Understanding Risk Balkans Conference

Republic of Serbia
Ministry for Agriculture, Forestry and Water
Republic Directorate for Water
Belgrade – Serbia
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2018
Content:

• Introduction
• Legal and institutional framework
• EU Flood Directive: Law on Water / comparison
• Status in Serbia according EU Flood Directive
  • Preliminary Flood Risk Assessment (PFRA)
  • Flood Hazard Maps and Flood Risk Maps
  • Flood Risk management Plan
• Coordination with EU Directive 2000/60/EC Public information and Consultation
Topic – Understanding Risk

FLOOD

How to respond?
Legal and institutional framework

• Law on Water
• Rulebook on the delineation of sub-basins
• Decision on the determination of water boundaries
• Decision on determining the list of waters of the 1st order
• Rulebook on determining the methodology for the preparation of the preliminary flood risk
• Rulebook on determining the methodology for development of flood hazard maps and flood risk maps
• General plan for flood protection for the period from 2012 to 2018
• Operational Plan for Flood Protection for 2018 (annual)
Authorities

Main institutions responsible for water management / flood risk management, are:

- Ministry for Agriculture, Forestry and Water/
  Republic directorate for water,
- Provincial Secretariat for Agriculture,
  Water Management and Forestry in Vojvodina
- Competent authorities of local self-government units,
- Public Water Management Companies
  ``Srbijavode`` and ``Vode Vojvodine``

*Ministry of Interior Affairs – Sector for Emergency situations

Serbia
Law on Water, Official gazette of Republic of Serbia No 30/10, 93/93 and 101/16
Flood protection is regulated by the Law that regulates proceedings and measures for flood and ice protection, as well as protection from torrents and erosion.
<table>
<thead>
<tr>
<th>EU Flood Directive</th>
<th>Law on Water</th>
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<tr>
<td>➢ Preliminary Flood Risk Assessments</td>
<td>✓ Preliminary Flood Risk Assessments, 2012</td>
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<td>➢ Flood Hazard and Flood Risk maps</td>
<td>✓ - Different Projects (SoFPAS, IPA 2014..)</td>
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<tr>
<td>➢ Flood Risk Management Plans</td>
<td>✓ - Flood Risk Management Plan for territory of Serbia (draft)</td>
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<td>➢ Coordination with Directive 2000/60/EC</td>
<td>✓ Determination – management units, water units…</td>
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Preliminary Flood Risk Assessments, 2012

Identified
99 APSFR
Flood Hazard Maps & Flood Risk Maps

FHM & FRM are required for all designated APSFR`s

• Rulebook on determining the methodology for development of flood hazard maps and flood risk maps
• In force / 2017 February

FHM development procedure

FRM development procedure

• Different projects: SoFPAS I, Danube Flood Risk (ICPDR),...
Flood Hazard Maps & Flood Risk Maps

SoFPAS I  Map of the Project area

➢ different source of data
➢ different formats and data processing level
➢ data that are non-homogeneous

Recommendations:
➢ standardization and preparation of spatial planning documents
➢ development of GIS in institutions
➢ strengthening cooperation among institutions including data exchange
➢ involvement of stakeholders in process

URGENT TASK
DEVELOPING FHM & FRM
Flood Hazard Maps & Flood Risk maps

➢ IPA 2014-2020

Serbia Flood Recovery Project

- APSFR under consideration in this project including the priority
- data collection
- LiDAR record
- data processing
- DTM
- .......
Flood Risk Management Plan

- Flood Risk management Plan for territory of Republic of Serbia
  - Draft version

- On the basis of the maps FRMP for territory of Serbia will establish by RDW

- FRMP for river basin district will establish by PWC
Coordination with EU Directive 2000/60/EC

Identification of River Basin Districts

Identification of Units of Management

46 units
River 1st & 2nd order

Flood defense facilities
Flood event 2014

Red meteorological alarm on 12th May

RHMSS
Flood event 2014

Kolubara river

- 80% territory of Obrenovac city was flooded
- Water depth in some parts was 5m
- Evacuated: 25,000
- Partially or totally devastated houses: more than 1,000
- Damage to transport and communications: 17,000,000 €
- Endangered TPP Nikola Tesla (the largest in Serbia, installed power 1.650 MW)
Flood event 2014

Sava river
Sremska Mitrovica
Jamena village
Flood event 2014

Reasava river
Svilajnac city
Krupanj / Likodra river

Šabac / Sava river
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Instrument = symbol for the EU FD implementation in Serbia

Thank you

André Rieu and Johan Strauss Orchestra

Thank you