meteoalarm system	Under way	

Liite 1: APPENDIX 1 Appointment decision

NATIONAL PLATFORM FOR DISASTER RISK REDUCTION

Appointment

The Ministry of the Interior has today appointed a Cooperation Network to put together and coordinate a National Platform for Disaster Risk Reduction. The network is composed of a steering committee and an expert committee.

Term of office

7 May 2010–31 December 2015

Background

The Ministry of the Interior Department for Rescue Services has been appointed the national coordinator for monitoring the implementation of the Hyogo Framework for Action. The Hyogo Framework for Action was prepared at the Kobe Conference in 2005. The task of the national coordinator is to report on the results of the work to prevent natural disasters and reduce the damage of disasters to the United Nations.

At the Kobe Conference, aims were set for promoting sustainable development, and in this context, for effective action for disaster risk reduction. The priorities for action cited in the final document include:

- 1) ensuring that disaster risk reduction is a national and local priority
- 2) identifying, assessing and monitoring risks and enhancing early warning
- 3) building a culture of safety
- 4) reducing the underlying risk factors
- 5) strengthening disaster preparedness and effective response.

A National Platform for implementing the Hyogo Framework for Action has been set up in 15 countries (Bulgaria, Croatia, Czech Republic, France, Germany, Hungary, Italy, Macedonia, Monaco, Poland, Russia, Spain, Sweden, Switzerland and the United Kingdom). No actual National Platform has been established in Finland.

Objective

The aim of the National Platform is to reduce risk factors and to improve society's preparedness for natural disasters in line with the priorities for action listed above.

Another aim is to bring together and draw on the work carried out by various parties to mitigate the damage of natural disasters and to achieve more effective cooperation in order to reduce disaster risks.

The Finnish National Platform sets out to develop international cooperation with the European Union and our neighbouring countries, and with regard to this, developing countries will be supported in their efforts to enhance their national and international cooperation regarding disaster preparedness. The National Platform takes into account the impacts of climate change on the risk factors.

Organisation

The Cooperation Network of the National Platform is a permanent body, while the members of the steering and expert committees will be appointed for a set period.

Steering committee

The task of the steering committee is to agree upon the priorities of the activities and working methods needed to prepare and develop various issues. The steering committee specifies the objectives of the National Platform and annually monitors their achievement.

The steering committee may rely on working groups, projects or experts in order to prepare issues that are within the competence of the National Platform, and invite organisations to participate in the Platform as it sees necessary.

The steering committee will make decisions on issues to be reported to the United Nations.

Steering committee composition

Chairman Director-General of the Department for Rescue

Services Pentti Partanen, Ministry of the

Interior

Members Director-General Jorma Julin, Ministry for

Foreign Affairs

Permanent State Under-Secretary Heikki Aaltonen, Prime Minister's Office Director-General Timo Kotkasaari, Ministry of Agriculture and Forestry Director-General Pekka Plathan, Ministry of **Transport and Communications** Ministerial Counsellor, Health Affairs Jouko Söder, Ministry of Social Affairs and Health Counsellor Airi Karvonen, Ministry of the Environment CEO Ilkka Kananen, National Emergency Supply Agency Development Manager Markku Haiko, Association of Finnish Local and Regional **Authorities** Director Juhani Damski, Finnish Meteorological Institute Development Manager Esa Nikunen, Finnish **Environment Institute** Director Pekka Heikkinen, Institute of Seismology Director, International Operations and Programmes Kalle Löövi, Finnish Red Cross

The secretary of the steering committee is Senior Officer, Rescue Services Taito Vainio.

Expert committee

The task of the expert committee is to prepare the steering committee meetings and to organise practical implementation of decisions made in the steering committee. As necessary, the expert committee may invite experts to be heard in order to prepare issues.

A separate decision will be made on arrangements for a secretary for the expert committee.

Composition of the expert committee

Chairman Senior Officer, Rescue Services Taito

Vainio, Ministry of the Interior

Members Counsellor Anna Gebremedhin, Ministry

for Foreign Affairs

Senior Specialist Eero Kytömaa, Prime Minister's Office Counsellor for Water Resources Management Jaakko Sierla, Ministry of Agriculture and Forestry Senior Officer for Preparedness Affairs Pauli Pullinen, Ministry of Transport and Communications Ministerial Adviser Jarkko Rapala, Ministry of Social Affairs and Health Product Manager Soili Suvanto, National **Emergency Supply Agency** Emergency Preparedness Manager Tapio Tourula, Finnish Meteorological Institute Leading Hydrologist Bertel Vehviläinen, Finnish Environment Institute Seismologist Matti Tarvainen, Institute of Seismology Head of National Preparedness Leena Kämäräinen. Finnish Red Cross

Act on Equality between Women and Men

It was not possible to meet the minimum requirement laid down in section 4a of the Act on Equality between Women and Men (Tasa-arvolaki 232/2005) in the composition of the steering and expert committees regarding both genders. A particular reason for this is that the steering and drafting committee members of the National Platform representing various organisations were appointed based on their job descriptions, and appointments to the committee were based on official position and tasks.

Costs and funding

Each organisation will take charge of the costs of their representative in the steering committee and expert committee.

Permanent Secretary Ritva Viljanen

Deputy of the Head of Preparedness Senior Officer, Rescue Services Tarmo Kopare

DISTRIBUTION

Members of the steering committee and expert committee

FOR THE INFORMATION OF

Minister of the Interior Anne Holmlund

State Secretary Antti Pelttari

Ministry of the Interior Departments and units

Prime Minister's Office

Ministry for Foreign Affairs

Ministry of Agriculture and Forestry

Ministry of Transport and Communications

Ministry of Social Affairs and Health

Ministry of the Environment

National Emergency Supply Agency

Finnish Meteorological Institute

Finnish Environment Institute

Institute of Seismology

Finnish Red Cross

Association of Finnish Local and Regional Authorities