



LOSS DATA

IRDR – MEETING (27.-29. APRIL 2011, PARIS)

# Loss data

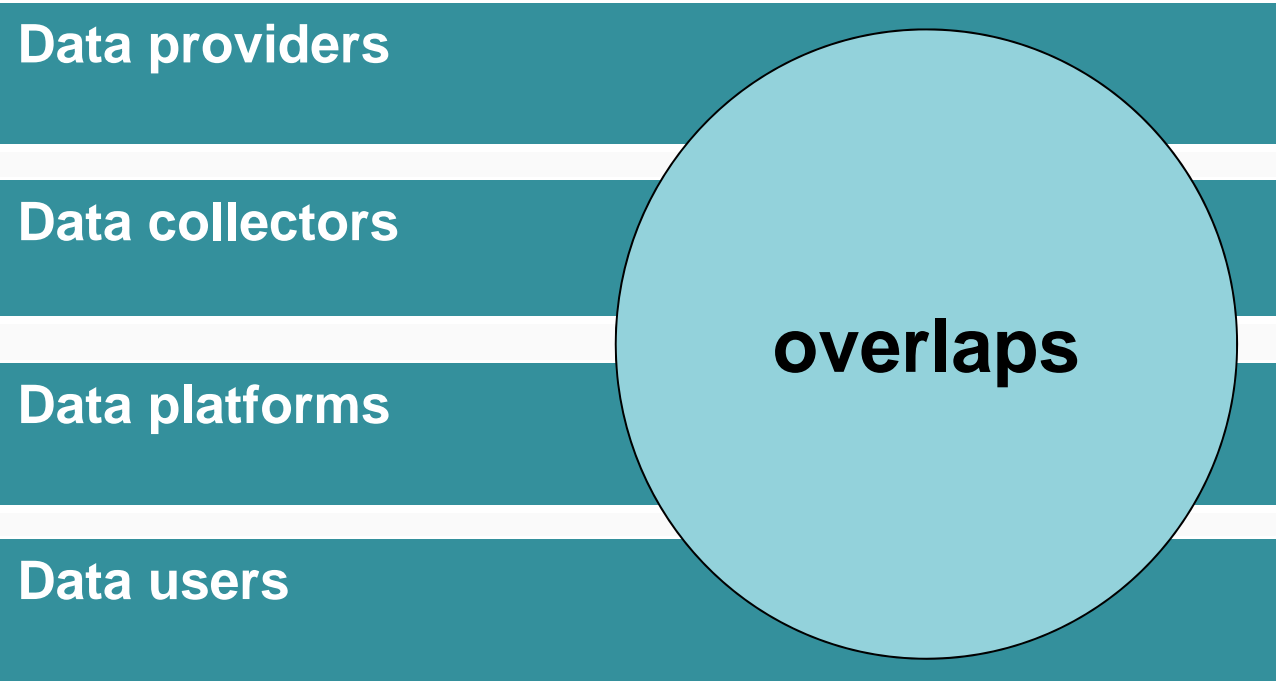
## Facts and problems:



- **Disaster loss data landscape is complex**
- **Many organisations and institutes are active**
- **Loss data community is growing**

- **Uncertainties**
- **Gaps**
- **Standards**
- **Methodologies**
- **Definitions**
- **Different expectations and needs**

# Loss data – Overview of stakeholders



# Data Providers

Kind of data	Example Information	Example Data Providers
<b>General informaion</b>	Description of event	Media, satellite images, case studies
<b>Scientific information</b>	Precipitation, magnitude	Scientific institutes (Weather services, USGS)
<b>Human impact</b>	People affected, injured, death, missing	Aid organisations, like Relief Web, IFRC
<b>Monetary loss information</b>		
- <b>Economic loss</b>	Financial impact of disaster (direct loss, indirect loss, secondary loss)	Different organisations (governments, World Bank, ECLAC, professional loss provider, etc)
- <b>Insured loss</b>	Regional, national, local loss	Reinsurance, insurance associations, local insurance, professional loss provider
	Sector based national loss	NFIP (flood), USDA (agro)
<b>Automatic generated information</b>	Region affected, people involved	Joint Research Centre/GDACs

# Data Collectors

Kind of data	Examples Data Collectors	Comments
Global multi peril	EmDat, Munich Re, Swiss Re	
Regional multi peril	La Red EEA European Environmental Agency	In planning
National multi peril	UNDP (country databases after TS 2004), Sheldus	
Event based	Dartmouth Flood Observatory  CEDIM Center for Disaster Management and Risk Reduction Technology	Flood  Earthquakes, Landslides
Sector based	Ascend  USDA (US Dept. of Agriculture)	Aviation  Agriculture

# Data Platforms

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Organisation	Examples	Comments
<b>ISDR – GRIP</b>	National Loss Data Observatory	Aim: 50-100 countries
<b>GLIDE</b>	Unique identifier	
<b>Relief Web, OCHA</b>	Information from various sources	Focus on human impact
<b>ICSU / CODATA</b>	Working Group on Documentation/Archiving Disaster Data	
<b>World Data System</b>		

