

Disaster Loss Data: a global metric

You can't manage what you can't measure



Sustainable
Development

- SDG Targets
1,4,9,11,13

Disaster Risk
Reduction

- Sendai Framework
Targets A,B,C,D



UN World Conference on
Disaster Risk Reduction
2015 Sendai Japan



Climate Change
UNFCCC

- Warsaw Int Mech

Private
sector

- Re-insurance,
Public Private
Insurance

Disaster
Loss
Data

Better data is needed

Situation in EU: Comparative analysis

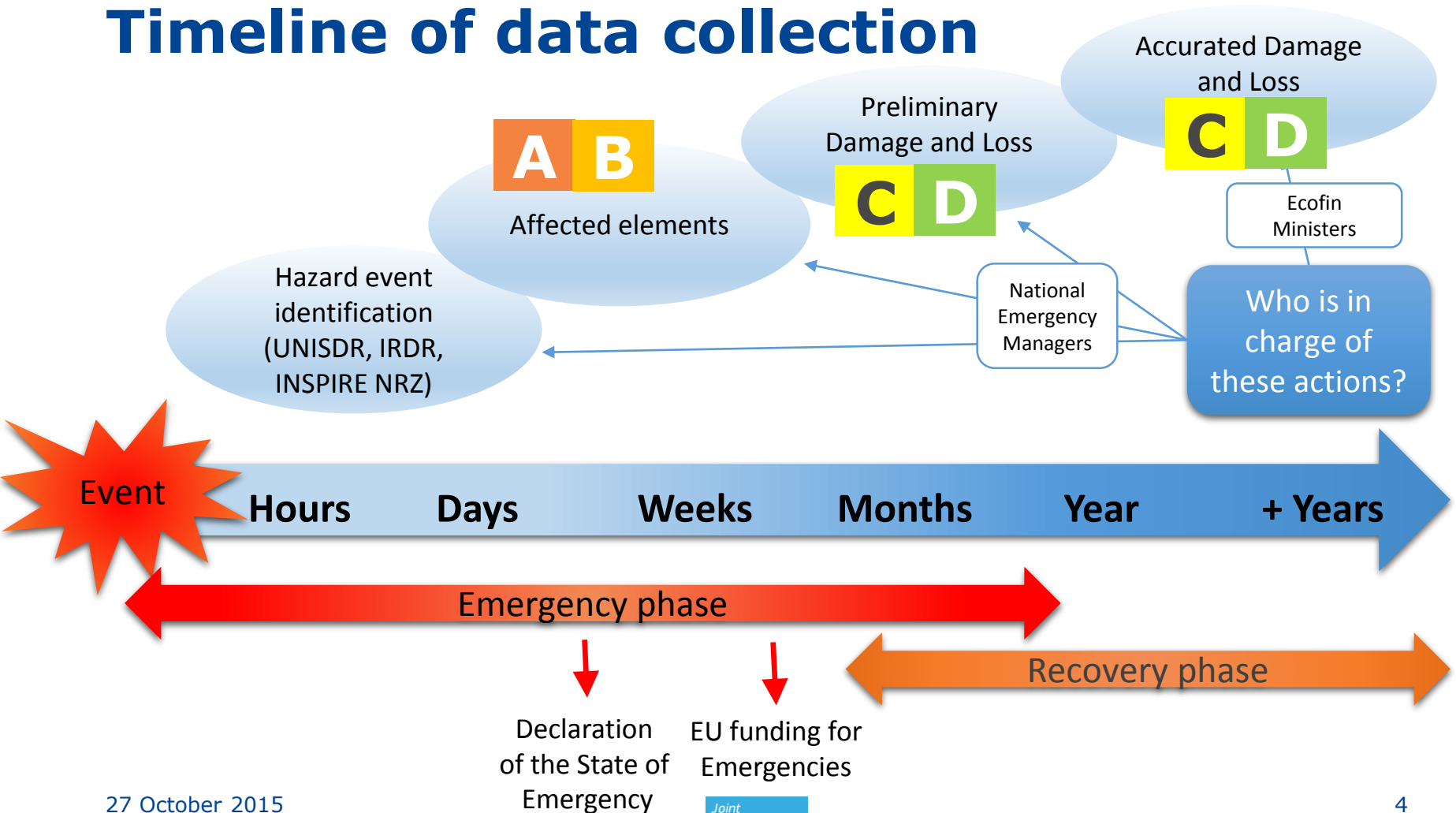
Member State	Suggested global indicators																	
	A		B						C					D				
	A1- Number of deaths and missing due to hazardous events per 100,000 (A-2 + A-3)		B1- Number of affected people per 100,000 (sum of B-2 to B-6)						C1- Direct economic loss due to hazardous events in relation to global gross domestic product (sum of C-2 to C-7)					D1- Damage to critical infrastructure due to hazardous events (sum of D-2 to D-5)				
	A-2 Number of deaths	A-3 Number of missing	B-2- Injured or ill	B-3a – Number of evacuated	B-3b- Number of relocated	B-4- Number of people whose houses were damaged	B-5- Number of people whose houses were destroyed	B-6- Number of people who received food relief aid	C-2 -Direct agricultural loss	C- 3- Direct economic loss due to industrial facilities damaged or destroyed	C-4- Direct economic loss due to commercial facilities damaged or destroyed	C-5- Direct economic loss due to houses damaged	C-6-Direct economic loss due to houses destroyed	C-7- Direct economic loss due to damage to critical infrastructure caused by hazardous events	D-2-Number of health facilities destroyed or damaged	D-3-Number of educational facilities destroyed or damaged	D-4-Number of transportation infrastructures destroyed or damaged	D-5- Number of time basic services have been disrupted
AT																		
BE																		
FR	•	•	•	•		•	•		•		•			•	•	•	•	
DE						•	•		•	•	•			•	•	•	•	
EL	•					•	•		•		•		•	•	•	•	•	
HR									•									
IT	•	•			B-1	•	•							•			•	
PT	•		•			•	•				•			•	•	•	•	
RO	•	•	•	•		•	•		•		•		•	•	•	•	•	
SI						•	•		•		•		•	•	•	•	•	
ES	•	•	•	•		•	•		•	•	•		•	•	•	•	•	
SE	•	•	•	•		•	•							•	•	•	•	
FI (new)	•	•			B-1	•								•			•	•
CZ (new)																		

