

# Germany – Lessons Learnt, Actions taken

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European Flood Conference  
17 and 18 May 2006; Vienna

## Overview

- **5-Issue Programme 2002**
- **Flood Protection Act 2005**
- **Proposal for an EC-Flood Directive**
  - Essentials for Germany

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## 5-Issue Programm 2002

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## 5-Issue Programm 2002

- **Reaction to the extreme flood events in the Danube and Elbe basin in 2002**
- **Programm Elements**
  - **Joint Flood Protection Programm of Federal Government and Federal States**
  - **Flood Action Plans co-ordinated across administrative (and national) boundaries**
  - **Promoting European Cooperation**
  - Review of construction plans for inland navigation, environmentally sound development of navigation
  - Immediate and short term actions (Recovery Fund)

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## 5-Issue-Programm 2002 Joint Flood Protection Programm

- Space for rivers
- Decentral Retention of Water in the Catchment Areas
- Reduction of potential damage through management of settlement development and spatial planning



Flood Protection Act; Recommendations by Conference of Environment Ministers and by Conference of Ministers for Housing and Urban Development;

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## 5-Issue-Programm 2002 Joint Flood Protection Programm

### National Research Programmes

- **RIMAX** (since 2004)  
on Risk Management of Extrem Floods
- **GLOWA** (since 2003)  
Global Change and Water Cycle  
Effects of global change on the return probability of extrem events (floods and droughts)

### New Institutional and Organisational Arrangements

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## 5-Issue-Programm 2002 Flood Action Plans

### International

- Rhine 1998  
(2. Evaluation 2006)
- Mosel/Saar 1998  
(2. Evaluation 2006)
- Elbe 2003  
(1. Evaluation 2006)
- Danube 2004
- Odra 2004

### National

- Weser (1997; under review)
- Programmes by Fed. States
  - Integrated Rhine Programme
  - Integrated Danube Programm
  - Bavarian Action Programm 2020  
for Danube and Main
  - Saxonian Flood Protection  
Concepts

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## 5-Issue-Programm 2002 Flood Action Plans

### Common Elements

#### • Objectives

- Reduction of damage potential
- Sufficient level of protection

#### • Measures

- Improving forecast and early warning systems
- Awareness Raising and Information (rules for behavior)
- Risk Mapping
- Improvement of natural retention, renaturation of floodplains
- Technical protection measures (but also dyke relocation)
- Prevention through land use management, requirements to reduce risk and damage potential in potentially flooded areas

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## **5-Issue Programm 2002 Promoting European Cooperation**

- UN ECE Seminar on Flood Prevention, Protection and Mitigation, Berlin, June 2004
- Support for EU-Strategy
  - Best Practice Document
  - Communication (July 2004)
  - Council Conclusions (October 2004)
  - Draft Action Programme and Draft Directive

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## **Flood Protection Act**

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## Flood Protection Act

### The act amends several Federal acts

- Water Act
- Building Code
- Regional Planning Act
- Waterway Act
- Act on the German Meteorological Service

### Stricter, more precise and identical provisions throughout Germany

- instead of 16 different provisions at Federal States level

### Act came into force in May 2005

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## Flood Protection Act Principles

- Water management has to take flood protection into account
- Everybody has the duty to prevent flood damages as far as possible
- Information and warning of the public with regard to flood hazards and risks
  - Preventive measures
  - Rules for behaviour

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## Flood Protection Act Important Provisions/ Water Act

- The 16 federal states have to determine waters or water segments where flood damage has occurred or is expected to occur
  - Information to the public
- For those determined waters flood plains have to be legally designated within 5 (high potential of damage) or 7 years
  - Basis: a flood event which is expected to occur once every hundred years
  - Public participation
  - In the past flood plains have already been designated, but not enough and according to different criteria.

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## Flood Protection Act Important Provisions/ Water Act

### Within the designated flood plains

- Law of the federal states shall stipulate, e.g.
  - How to deal with hazardous substances, especially oil heating systems
  - How to prevent or alleviate possible soil erosion and inputs of pollutants
- No new development sites by land-use plans
  - Exemption only if nine conditions are met, e.g.
    - No alternatives for human settlement
    - No risk to life, significant health damage or material loss
- If the Building Code allows buildings an additional license is necessary to prevent negative impacts on flood protection
  - E.g. if a land-use plan already exists

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## Flood Protection Act Important Provisions/ Water Act

- **Flood-prone zones**
  - Areas behind dykes or other flood protection devices
  - Dykes may be overtopped and damage may occur
  - Public and municipalities shall be warned by the designation of those zones
- **Flood control plans**
  - At the latest after four years, if no plans already exist
  - Control of water run-off, technical flood control, measures to preserve or restore retention areas, relocation of dykes etc.
- **Cooperation in river basin districts**

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## Flood Protection Act Important Provisions /Other Acts

- **Federal Building Code and Federal Regional Planning Act**
  - Designated flood plains and flood-prone zones shall be noted in the land use plan, the development plan and in the regional development plans
- **Federal Waterway Act**
  - Expansions or new construction measures as well as maintenance measures have to be carried out in such a way as to avoid impacts on flood control
- **Act on the German Meteorological Service**
  - More concrete provisions in order to support effective and quick flood forecasts

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# Proposal EC-Flood Directive

## Essentials for Germany

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# Proposal EC-Flood Directive

## Federal Government in principle supports

- overall approach
  - risk assessment
  - mapping of risk areas
  - risk management plans
- scope (all river basins and coastal areas)

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## Proposal EC-Flood Directive Essentials for Germany

- Guarantee for already existing instruments until deadline for first review and update
- Flexibility concerning the co-ordination with WFD implementation where necessary in substance, no formal procedural links which may hamper implementation of both directives

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## Proposal EC-Flood Directive Essentials for Germany

- Feasible solutions for coastal areas (in particular concerning mapping) taking into account the differences to inland flood management
- Flood risk management plans shall be strategic plans at river basin level, not detailed plans for each risk area at sub basin level

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## Proposal EC-Flood Directive Essentials for Germany

- Precise requirements which limit the administrative burden

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attention

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