

## EDIM 2<sup>nd</sup> Year Meeting 2009

Karlsruhe University, Geophysical Institute, May 12, 2009

### Participants:

- Christ, Ingrid (DELPHI IMM, Potsdam)
- Erdik, Mustafa (Bogazici University, Istanbul, Turkey)
- Kiehle, Christian (lat/ion GmbH, Bonn)
- Köhler, Nina (Karlsruhe University)
- Kühnlenz, Frank (HU Berlin)
- Lessing, Rolf (DELPHI IMM, Potsdam)
- Lichtblau, Björn (HU Berlin)
- Mays, Judit (lat/ion GmbH, Bonn)
- Milkereit, Claus (GFZ Potsdam)
- Picozzi, Matteo (GFZ Potsdam)
- Schubert, Chris (DELPHI IMM, Potsdam)
- Yenidogan, Cem (Bogazici University, Istanbul, Turkey)
- Wenzel, Friedemann (Karlsruhe University)

### Reports of Project Partners:

- **Friedemann Wenzel:** Highlights of the 2<sup>nd</sup> International Workshop on Earthquake Early Warning in Kyoto (April 21/22, 2009), <http://www.eqh.dpri.kyoto-u.ac.jp/src/eew/>
- **Cem Yenidogan:** KOERILOSS – Building Damage Estimation Algorithm  
Building classification (type, height, construction date); input parameters; damage estimation procedure; calculation of input parameters; capacity spectrum; fragility curves; vulnerability curves
- **Nina Köhler:** Progress of sub-project A  
PGA and Sae attenuation of simulated earthquake data; delivering of Sae-values of simulated example earthquakes to DELPHI IMM; simulation of the historic 1509 Istanbul earthquake
- **Matteo Picozzi:** Progress of sub-project B1  
Development of an improved sensor; report of testbed in Ataköy district (Istanbul); SOSEWIN Task-Force mission Italy (April 2009) – a couple of sensors installed, running for some weeks, several aftershocks recorded
- **Björn Lichtblau:** Progress of sub-project B2  
Basic node software and testbeds done (running for nearly 1 year); Notification Service done; Management Software mainly done; first Alarming Protocol version installed - starting performance evaluation
- **Christian Kiehle / Judit Mays:** Progress of sub-project C (lat/ion GmbH)  
Latest achievements: Setup of Spatial Data Infrastructure, Connection to Sensor Network, Quality of Service, several meetings with project partners, travel to Istanbul; planned: connect Sensor Web to Portal, concept for Quality of Service based on Grid-computing concepts, documentation, final prototype, diploma thesis within sub-project cancelled; interactive presentation of Sensor Observation Service

- **Ingrid Christ / Chris Schubert:** Progress of sub-project C (DELPHI IMM GmbH)  
Development of an EDIM damage estimation service; provision of mediation system (<http://www.edim-des.delphi-imm.de/>): calculation of potential building damage, filtering of affected building classes, visualization of earthquake information, presentation in Istanbul (KOERI, AKOM, municipality); interpretation of radar data: land cover interpretation, floor number interpretation
- **Mustafa Erdik:** Urban Earthquake Shaking and Loss Estimation (ELER Level 2 Module)  
ELER = Earthquake Loss Estimation Routine (developed within EU-FP6 NERIES project), developed for earthquake loss estimation in urban areas: assessment of building damage, human casualties, macro economic loss quantifiers; Shake Mapping; spectral capacity-based vulnerability assessment methodology; casualty estimation; grid-based urban building inventory and population data

All presentations are available as PDF files within the internal area of the EDIM webpage.

#### **Possible conferences (special EDIM session?):**

- Fall meeting of the American Geophysical Union (AGU), each year in December, San Francisco, USA
- 32<sup>th</sup> European Seismological Commission (ESC), September 5-9, 2010, Montpellier, France (**Friedemann Wenzel:** check with organization committee if ESC in Germany possible)
- 14<sup>th</sup> European Conference on Earthquake Engineering (ECEE), August 30 - September 3, 2010, Skopje, Macedonia (**Mustafa Erdik:** check with ESC if special EDIM session possible)

#### **Publications / Public relations:**

- submitted papers by sub-project B: one paper about SOSEWIN (Seismological Research Letters), one paper about bridge, both minor revisions
- publication of EDIM paper:
  - schedule: preferred submission by mid-year (before BMBF Status Workshop!)
  - possible journals: Computers and Geoscience, Natural Hazard, EOS
  - publications maybe split into two papers: one about earthquake early warning, one about information system
  - responsible organization by **Claus Milkereit, Christian Kiehle, Cem Yenidogan, Friedemann Wenzel / Nina Köhler:** create a core document with basic figures
- Mustafa Erdik: prepare summary of options for public relations in Istanbul (talk to municipality)
- Mercedes Foundation
- Ludwig Stroink: planned cooperation with Turkey?

#### **BMBF Status Workshop (Munich, October 2009)**

- comprehensive presentation of all EDIM partners (layout)
- **Friedemann Wenzel:** talk to Werner Dransch about possible EDIM booth, propose English as official meeting language
- language of EDIM presentations: English
- **Nina Köhler:** schedule special EDIM meeting in Munich, inform about presentation style

### Financials:

- EDIM funds can be spent until month 39 (= end of June 2010)
- **Friedemann Wenzel:** write to Ludwig Stroink about special travel funds to conference (Skopje?)

### Project Continuation:

- BMBF: possible continuation of GEOTECHNOLOGIEN
- FP7: will be discussed at SAFER Final Meeting, GFZ, June 2009
- GEM (Global Earthquake Model): currently about 14 million Euros; thinking about 25 million Euros for a 5-year project; critical meeting: Munich, June 2009 (details: Mustafa Erdik)

### Miscellaneous:

- lat/lon GmbH workshop: deegree day, Bonn, May 26/27, 2009, <http://deegreeday.deegree.org>
- a visitor from KOERI (Ufuk Hancilar) is planned to come to Karlsruhe and GFZ
- **Nina Köhler:** provide acceleration time series of historic 1509 earthquake to sub-project B and according Sae-values to DELPHI IMM within next month (for Istanbul grid as well as for the site coordinations of SOSEWIN sensors)
- speed train between Ankara and Istanbul: application of EEW system?