EU MS and Sendai indicators

Complete Partial Missing

Member State	National Loss Database		Scope (Hazard types covered)					Hazard event identification			Affected people			Affected property	
	Name	Data available at JRC	Geophysical	Hydro-meteorological	Climatological	Biological (new!)	Technological (new!)	National unit	Subnational units	Hazard event ID	Age	Sex	Location of residence	Sector	Loss ownership
AT	WLV	Yes	•	•		?	SEVESO	•	•	•					
BE	regional	No	•	•		?	SEVESO	•	•	•	•	•	•	•	•
FR	ONRN	Yes	EQ, LS	FL, ST		?	SEVESO, ARIA	•	•	•				•	Insured
DE	HOWAS	No		FL		?	SEVESO, ZEMA	•	•	•	•	•	•	•	•
EL		No			WF	?	SEVESO	•	•	•				•	•
HR		No				?	SEVESO	•	•	•					
IT	AVI	Yes	LS	FL	WF?	?	SEVESO	•	•	•				•	•
PT	SADO	Yes	•	•	•	?	SEVESO, SADO	•	•	•	•	•	•	•	•
RO	GIES	Yes	•	•	•	•	SEVESO, GIES	•	•	•				•	•
SI	AJDA	No	•	•	•	?	SEVESO	•	•	•			•	•	•
ES	CNIH	Yes		FL		?	SEVESO	•	•	•				•	•
SE	NDB	Yes	•	•	•	?	SEVESO	•	•	•				•	Mainly insured losses
FI (new)		Yes	?	•	?	?	SEVESO	•	•	•				?	?
CZ (new)		Yes	•	•	•	?	SEVESO	•	•	•				?	?

Timeline of data collection



Actors for new hazard types

Natural hazards

- Civil protection / Interior

Technological hazards

- Civil protection / Interior
- **Ministry of Ecofin**

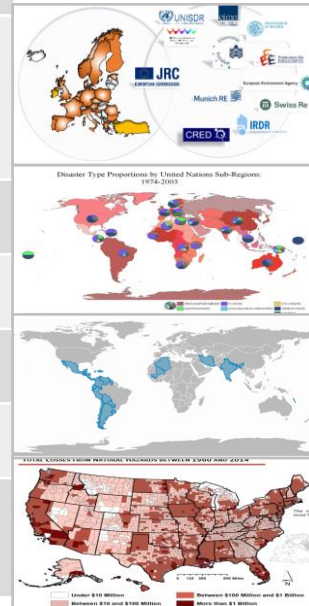
Biological hazards

- **Ministry of Health**
- Civil protection / Interior ???

Loss Databases and Sendai Indicators

Inventory	Target A		Target B (N° affected people per 100,000)					
	A1 – N° of Deaths	A2 – N° of Missing	B2-Injured or ill	B3a- N° Evacuated	B3b- N° Relocated	B4-N° People Houses damaged	B5-N° People Houses destroyed	B6-N° People Food relief aid
EU Member State (e.g. Italy)	92,6 %	7,4%	0.3%			99.7%		-
EM-DAT	100%		0.05%	-	-	2.8%		-
DesInventar	X	X	X	X	X	-	-	-
SHELDUS	X		X	-	-	-	-	-

Flood 1950-2008



People requiring immediate assistance during an emergency situation.

FLOOD

1950-2008

