

# CEDIM and cedim AG – an example for a successful public-private partnership in integrated risk management

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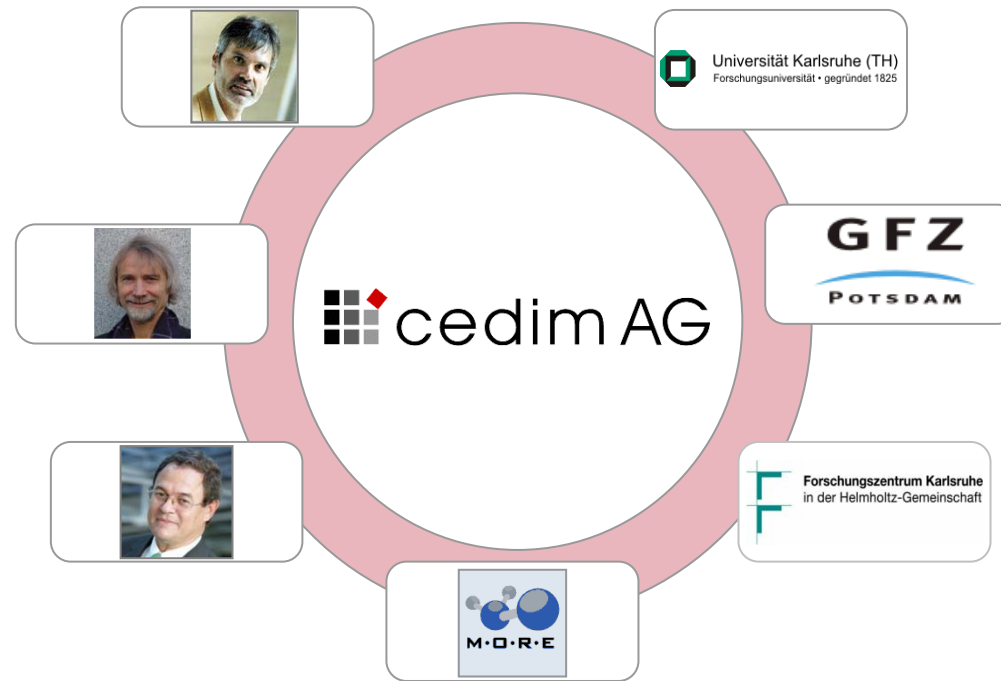
Dr. Tanja Liesch

