

Institute of Spatial and Regional Planning University of Stuttgart

Activities of the ICoE - Network on

Critical Infrastructures and Strategic Planning

Prof. Dr.-Ing. Jörn Birkmann Director IREUS



Core Network Partners – Associated Partners



- Annegret Thieken /Prof. Hazard and Vulnerability/ Flood Expert
- Prof. Ortwin Renn / Risk Governance Expert /Sociology
- Prof. Jakob Rhyner / UNU-Vice Rector, Director EHS
- Prof. Friedemann Wenzel /Earthquake and Urban Expert
- PD Kunz Plapp / CEDIM Coordinator / KIT
- Head /<u>Director of the ICoE Prof. Joern Birkmann</u> / Univ. Stuttgart

DFG Round Table

Institute of Spatial and Regional Planning



Identification of emerging research topics Scope for interdisciplinary cooperation Formation of a research network on CI and SP



NIST Awards \$20 Million for Research Cen Disaster For Immediate Release: February 19, 2015

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Prof.

Prof. Dr.-Ing. habil. Jörn BIRKMANN

Activities in the last 12 month

- Follow up activities regarding the "DFG Round Table Workshop" on Critical Infrastructures and Strategic Planning
- Submission of a proposal for a post-doc position at IREUS for strengthening integrated research between civil engineering and urban planning - CI and strategic planning
- Presentation of the ICoE and respective research in selected expert and high level meetings
- Development of teaching material for international Master Courses in Stuttgart (MIP, MPP).

Key results and further activities

- Paper that summarizes the state of the art and outlines new research needs
- SI in the Journal of Extreme Events (JOEE)
- Further discussion with the BMBF and DFG for follow up funding for specific activities



Authors (to be defined - all who have an interest to support use mutatve). Prof. Dr. Jon Birkmann, Prof. Friedemann Wenzel, Prof. Stefan Greiving, Dr. Matthias Garschagen, Prof. Wolfgang Nowak, Prof. Dirk Valleé, Dr. Torsten Welle, Dr. Stefan Fina, Mr. Benedikt Rilling, Ms. Anna Goris, Prof. Frank Fiedrich, Prof. Alexander Fekete, Prof. Susan Cutter: Prof. Janes K. Mitchel.

Preamble

The WHITE PAPER is part of the DFG Roundtable-Discussion on ""Integrated Research for Enhancing the Resilience of Critical Infrastructures through Strutegic Assessments and Innovative Planning Approaches" which takes place from the 26^4 to 27^6 of October in Stuttgart.

The White Paper is designed to document the state of the art and particularly highlight research gaps and future research needs.

In this context, the paper provides an initial assessment of the state of the art of research on the resilience of Cl. It identifies existing research gaps based on the expertise of academics from various disciplines, particularly engineering, geography, spatial and urban planning as well as sociology. All of these areas and disciplines are represented at the DFG Round Table discussion.

Overall, the WHITE PAPER aims to promote the establishment of a research community in Germany with strong international linkages in the field of Critical Infrastructures and Strategic Planning.

Importance of Critical Infrastructures (CI) and Strategic Planning - State of the Art in Research -

Critical Infrastructures (CI) play a key role in building resilience and reducing vulnerability of people to natural, natural-technical and human-induced hazards, including terrorist attacks.

According to the European Union Council Directive 2008/114/EC, CI refers to an asset, system or part thereof located in Member States that is essential for the maintenance of vital societal functions, the health, asfety, security, and economic and social well-being of people, and where the disruption or destruction of which would have a significant impact in a Member State as a result of the fulture to maintain those functions. The CI sectors include: () Energy (electricity, oil, gas) and (II) Transport (road, rail, air, inland waterways, ocean and short-sea shipping and ports). Infrastructures must meet the following criteria to be judged as critical: (1) the definition above, (2) within sectors as identified above and (3) have potential impact according to the following

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Science needs in implementing the SDGs

- Future Earth (e.g. Shrivastava, Paul), international experts and selected founding agencies.
- Discussion: challenges to monitor the SDG implementation
- SDG 9 and 11



Future Earth – Extreme Events

- Fast Track Research initiatives under Future Earth
- Extreme Events challenges for the co-production of knowledge
- Challenges in dealing with ubiquitous extreme events (non-spatially fixed) in urban planning



Institute of Spatial and

Regional Planning

Extreme events and societal transformation processes: new challenges for risk management and strategic planning

Institut für Raumordnung und Entwicklungsplanung Universität Stuttgart

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Scientific Dinner Speech at the Extreme Events and Environments: from Climate to Society cross community workshop, Berlin, 15th February 2016

High Level Event in New York

Institute of Spatial and Regional Planning

 Presentation of the WorldRiskIndex 2015 in New York with HE. Ambassador Braun and Ambassador Momen and other experts (e.g. Jo Scheuer/ UNDP)

 This year report will focus on Critical Infrastructures and Logistics



Source: http://www.uni-stuttgart.de/ireus/institut/index.en.html

Future activities and future needs

- Establishment of an advisory committee (still in progress)
 - but is that useful?
- Publication series / working papers
 - what can we expect from IRDR /IPO?
- Strategic proposal development with other ICoEs
 - what can we do to enhance bilateral cooperation's and exchanges (e.g. scholarship programmes.....)
- Meeting with funding agencies (DFG, BMBF)



Thank you

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