

IDIRA

Interoperability of data and procedures in large-scale multinational disaster response actions

International Workshop on Interoperability and Rescue 9th May 2012, Assisi, Italy

Dr. Georg Foerster Fraunhofer Institute for Transportation and Infrastructure Systems IVI, Dresden, Germany







European situation



- Large scale disasters happen periodically
 - floods
 - earthquakes
 - forest fires
- Response cooperation
 - multi-national
 - multi-organizational



How to manage efforts from different countries effectively?

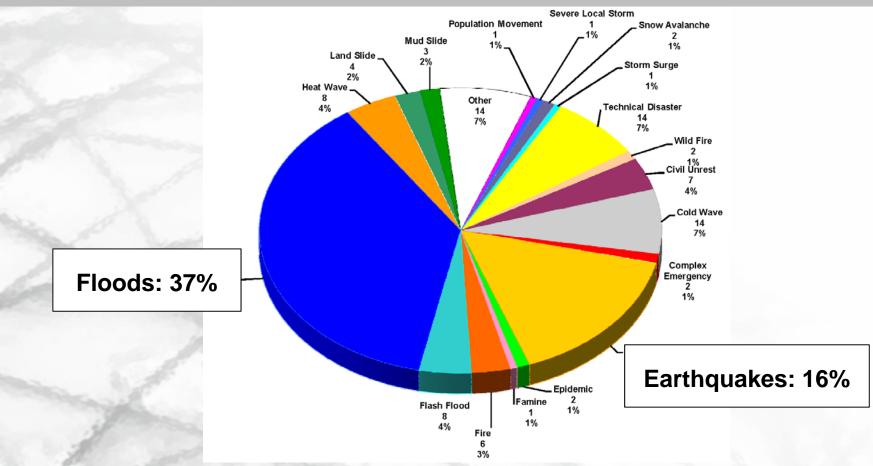


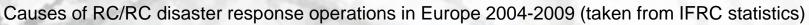




Red Cross statistics as starting point













IDIRA: A Vision?



Imagine large-scale disaster response actions, where

- all acting organisations share a common operational picture,
- linguistic and technical communication barriers don't constrain an effective resource management,
- structures and procedures of information interchange are compatible.









Existing barriers



Temporal horizon	Barriers for interoperability	Planning perspective
Weeks	 Administrative level Structures Legal background/mandates Resource management 	Strategic level
Days Hours	 Command and control level Procedures Information handling 	Tactical level
Minutes	Field operations levelLanguageCommunication systemsEquipment	Task level

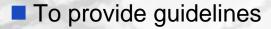




How to reduce barriers?



- To provide infrastructure
 - central server and services
 - ad hoc wireless communication
 - common operational pictures



- validation and adaptation of existing processes
- description of successful rules and procedures
- recommendations for harmonization and standardization









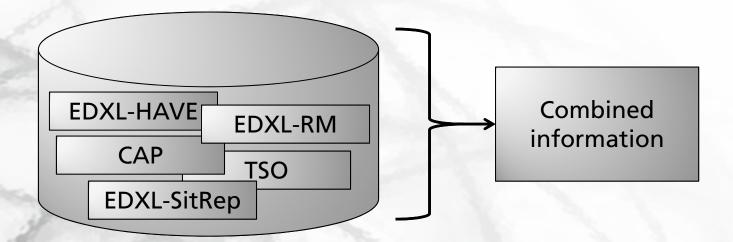




How to reduce barriers?



- To provide standards for information exchange
 - define new standards: long-term process
 - use and combine existing standards: feasible



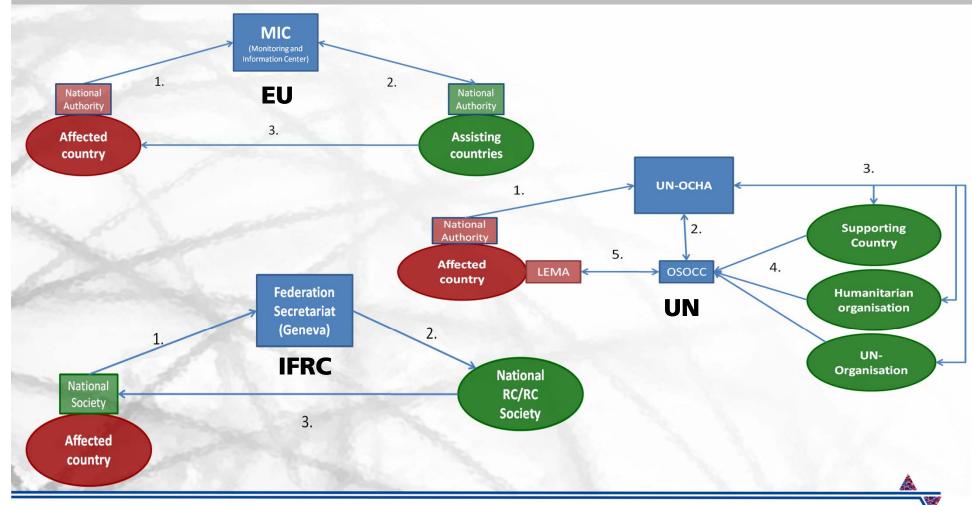






Existing processes must be considered









General approach: common operational picture



Interoperability of communication

Interoperability of information

Interoperability of management

Common Operational Picture

define the need

show new options

Standardized procedures

propose adaptations

Field trainings





Project in brief



Start date: May 1st, 2011

Duration: 48 months

■ Budget: ca. €11 Mio.

Consortium: 18 organization from 7 countries











































Contact



Fraunhofer Institute for Transportation and Infrastructure Systems IVI

Zeunerstr. 38, 01069 Dresden, Germany



IDIRA project coordinator: <u>Andreas.Kuester@ivi.fraunhofer.de</u>

Head of Fraunhofer IVI's security research: Kamen.Danowski@ivi.fraunhofer.de