IDRC Davos 2008, August, 27<sup>th</sup>

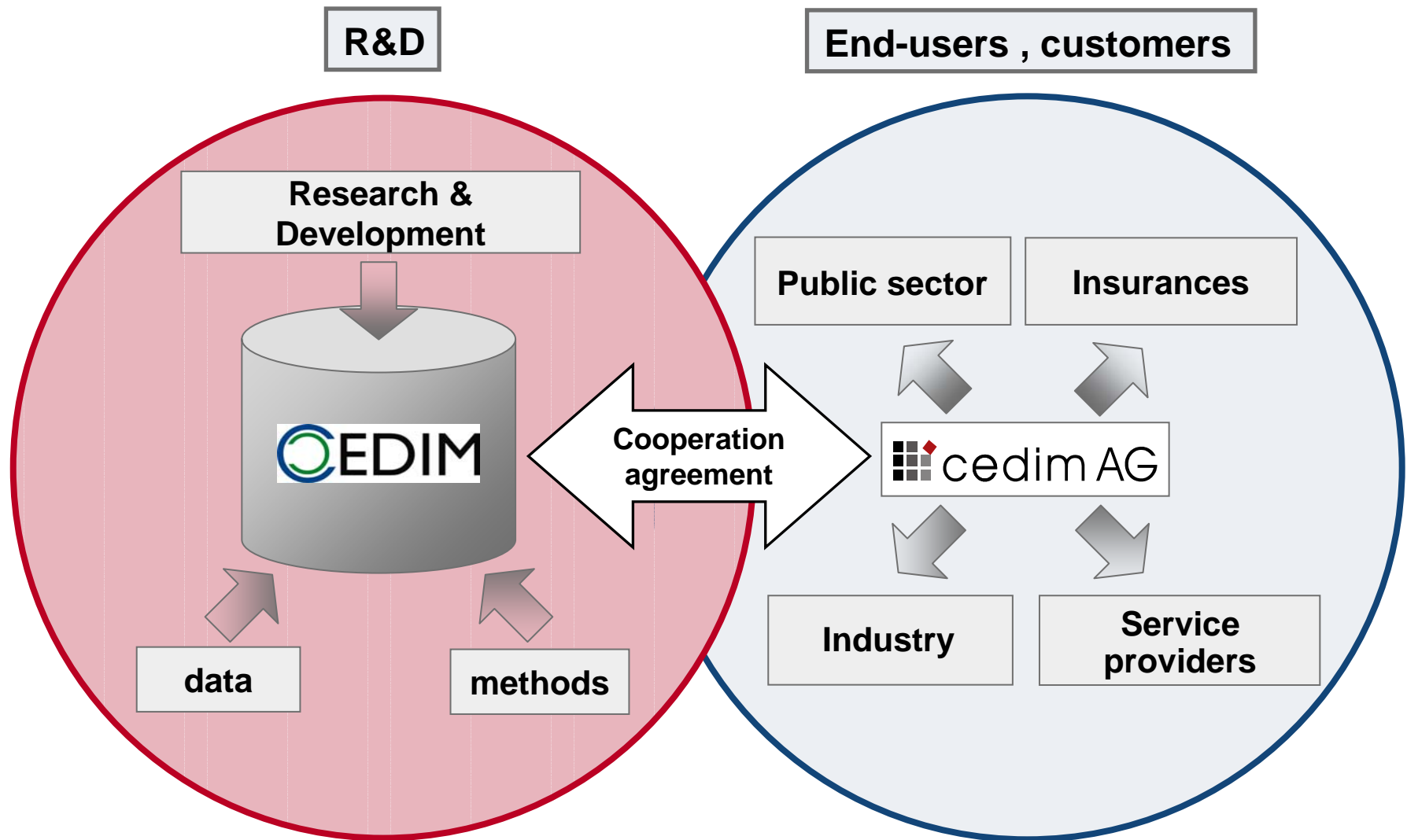


## ***Center for Disaster Management and Risk Reduction Technology***

- **Interdisciplinary research center**
- **Located at University of Karlsruhe (TH), Research Center Karlsruhe (FZK), GeoForschungsZentrum (GFZ) Potsdam**
- **Founded in 2002**
- **Over 100 involved scientist from 20 different institutes**
- **R&D in the field of earthquake, storm, flood and man-made hazards**



- Spin-off company of the CEDIM research center
- (Main) Goal: commercialisation/exploitation of research results
- First exploitation rights
- Founded in 2005
- Main business fields: Consulting & Development of Information Systems

