DLR Center for Satellite Based Crisis Information (ZKI)

Dr. Stefan Voigt
Emergency Mapping – Development of ZKI

- First concept
- Formal start of ZKI
- Tsunami Indonesia
- Junior partner to Charter (PM)
- Elbe flood
- Launch TerraSAR-X
- First support
- Full Member of the Charter
- Charter Presidency
- ZKI-DE Service Contract
- 1999
- 2002
- 2004
- 2007
- 2011
- 2012
- 2013
- 2014
- 2000
- 2005
- 2010
- 2015

- DLR
- ZKI
- BOSS4GMEs
- Respond / RISK-EOS
- SAFER / LinkER
- IWG-SEM
- IWG-SEM Chair
- German WG on EM
- Center for Satellite Based Crisis Information

- a service of DFD
- BOSS4GMES
- RESPOND / RISK-EOS
- IWG-SEM
- IWG-SEM Chair
- German WG on EM
- Center for Satellite Based Crisis Information
- a service of DFD
DLR Center for Satellite Based Crisis Information (ZKI)

... provides 24/7 service for
- rapid mapping and damage assessment
- monitoring crisis situations
- reference mapping for disaster preparedness

- Harmonisation
- Cooperation
- Guidelines
- Open to new partners

www.iwg-sem.org
Disaster cycle: From Response to Reduction!

Increased use of EO for Risk Assessment
- Hazard
- Exposure
- Vulnerability

Space for Early Warning and Indicators
- Crisis Indicators
- Early Warning
- Now Casting
- Document reduction!

Towards geospatially explicit PDNA
- Automated workflows
- Systematic Flood Mapping
- Semi-automatic feature extraction
  Reconstruction Monitoring

Preparation/Prevention
Risk Analysis
Reconstruction
Emergency Relief
Transition Phase Relief and Reconstruction

Next generation Rapid Mapping

Increased use of EO for Risk Assessment
Next generation Rapid Mapping
The Future...

- Collaborative Analysis and Crowd Mapping
- Integrating Web Sources and Social media
- Industrial Mapping / Production
- Synergy of global mechanisms
- Oblique Observations and 3D
- Crisis indicators and now casting
- Harmonization and Cooperation - IWG-SEM 2.0
- Global Partnership for DRR
- Global fusion of damage/loss information on Open Street Map - OSM
- NRT / Dynamic Monitoring

J/IWGJSEM 2.0
Global Partnership for DRR

Global fusion of damage/loss information on Open Street Map - OSM

Synergy of global mechanisms

Collaborative Analysis and Crowd Mapping

Industrial Mapping / Production

Integrating Web Sources and Social media

Oblique Observations and 3D

Crisis indicators and now casting

Harmonization and Cooperation - IWG-SEM 2.0
Global Partnership for DRR

Global fusion of damage/loss information on Open Street Map - OSM
Thanks for your kind attention

stefan.voigt@dlr.de