Ministry of Agriculture and Forestry, Finland NB: Unofficial translation; legally binding texts are those in Finnish and Swedish.

# Government Decree on Flood Risk Management 659/2010

## Section 1 – Preliminary flood risk assessment

- (1) The preliminary assessment of flood risk due to river and lake floods is conducted according to river basins. The preliminary assessment of flood risk due to the rise in the sea level is conducted according to the territories of the Centres for Economic Development, Transport and the Environment.
- (2) The preliminary assessment of flood risk in river basins and coastal areas comprises:
  - 1) maps drawn up on the appropriate scale, showing the relative altitudes of the river basin and the coastal area, realised and planned land use and other necessary information for assessing the flood risk;
  - 2) a description of earlier flood events, their extent and the adverse consequences referred to in section 8(1) of the Flood Risk Management Act (620/2010) they may have caused, if the recurrence of similar floods and the related adverse consequences is to be considered possible;
  - 3) an estimate of the coverage of the floods which may occur in the future and the adverse consequences caused by the floods referred to in paragraph 2.
- (3) The estimate referred to in paragraph 3 of subsection 2 above is made using the altitude model and spatial data sets, taking account of the location of watercourses and their hydrological and geomorphological properties, efficiency of regulation and flood protection structures and other means used for flood risk management as well as the long-term trends in circumstances, including the impact of climate change on the occurrence of floods.
- (4) The provisions of subsections 2 and 3 apply, as appropriate, to the preliminary assessment of stormwater and meltwater flood risks.

#### Section 2 – Flood hazard maps

- (1) The flood hazard maps for river and lake floods and floods caused by the rise in the sea level show the areas which may be covered with water and the water level and depth during the flood event as well as, where necessary, water flow and flow velocity for the following types of floods:
  - 1) annual likelihood of flood is 2 per cent or flood recurs, on average, once in every 50 years;
  - 2) annual likelihood of flood is 1 per cent or flood recurs, on average, once in every 100 years;
  - 3) flood may occur in special circumstances or the annual likelihood of flood is very low.
- (2) Flood hazard maps for stormwater and meltwater floods show the areas which may be covered with water and the water level and depth during the flood event, taking account of the local circumstances and the likelihoods of rains which may be relevant as regards stormwater floods.

- (1) Flood risk maps present the following information on flood areas referred to section 2:
  - 1) estimated number of inhabitants;
  - 2) specific target sites and buildings such as hospitals, schools and day care centres;
  - 3) infrastructure such as roads, energy networks, communications networks and water supply plant systems and equipment;
  - 4) economic activity which is significant in terms of ensuring the functions vital to society;
  - 5) installations referred to in Annex I of Directive 2008/1/EC of the European Parliament and of the Council concerning integrated pollution prevention and control whose operations may cause sudden contamination of the environment in connection with a flood event, and specific areas referred to in section 4 of the Government Decree on Water Resources Management (1040/2006) where damage may be caused by such contamination;
  - 6) cultural heritage sites protected by law or designated for protection in the land use plan;
  - 7) other necessary information, including areas where flooding may cause adverse movement of ice or other solid matter, significant soil erosion or risk of landslides or risk of significant environmental contamination.

## Section 4 – Information used in flood hazard maps and flood risk maps

(1) Information used in flood hazard maps and flood risk maps must be consistent with the corresponding information used in the planning of water resources management. The flood hazard maps and flood risk maps are coordinated with the accounts of the characteristics of waters, effects of human activity on the waters and economic analyses of water use included in the planning of water resources management. The maps and accounts may also be combined.

#### Section 5 – *Flood risk management plan*

- (1) The flood risk management plans for river basins and coastal areas take account of:
  - 1) assessments referred to in sections 7–9 of the Flood Risk Management Act;
  - 2) possibilities to use regulation and other flood protection structures, flood conveyance routes and flood retention areas;
  - 3) realised and planned use, management and protection of water resources including the recreational use of the river basin and coastal area, fishery, power and energy economy, water traffic and port infrastructure;
  - 4) realised and planned land use;
  - 5) areas protected or reserved for nature protection purpose under the Nature Conservation Act (1096/1996);
  - 6) monitoring of the water situation, flood forecasts and communication on flood risks and preparation for these;
  - 7) action to be taken when there is a threat of flood or during a flood event including plans for rescue services and flood warning systems;
  - 8) other flood risk management planning concerning the same area.
- (2) The preparation and review of the flood risk management plan is coordinated with the review of the water resources management plan referred to in section 19 of the Act on Water Resources Management (1299/2004).
- (3) The flood risk management plan contains the information listed in paragraph A of the Annex.
- (4) The provisions laid down in this section above apply, as appropriate, to the preparation of the stormwater and meltwater flood risk management plan.

# Section 6 – *Appointment and term of the flood management group*

- (1) The Centre for Economic Development, Transport and the Environment submits the proposal referred to in section 8(3) of the Flood Risk Management Act to the Regional Councils which operate in the river basin or coastal areas concerned in the proposal. The Regional Council makes a proposal on the appointment of the flood management group after having negotiated with the relevant municipalities in its territory and regional rescue services as well as the Centre for Economic Development, Transport and the Environment. The Regional Council or Councils jointly submit the proposal to the Ministry of Agriculture and Forestry.
- (2) The Ministry of Agriculture and Forestry appoints the flood management group for no more than six years at a time. Efforts must be made to coordinate the term with the terms of the planning cooperation groups operating in the same river basin referred to in section 14 of the Act on Water Resources Management.