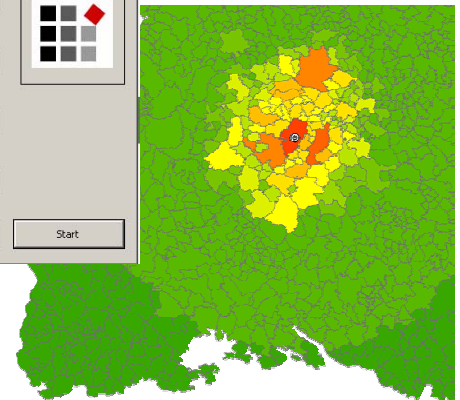




ID	NAME	EV	FB_Z	LONGITUDE	LATITUDE	Pop. Data	rest_costs	PC3	XX	YY	DAM. SCENARI	HT. SCENARI
0102005	Bunnen	551	2541	9,2	51,5	45	14532	-1	1,07274	0,490577	0	2,303708
0102017	Nametal	1693	2541	9,2	51,5	59	32713	-2	0,899576	0,515000	0	2,303708
0102013	Lautertal	1680	2542	9,9	51,5	49	22188	-2	0,899462	0,494670	0	2,377728
0102015	Landskronhausen	1233	2545	10,1	51,9	79	31979	-1	10,092802	0,535276	0	2,699994
0102016	Siedelgen	1454	2545	10,1	51,5	179	31200	-1	10,157501	0,525700	0	2,649911
0102003	Reichenau	781	2632	10,1	51,8	105	34318	-1	10,134687	0,606207	0	2,547625
0102008	Eisenberg	1468	2632	10,1	51,8	99	36437	-1	10,089391	0,527968	0	2,599991
0102014	Reinbach	1178	2632	10,1	51,8	96	34114	-1	10,193992	0,528001	0	2,586497
0102027	Heide										0	2,500727
0102018	Oberried										0	2,607924
0102028	Hilfsmann										0	2,601174
0102004	Seelburg										0	2,631351
0102029	Waldenbuch										0	2,624018
0102022	Reichenbach										0	2,611148
0102029	Waldenbuch										0	2,624018
0102012	Reichenbach										0	2,635307
0102019	Zorn										0	2,629292
0102009	Reinbach										0	2,139209
0102014	Furstenberg										0	2,139209
0102001	Bornheim										0	2,139209
0102008	Siegb. B. walden										0	2,139209
0102006	Ebermann										0	2,139209
0102013	Haarles										0	2,139209
0102002	Herrn-Ludw. Ort										0	2,139209
0102004	Herrn-Ludw. Ort										0	2,139209
0102005	Herrn-Ludw. Ort										0	2,139209
0102013	Heinrich										0	2,139209
0102006	Alte Heinsheim										0	2,139209
0102005	Ebermann										0	2,139209
0102014	Waldenbuch										0	2,139209
0102015	Waldenbuch										0	2,139209
0102011	Schwanenau										0	2,139209
0102005	Ebermann										0	2,139209
0102013	Prill. Flachsen										0	2,139209
0102028	Heinrich										0	2,139209
0102015	Oberbach										0	2,139209
0102012	Reichenbach										0	2,139209
0102008	Aufhausen										0	2,139209
0102008	Deinbach										0	2,139209
0102012	Hausberg										0	2,139209
0102008	Heppenheim										0	2,139209
0102012	Eisen										0	2,139209
0102012	Heppenheim										0	2,139209
0102012	Lenne										0	2,139209
0102008	Heppenheim										0	2,139209
0102012	Eisen, gem. C										0	2,139209
0102012	Oberbach										0	2,139209
0102008	Waldenbuch										0	2,139209
0102014	Waldenbuch										0	2,139209

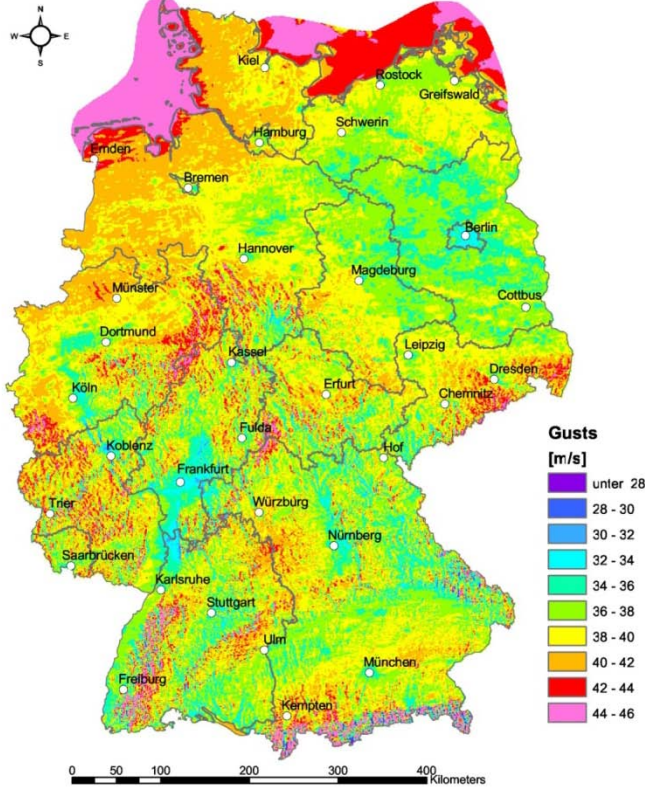
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karlsruhe-int.cal - Editor
Datei Bearbeiten Format Ansicht ?
X0 = 457051
Y0 = 5428905
M = 6,4
H = 12
I0 = 8
alpha = 0,002
R = Sqr (( [XX] - X0)^2 + ([YY] - Y0)^2) / 1000
R2 = RA2
H2 = HA2
A1 = 3 * Log ( Sqr ( R2 + H2 ) / H ) / Log ( 10 )
A2 = 3 * alpha * 0,4343 * ( Sqr ( R2 + H2 ) - H )
DELTA = A1 + A2
I = I0 - DELTA
    
