# Disaster management

## Preventing Environmental Catastrophes by Spatial Planning and Land Management

G. Schennach, Austria

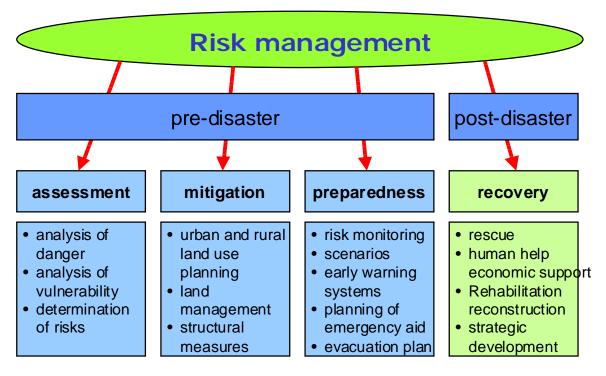


### **FIG WG 8.4**

- intercommissional WG of FIG
  - ø established in August 2003
- several meetings at WWs, seminars, congresses
  - **Ø** changing members

### **Members**

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Regional and international co-operation in research, data-transfer and datainfrastructure



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#### Risk assessment



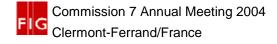
**Zoning of disaster** prone areas according to the magnitude of risk:

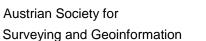
- Simulation of flood scenarios
- 3 dimensional landscape model
- Land use
- Population density
- Infrastructure
- Real estate value

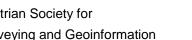


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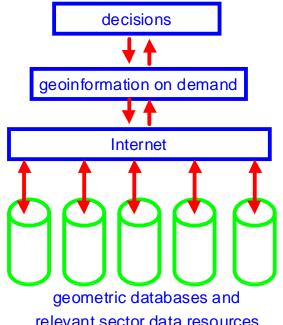
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#### Recovery of disasters and emergency management



#### Geoinformation on demand:

- Information of damages
- Infrastructure
- Evacuation routes
- 3 dimensionel landscape model
- etc.

relevant sector data resources



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## Requirements on data and data infrastructure

- Cross border availability of actual relevant spatial information
- Accuracy and completeness of geoinformations
- Common and uniform database
- Interoperability and congruent classification of data sets
- Reliability of data infrastructure
- Appointment of a co-ordinating organisation to serve as primary portal of access to national and international networks



#### Conclusions

- Information based decisions are a pre-requisite for the formulation of sucessful assessment, mitigation, preparedness and recovery strategies concerning risk management.
- Setting up successful risk information infrastructure networks is one of the greates challenges
- Risk management is a new purpose of catastral databases and an important application of land administration
- The surveyors of the 21 st century have great responsibilities both socially and professionally to involve themselves in risk management.



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