



Elinkeino-, liikenne- ja ympäristökeskus
Närings-, trafik- och miljöcentralen
Centre for Economic Development, Transport and the Environment

Flood directive implementation in Finland



Content

- Legislation
- Implementing the flood directive
 - Preliminary flood risk assessment
 - Flood hazard maps and flood risk mapping
 - Flood risk management plans
- Competent authorities
- Preliminary flood risk assessment in Lapland



Legislation in Finland

- Flood directive (2007/60/EY)
 - Act for flood risk management (620/2010)
 - Decree on flood risk management (659/2010)



Flood directive implementation and the time table of first round

Preliminary flood risk assessment

22.12.2011

Flood hazard maps and flood risk maps

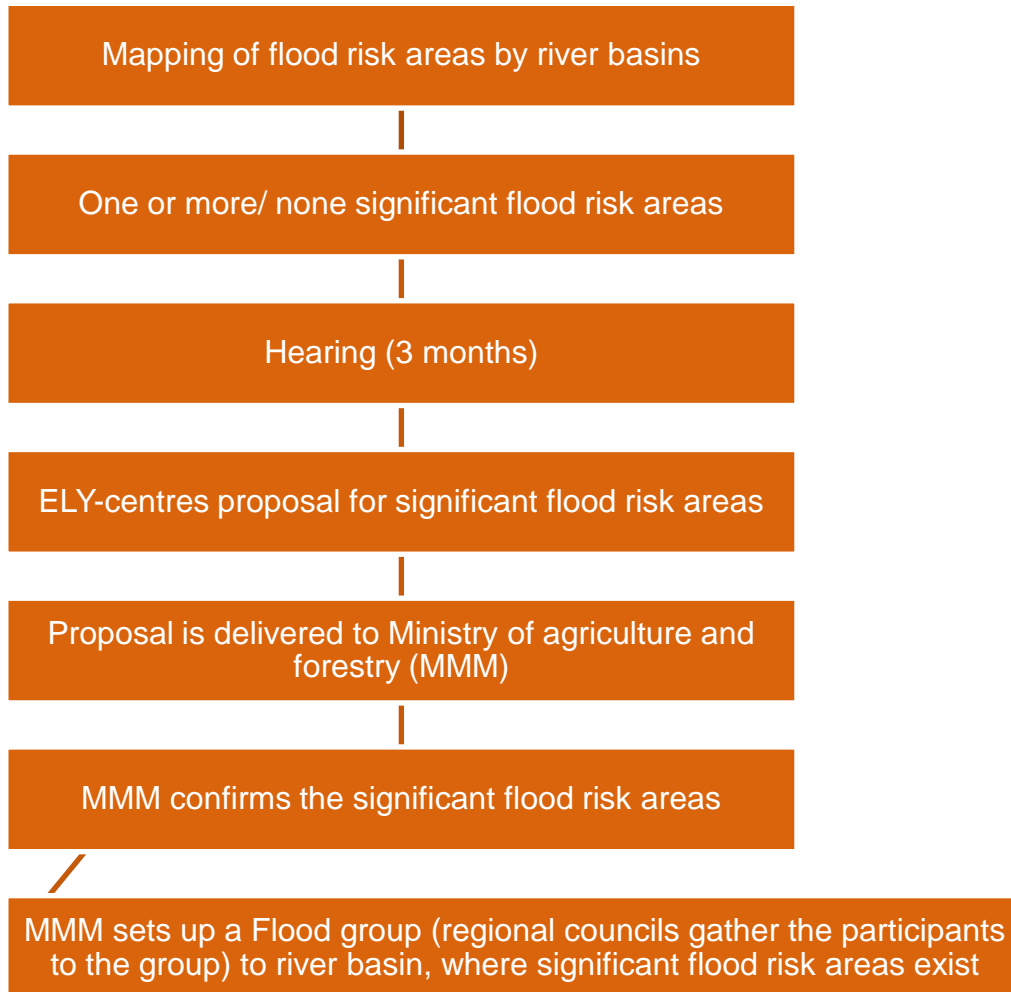
22.12.2013

Flood risk management plans

22.12.2015

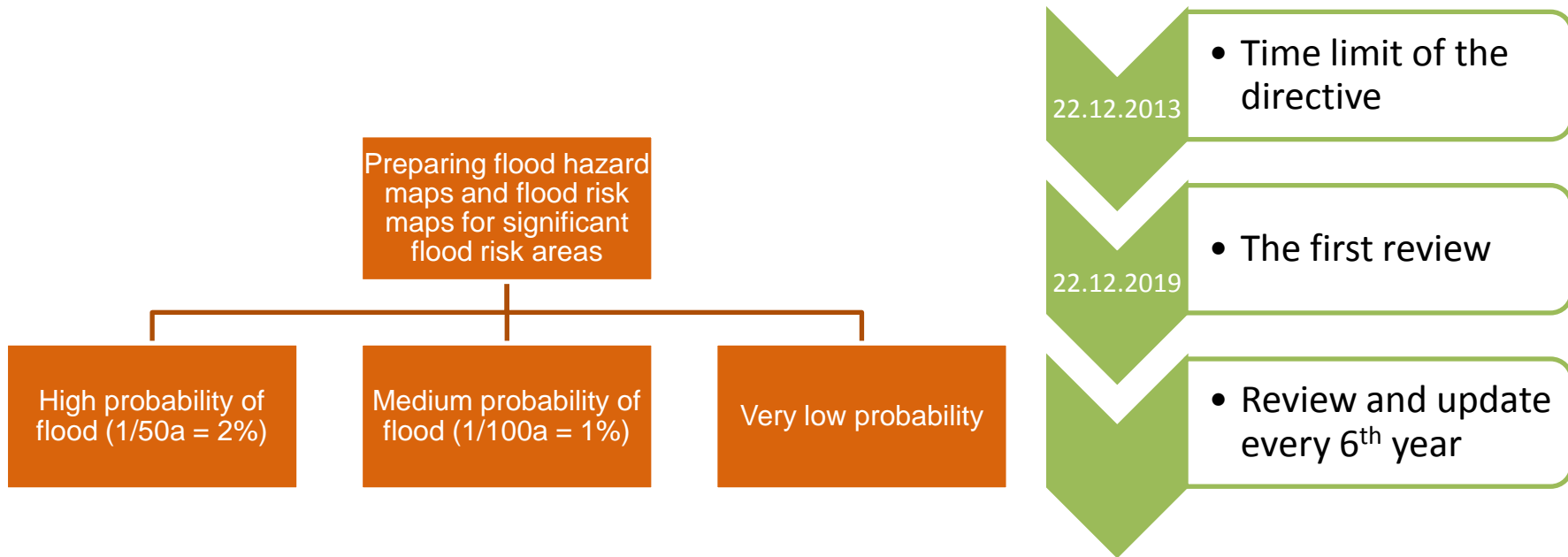


Preliminary flood risk assessment



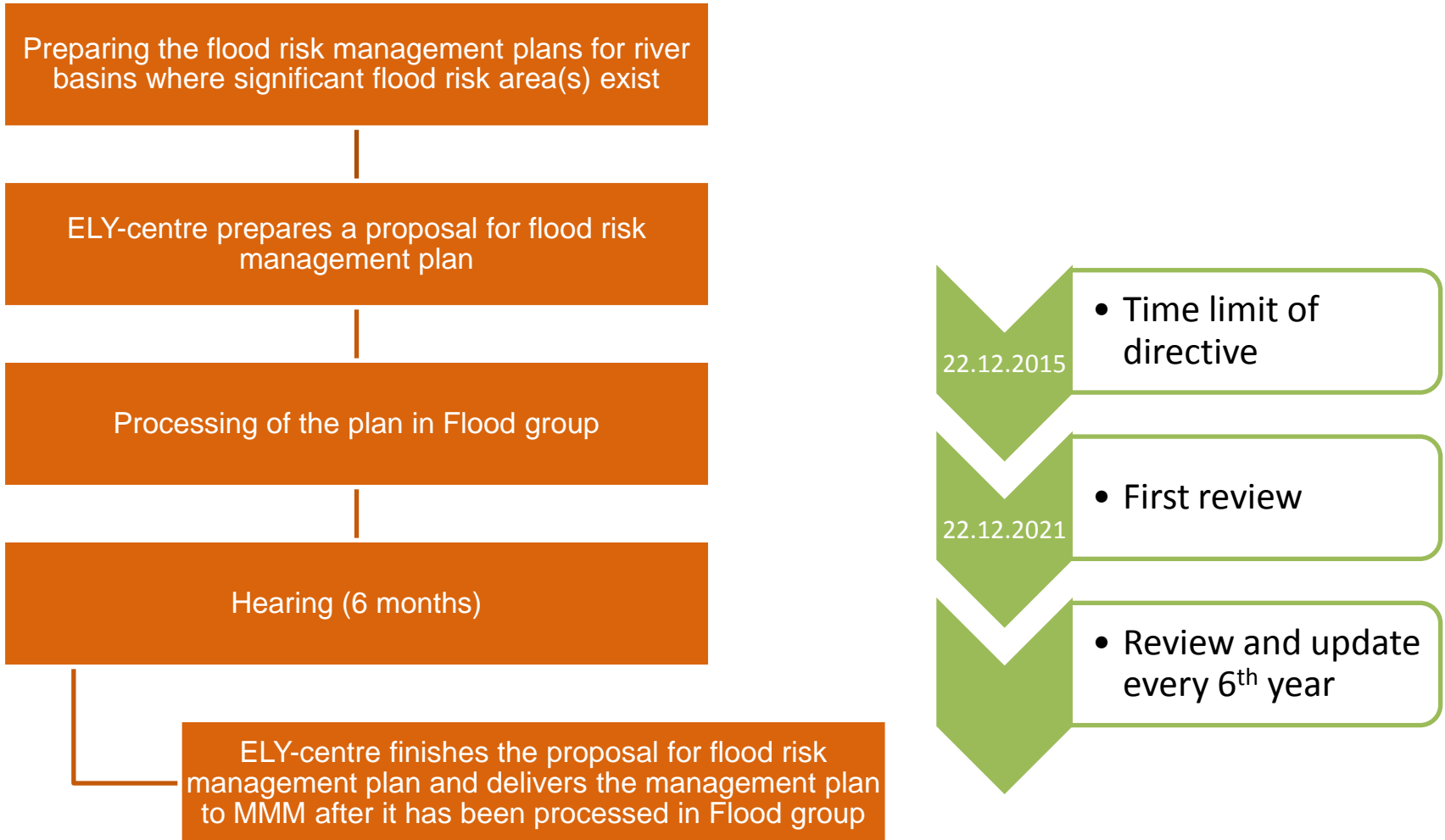


Flood hazard maps and flood risk maps





Flood risk management plans





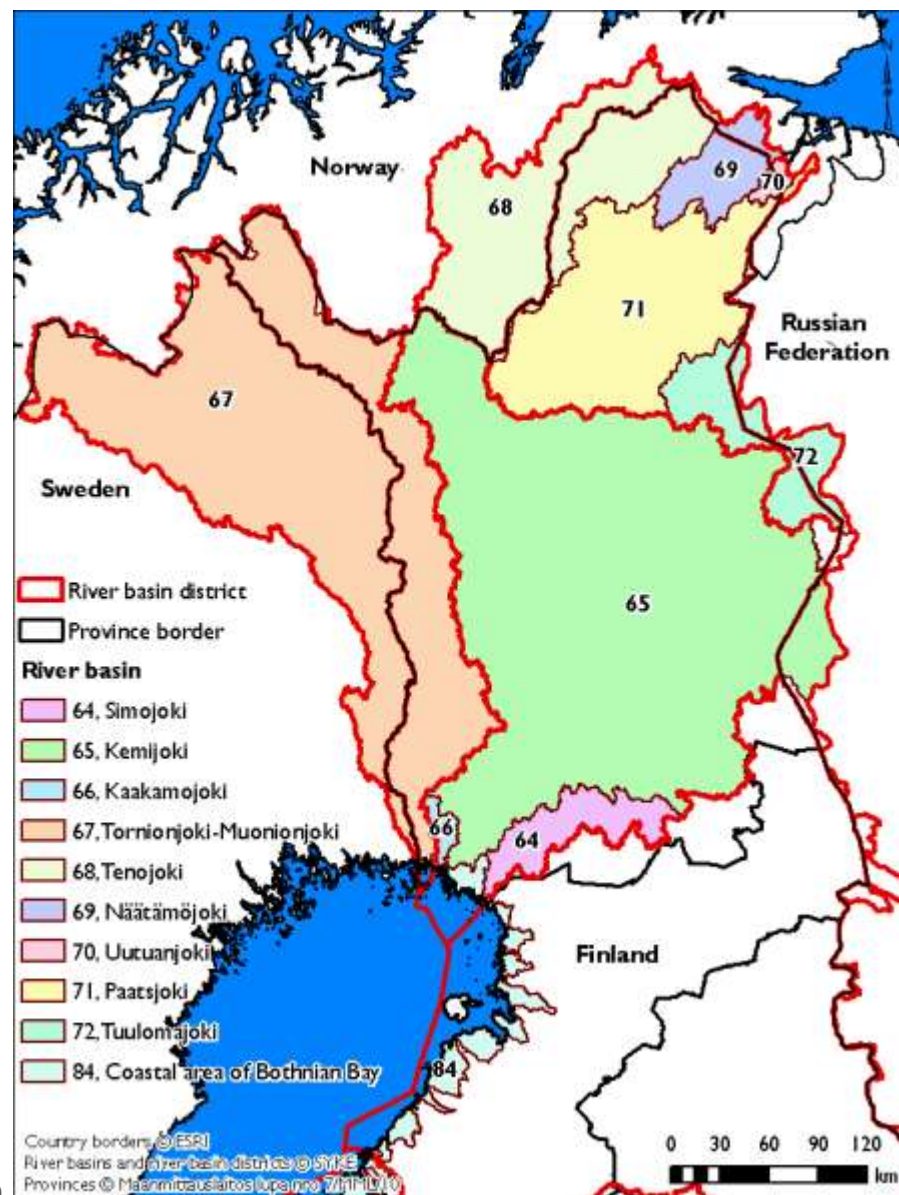
Competent authorities