```



- Data (vulnerability curves, building stock etc.)
- Algorithms (attenuation function etc.)

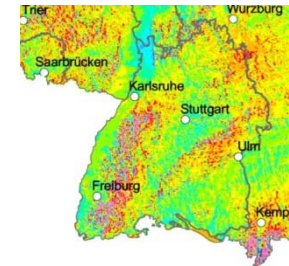
- Programming of a user-friendly interface
- Acquisition of projects, customers



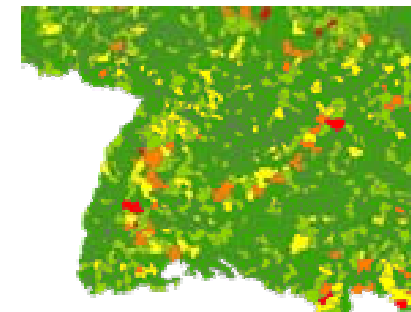
Max. gust Speeds, return period of 50 years  
Source: IMK, Uni Karlsruhe



Customers' data







Storm hazard



Customers' storm risk

**EDIM** Center for Disaster Management and Risk Reduction Technology

Universität Karlsruhe (TH)  
Research University • founded 1825

GFZ Potsdam   text version  

About CEDIM	Staff	Institute intern (Password)
Events	Publications	Contact / Legal Notes
Research	Risk Explorer	Links

Center for Disaster Management and Risk Reduction Technology

search  go

## About CEDIM

- ▶ Objectives
- ▶ Organisation
- ▶ Coordinating Committee
- ▶ General Meeting
- ▶ Advisory Board
- ▶ Head Office
- ▶ Press
- ▶ Partners
- ▶ cedim AG

## Welcome!



### Weather warnings

Severe weather early warning page at IMK Uni Karlsruhe

### Job offers

**Research assistant**  
Flood risk and climate change

### CEDIM News

CEDIM contributes to OECD Global Earthquake Model (GEM)

[www.cedim.de](http://www.cedim.de)

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- Publications
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Home

## cedim AG

Intelligent solutions for responsible risk and disaster management.

Research University of Karlsruhe and Geoforschungszentrum Potsdam have founded cedim AG

The frequency of disasters - in particular natural disasters - and the resulting damages have significantly increased within the last decades. The scientifically leading Center for Disaster Management and Risk Reduction Technology ([www.cedim.de](http://www.cedim.de)), which is managed by the Research University of Karlsruhe (TH) and the GeoForschungszentrums Potsdam ([www.gfz-potsdam.de](http://www.gfz-potsdam.de)) (Germany's National Research Centre for Geosciences), focuses on the better understanding and timely recognition of risks as well as on an optimised evaluation of resulting consequences. [read more](#)



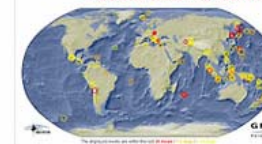
NaDiNe is the Natural Disasters Networking Platform of the Helmholtz Association of German Research Centres including the cedim AG shareholder GeoForschungszentrum Potsdam.

The mission of the platform is:

- Bundling and linking the existing scientific expertise within the Helmholtz Association in order to support actors in disaster management



### GEOFON - Global Seismic Monitor



### Early Warning - Floods



### Early Warning- Weather events



[www.cedim-ag.com](http://www.cedim-ag.com)



- Prof. Dr. Friedemann Wenzel
- Prof. Dr. Jochen Zschau
- Prof. Dr. Christoph Kottmeier



- Prof. Dr.-Ing. Lothar Stempniewski



**THANK YOU FOR  
YOUR ATTENTION!**