National implementation of Sendai Indicators: methods and tools for recording and sharing loss data

- Multi-stakeholder National Platforms

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Association for the Norwegian banks and insurance companies

Focus points for the meeting

• How to report for Sendai Framework
• Loss Data **Challenge**: Harmonize and collect
• Integration of Loss Data in the Risk Assessment process

• *International and national level* - **Multi-stakeholder** National Platforms
Basic point: Why (also) insurance loss data?

- Show trends
- A holistic, more correct risk picture

Total "water-related" damages incl urban flooding vs land/river-flooding

- Total water damage
- Land flooding

Damages - mill NOK
Basic point: Why (also) insurance loss data?

- These are loss data the public authorities don’t have
- They include also “small disasters”-losses like…
- 28,000 urban flooding losses per year

Average insurance pay outs last 10 years

- Flomskader - NP 22%
- Vanninntrengningen utenfra 41%
- Urban flooding / storm water
- Urban flooding / sewer back up
- Tilbakeslag. Stopp i avløp 27%
- Landslide 5%
- Stormsurge 3%
- River flooding

2/3 of Europeans live in cities
### Sendai indicators and Insurance loss data

<table>
<thead>
<tr>
<th><strong>Target A</strong></th>
<th><strong>Target B</strong></th>
<th><strong>Target C</strong></th>
<th><strong>Target D</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of deaths and missing due to hazardous events per 100,000</td>
<td>B1 - Number of affected people per 100,000</td>
<td>C1 - Direct economic loss due to hazardous events in relation to global gross domestic product</td>
<td>D1 - Damage to critical infrastructure due to hazardous events</td>
</tr>
</tbody>
</table>

#### (A1 + A2) values:
- A1 - Number of deaths
- A2 - Number of missing

#### (B1 + B2) values:
- B1 - Number of affected people per 100,000
- B2 - Number of people whose houses were damaged
- B3a - Number of people whose houses were destroyed
- B3b - Number of people who received food relief aid

#### (C1 + C2) values:
- C1 - Direct economic loss due to hazardous events in relation to global gross domestic product
- C2 - Direct agricultural loss
- C3 - Direct economic loss due to industrial facilities damaged or destroyed
- C4 - Direct economic loss due to commercial facilities damaged or destroyed
- C5 - Direct economic loss due to houses damaged
- C6 - Direct economic loss due to houses destroyed
- C7 - Direct economic loss due to damage to critical infrastructure caused by hazardous events

#### (D1 + D2) values:
- D1 - Damage to critical infrastructure due to hazardous events
- D2 - Number of health facilities destroyed or damaged
- D3 - Number of educational facilities destroyed or damaged
- D4 - Number of transportation infrastructures destroyed or damaged

<table>
<thead>
<tr>
<th><strong>Public Authority</strong></th>
<th><strong>Academic &amp; Research Institutes</strong></th>
<th><strong>Private Sector</strong></th>
<th><strong>Recording</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Norwegian Institute of Public Health, Cause of Death Registry, International Classification of Diseases (ICD)</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Norwegian Directorat of Health, Norwegian Patient Registry</td>
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<tr>
<td>Norwegian National Fund for Natural Damage Assistance</td>
<td></td>
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</tr>
</tbody>
</table>

**Mapping**
- National recording from specialised services only
- Asset, recording from primary health care only
- Asset, recording from municipal level only
What loss data do the insurance industry have?

Target B: affected people and
Target C: direct economic loss
Target D: critical infrastructure

- **B-4** - Number of people whose houses were **damaged**
- **B-5** - Number of people whose houses were **destroyed**
- **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 and**
- **C-5 b** - Loss of administrative building*
- **C-6** - Direct economic loss due to **houses destroyed**
- **D-1** - Critical infrastructure (**municipalities building insured with private insurance**)

- *Critical asset/buildings not bridges and roads*
- *The municipalities (426) all buy **private** property insurance
How to report Sendai indicators

• “Understand the indicators and *relevant international frameworks dealing with the implementation of Sendai Indicators*”

• OECD Recommendation on Disaster Risk Financing Strategies

• The Paris Agreement (FCCC) / EU Climate Change *Adaptation* strategy work

• These frameworks all have the same goal:
  – *Reduce damage and losses*
  – *Understand vulnerability and the value of risk reduction measures*
  – *Build Back Better – through sharing of loss data*
Loss Data Challenge:

“exchanges the progresses made in EU Countries to harmonize and collect loss data;”

• Sendai apply and is essential for the local Governments

• Local Government need access to loss data
  • For risk- and vulnerability assessment
  • The right places to invest in preventive measures
  • See the real cost - understand the value of preventive measure

Without insurance loss data

Oslo city
Loss Data Challenge - Which level should to collect the loss data?

<table>
<thead>
<tr>
<th></th>
<th>NatCat loss (not urban flooding)</th>
<th>All other loss data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Municipality level</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>Assets level</td>
<td>YES</td>
<td>NO</td>
</tr>
</tbody>
</table>

Finance Norway/association

Insurance Company
How to organize the national implementation of Sendai?

• Naturfareforum – a multi-stakeholder National Platform for impl of Sendai:

• Main goal: coordinate and share the responsibility across public sector
• Also collaborate with “Klima2050” a Centre for Research-based Innovation (SFI) Researchers /academia, national authorities (agencies), municipalities and private sector

• https://naturfareforum.com/
• www.klima2050.no/
The role of Finance Norway in the national implementation of Sendai

Projects under Naturfareforum:

- Build back better (learning from hazards/events)
- Establishing a nation loss data base
- Holistic approach to manage watersheds
- Early warning for flooding and landslide
- Multistakeholder cooperation for better cope with natural hazard and risk management

- Finance Norway (insurance) and the Norwegian NatCat insurance pool (part of Finance Norway) take part in three of the projects
Integration of Loss Data in the Risk Assessment

“Benefits from an effective recording and sharing of loss data for hazard modelling and ex-ante loss evaluation”

Insurance loss data:

• give local and national authorities a better fundament / information for decision
• help understand the socio-economic impact on the society
• useful for modeling and prioritize which areas to invest in risk-mapping
Best practice:

Insurance natcat and urban flooding compensation per year per municipality

Climate change and natural hazards: the geography of community resilience in Norway

www.climres.no/
Coordinate the collection of loss data

- Using insurance loss adjusters to collect critical risk management information for national agencies and municipalities
- Best practice: Finance Norway – NVE (Flood and landslide Agency)

<table>
<thead>
<tr>
<th>Building no.</th>
<th>ID or type of building</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water level</td>
<td>cm +/- relative to ground floor level</td>
</tr>
<tr>
<td>Basement?</td>
<td>yes/no</td>
</tr>
<tr>
<td>Erosion, under-mining of building?</td>
<td>yes/no</td>
</tr>
<tr>
<td>Mass deposition outside of the building?</td>
<td>yes/no</td>
</tr>
<tr>
<td>Damage due to floating objects etc. hitting the building?</td>
<td>yes/no - thickness</td>
</tr>
<tr>
<td>Supplementary information</td>
<td>yes/no</td>
</tr>
</tbody>
</table>
• Thank you!
• Questions?