#### Section 7 – *Participation*

- (1) The Centre for Economic Development, Transport and the Environment must keep the proposal for designating the significant flood risk areas referred to in section 4(1) of the Flood Risk Management Act for public viewing in the relevant municipalities for three months and the proposal for a flood risk management plan for six months. The proposal for the flood risk management plan is kept for public viewing simultaneously with the proposal for the management plan referred to in section 13(3) of the Act on Water Resources Management.
- (2) Opinions on the proposal may be presented during the public viewing referred to in subsection 1.

## Section 8 – *Review of the assessments and plans*

(1) The impact of climate change on the occurrence of floods is taken into account in the review of the preliminary flood risk assessments and flood risk management plans. The information listed in paragraph B of the Annex is presented in the reviewed plans.

## Section 9 – Tasks of the Finnish Environment Institute

- (1) The Finnish Environment Institute:
  - assists the Centres for Economic Development, Transport and the Environment and Ministry of Agriculture and Forestry in managing tasks under the Flood Risk Management Act and in preparing the guidance needed for these and in communication as well as sees to the development of methods needed in flood risk management;
  - 2) maintains and develops hydrological monitoring as well as water situation and flood warning services in cooperation with the Finnish Meteorological Institute and Centres for Economic Development, Transport and the Environment;
  - 3) sees to the reporting to the European Commission required by the European Union legislation;
  - 4) sees to other tasks prescribed by the Ministry of Agriculture and Forestry.

# Section 10 – Tasks of the Finnish Meteorological Institute

- (1) The Finnish Meteorological Institute:
  - 1) maintains and develops the monitoring of the sea level and related forecasts as well as water situation and flood warning services in cooperation with the Finnish

- Environment Institute and Centres for Economic Development, Transport and the Environment:
- 2) sees to other tasks prescribed by the Ministry of Transport and Communications.

#### Section 11 – Cooperation authority in the international management unit

(1) The Centre for Economic Development, Transport and the Environment of Lapland sees to the cooperation referred to in section 14(1) of the Flood Risk Management Act in international flood risk management units established with Sweden and Norway.

## Section 12 – *Information system*

- (1) In addition to provisions laid down in section 26 of the Flood Risk Management Act, information to be recorded in the information system includes:
  - 1) information on the results of the preliminary flood risk assessments;
  - 2) necessary information on flood water levels and flood flows as well as precipitation;
  - 3) maps and plans concerning areas other than significant flood risk areas;
  - 4) recommendations for the lowest building levels;
  - 5) other available information needed for flood risk management planning such as information on damages caused by floods.

#### Section 13 – Deadlines

- (1) The first preliminary flood risk assessment must be completed and significant flood risk areas designated no later than 22 December 2011. The first review of the assessments and designations must be conducted, as considered necessary, no later than 22 December 2018.
- (2) The first flood hazard maps and flood risk maps must be completed no later than 22 December 2013.
- (3) The flood risk management plans must be prepared for the first time so that they can be approved and published no later than 22 December 2015.

## Section 14 – Entry into force

(1) This Decree enters into force on 7 July 2010.

#### A) Information to be presented in the flood risk management plan

- 1. A map of the river basin, coastal area or area where a stormwater or meltwater flood may occur concerned in the plan, showing the significant flood risk areas and other results of the preliminary flood risk assessment and a description of the river basin, its hydrology and use of water resources.
- 2. Flood hazard maps and flood risk maps and estimates of the adverse consequences caused by floods as well as conclusions on the maps and estimates.
- 3. Flood risk management objectives set for significant flood risk areas.
- 4. Summary of measures selected to achieve the flood risk management objectives, their impacts, costs and benefits, description of the coordination of measures with the environmental objectives included in the relevant water resources management plans and programmes of measures for water resources management as well as the environmental report.
- 5. Description of the activity in the river basin when there is a threat of flood and during the flood event, specific plans relating to the activity and the organisation of flood risk management.
- 6. A summary of how flood risks and their management have been taken into account in the procedures relating to the area concerned in the plan under the following statutes:
- i) Act on Water Resources Management (1299/2004);
- ii) Land Use and Building Act (132/1999);
- iii) Rescue Act (468/2003;
- iv) Dam Safety Act (494/2009)
- v) Health Protection Act (763/1994);
- vi) Act on Environmental Impact Assessment Procedure (468/1994);
- vii) Act on Environmental Impact Assessment of Plans and Programmes of Public Authorities (200/2005);
- viii) Act on Safe Handling of Dangerous Chemicals and Explosives (390/2005).
- 7. If available, a description of the methods for assessing the costs and benefits used for the assessment of measures implemented in transboundary river basins which have impacts within the territory of another state.
- 8. A summary of how the participation and communication under section 17 of the Flood Risk Management Act has been organised and an account of the opinions presented and negotiations between the states during the preparation and how these have influenced the flood risk management objectives defined in the plan, selected measures and other content of the plan.

- 9. A description and grounds for the prioritisation of measures, estimated costs, parties which have shown interest in implementing the measures and the financing possibilities, as well as how the progress in the implementation of the plan is to be followed.
- 10. A list of competent authorities and, as considered necessary, a description of the coordination of the planning within an international flood risk management unit or other transboundary river basin with parts in the Finnish territory.

# B) Information to be presented in the reviewed flood risk management plans

- 1. A summary of changes made after the publication of the previous version including the amendments referred to in section 20 of the Flood Risk Management Act.
- 2. An estimate of the progress made in reaching the flood risk management objectives and implementation of the related measures.
- 3. A summary of the measures included in the previous flood risk management plan which have not been implemented and an account of the reasons for this.
- 4. A description of other measures implemented after the publication of the previous version of the flood risk management plan.