1.5 ZÜRS Geo for Flood Risks (Germany)

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<th>OECD GP Activity</th>
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<td>1. Natural hazards identification and communication, NH (early) warning systems</td>
<td>1. Understanding disaster risk</td>
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Classification according to OECD Guiding Principles, UN Sendai Framework Priorities/Activities, and UN SDGs and Targets

Figure 1: ZÜRS Geo risk map

Source: © 2018 by GDV Gesamtverband der Deutschen Versicherungswirtschaft e.V.

Figure 2: Distribution of addresses in Germany among the four risk categories of flooding in 2017

- Risk Category 1: no or very low risk of flooding
- Risk Category 2: flooding expected less than once in 100 years
- Risk Category 3: flooding expected once in 10-100 years
- Risk Category 4: flooding expected once in 10 years

Source: Data from GDV, 2017
**Short Facts:**

**Governance approach:** Hazard communication  
**Source:** German Insurance Association (GDV)  
**Entry into force:**  
**Targeted Stakeholders:** Operators, authorities, assessors / safety experts, the public  
**Scope of applicability:** National

**Natural Hazard(s) Considered:**  
- Flood  
**Climate change:** Included and continuously updated

**Description**

The tool ‘ZÜRS Geo’ was developed by the German Insurance Association (GDV). It contains data for almost every building in Germany and classifies flood hazards among one of four risk categories (RC). The map is updated every year based on the latest weather data from the German Weather Service (Deutscher Wetterdienst, DWD). This automatically includes any measurable effects from climate change and updates the risk profile accordingly. Of the 21.4 million addresses in the database in 2017, 19.5 million (91.2%) are classified as RC1, meaning no or very low hazard of flooding (see figure below). 1.5 million (7.1%) are classified as RC2 (flooding expected less than once in 100 years), 234,100 (1.1%) in RC3 (flooding expected once in 10-100 years), and 129,700 (0.6%) in RC4, the class with the highest risk (flooding expected once in 10 years).

There are plans to update the ZÜRS Geo database with data from an ongoing research project on heavy precipitation events, which would expand the scope beyond flooding from rivers to include hazards associated with rainfall.

ZÜRS Geo also enables access data on the risk of environmental damages, which is relevant to the Umweltschadensgesetz (the national implementation of Directive 2004/35/EG on environmental liability with regard to the prevention and remedying of environmental damage).

**Link/Contact:**

[http://www.gdv.de/tag/zuers-geo/](http://www.gdv.de/tag/zuers-geo/)  

**Comments by the UN/OECD Natech-Steering Group:**

The presentation of information for every single site is valuable for decisions on siting of new installations. The addition of information on water levels due to other types of floods, like those due to heavy (local) precipitation, will represent great progress.

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