Ministry of agriculture and forestry	<ul style="list-style-type: none">• Guides and follows the enforcement of the law and takes care of reporting to the commission• Confirms the significant flood risk areas and accepts the management plans, sets up the Flood group
Ministries of the Interior, Environment, Transport and Communications	<ul style="list-style-type: none">• Participate together with ministry of agriculture and forestry to the guidance and monitoring of the implementation of the law for flood risk management
Centers of Economy, Transport and Environment	<ul style="list-style-type: none">• Are mainly responsible for the planning of flood risk management• Participate to the Flood group
Finnish Environmental Institute, Finnish Meteorological Institute	<ul style="list-style-type: none">• Give expert help to ELY-centres• Other assignments considering flood risk management given by Ministry of agriculture and forestry
Regional councils	<ul style="list-style-type: none">• Gather the Flood group and participate to the Flood group
Municipalities	<ul style="list-style-type: none">• Are responsible for flood risk management related to storm water floods• Participate to the Flood group
Area's rescue service and other authorities	<ul style="list-style-type: none">• Participate to the Flood group



Preliminary flood risk assessment (PFRA) in Lapland

- Three River basin districts, in which all together nine River basins and northern coastal area of Bothnian Bay
 - ➡ 10 PFRA reports and one separate report for sea flood





Content of PFRA report

1. Background
2. Description of the river basin
3. Floods in history
4. Possible floods in future and flood risks
5. Using GIS-data in flood risk estimation
6. Flood risk areas
7. Suggestions for significant flood risk areas



Content of PFRA report

1. Background chapter describes in general how flood directive has been implemented in Finland
2. Description of the river basin
 - In this chapter information about river basin are described
 - Hydrology
 - Population and land use
 - Land use planning
 - Protected areas and cultural heritage
 - Flood protection and the use of the river basin



Content of PFRA report

3. Floods in history

- Observed floods
 - Information about floods that have caused major damages

4. Possible floods in future and flood risks

- Effect of climate change on floods

5. Using GIS-data in flood risk estimation

- In this chapter the modelling made by Finnish Environment Institute is described.



Content of PFRA report

6. Flood risk areas

- In this chapter bases for significant flood risk areas are described
 - Empirical knowledge and earlier reports
 - Already known areas that have had major problems with flooding
 - Flood risk to human health and security
 - Areas where inhabitants live, areas where are buildings that are hard to evacuate (hospitals, old people's homes, day-care centres, schools etc.)



Content of PFRA report

- Flood risk to essential services for community
 - Areas where are food industry or pharmaceutical industry
 - Electricity and drinking water distribution networks and services
 - Road and railroad networks
- Flood risk to environment and cultural heritage
 - Contaminated lands, waste disposal sites, waste water treatment plants
 - Cultural heritage sites that may suffer unrepaired damages if flooded
- Threat of flood caused by water structures
 - Dams (dam breaks)



Content of PFRA report

7. Suggestions for significant flood risk areas

- In this chapter the possible significant flood risk areas are proposed by basis described in chapter 6.
- If no significant flood risk areas are proposed, also bases for not to propose any areas are described here.



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Thank you!