# Data Users



<b>Sector</b>		<b>Examples</b>
<b>Science</b>	Research projects	Trend analyses, IPCC, Global Assessment Report, GEM
<b>Decision makers</b>	Governments, NGOs	Loss reduction purposes
<b>Finance industry</b>	Insurance	Risk calculation, development of new solutions
	Alternative (monetary) risk transfers	Cat Bonds, weather derivate
	Modelling companies (RMS, EQE Cat, AIR)	Calibrate models

# Loss data working group

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- **What can be the role of IRDR**
  - **Can we improve the existing data quality?**
  - **Can we make the data landscape more transparent?**
  - **Can we strengthen the data platform efforts?**
  - **What are there synergie effects with CoDATA and World Data Center**



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## IRDR – The loss data umbrella

**Data platforms**

**Data providers**

**Data collectors**

**Data users**

**Standards, Methodology, Definition, Transparency**

# Disaster Loss Data Working Group

## 1st meeting in Munich, 25 July 2011

Bring together the key stakeholder:

- **GRIP** Platform for national databases
- **GLIDE** Unique disaster identifier
- **OCHA** Platform with focus on humanitarian impact
- **EMDAT** Global database

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## IRDR – The loss data umbrella



To develop an integrative structure for disaster loss data

To minimize uncertainty and overlap

To have recognized standards

To facilitate the data interpretation for users



IRDR as umbrella organisation  
for developing a roadmap to achieve these goals

# Loss data – IRDR conference

Provider	Collector	Platform	User
USGS (Harley M. Benz or Kishor Jaiswal)	EmDat (Debby Guha-Sapir, Regina Below)	GLIDE (Hajime Nakano)	GAR (Andrew Maskrey)
Swiss Re (Brian Rogers or Lucia Bevere)	UNDP (NN, Calamidat.ph)	ISDR GRIP (Carlos Villacis)	Trends (Ryan Crompton, Macquaire University; Laurens Bower, University Amsterdam )
Maquire University - PERIL AUS (Prof. John McAnernay)	La Red (Cristina Rosales)	IRDR / CODATA (NN)	Use of loss data (China Met. Administration: Prof. Marco Gemmer or Jiang Tong )
ECLAC (Ricardo Zapato)	CEDIM (James Daniel, Prof. Wenzel)		Nirmala Fernando (Asia Disaster Prepardness Center) (?)
JRC/GDACS (Andreas Hirner)			

# Loss data – IRDR conference

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The Disaster Loss Data Working Group is meant to study issues related to the collection, storage, and dissemination of disaster loss data.

When human, monetary, or environmental losses occur as a result of a disaster, extensive loss data are collected and stored, but the thoroughness and accuracy of the data varies from country to country and even among local entities.

Government agencies, private companies, and other organizations may collect and manage data related to their own areas of interest using their own standards and procedures, without significant collaboration with other groups.

This results in gaps, inconsistent overlaps, and biases that ultimately affect the quality of research conducted and policies made based on the data.

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## **The Data Working Group has identified needs for:**

- Education of users regarding data biases and issues of social loss data
- Comparable and accessible human disaster loss data to support research and policy
- Identification of existing loss database projects (from national to regional to global)
- Increased downscaling of loss data to sub-national geographies for policy makers
- Definition of a "loss" and creation of a methodology for assessing it

To meet these needs, the working group intends to establish an overall framework for disaster loss data for all providers, establish nodes and networks for databases, conduct sensitivity testing among existing databases, and create mechanisms for archiving loss data.

# C O D A T A

## Working Group on Documentation, Archiving and Open Access to Disaster Information

*As approved by the CODATA 26th General Assembly, Kyiv 2008*

*Renewal approved by the CODATA 27th General Assembly, Cape Town 2010*

### Members:

Liu Chuang, China  
Bob Chen, U.S.A.  
Jean Bonnin, France  
Shuichi Iwata, Japan  
Horst Kremers, Germany

There is a strong deficit in disaster data availability for traceback and knowledge mining especially during the phases of improving disaster preparedness. This comprises the fields of natural and technical disasters. There is high interest to compile a recommendation on best practice of collecting, archiving and providing open access to disaster information.

This Workgroup will prepare a strategic report highlighting the necessity of data availability of disasters of various types. Disaster information on different levels lack standardization of structure and description and thus, interoperability for cross-discipline analysis is not guaranteed. The complex and often large datasets of actors and institutions involved in documenting information on severe disaster events give rise to new type of investigation principles especially when considering the complete information process for decisionmaking and action.

Risk information accompanies the information management in all detailed aspects, because typically, the various factors influencing the risk measures are dynamic and even may change drastically within short time of the disaster management decision and action.

Effectiveness of information system supported disaster management has to be defined by the measure to which individual, group and institutional actors involved are enabled for improved (that is: more reliable, more timely, more effective etc.) goal reaching in disaster management.

### Aim / Deliverables:

Preparing a strategic report highlighting the necessity of data availability of disasters of different types.

Addresses disaster organisations (UN bodies, NGOs), government, industry, insurances, etc. on local, regional, national, and international level.

The report will address

- Demand
- Current state of the art
- Deficits
- Benefits
- Action plan / recommendations
- Identify initiatives
- Executive summary

Working plan: draw on experience of WG members discuss draft report with disaster actors (Workshop)

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