

Stress testing DRM system capacities

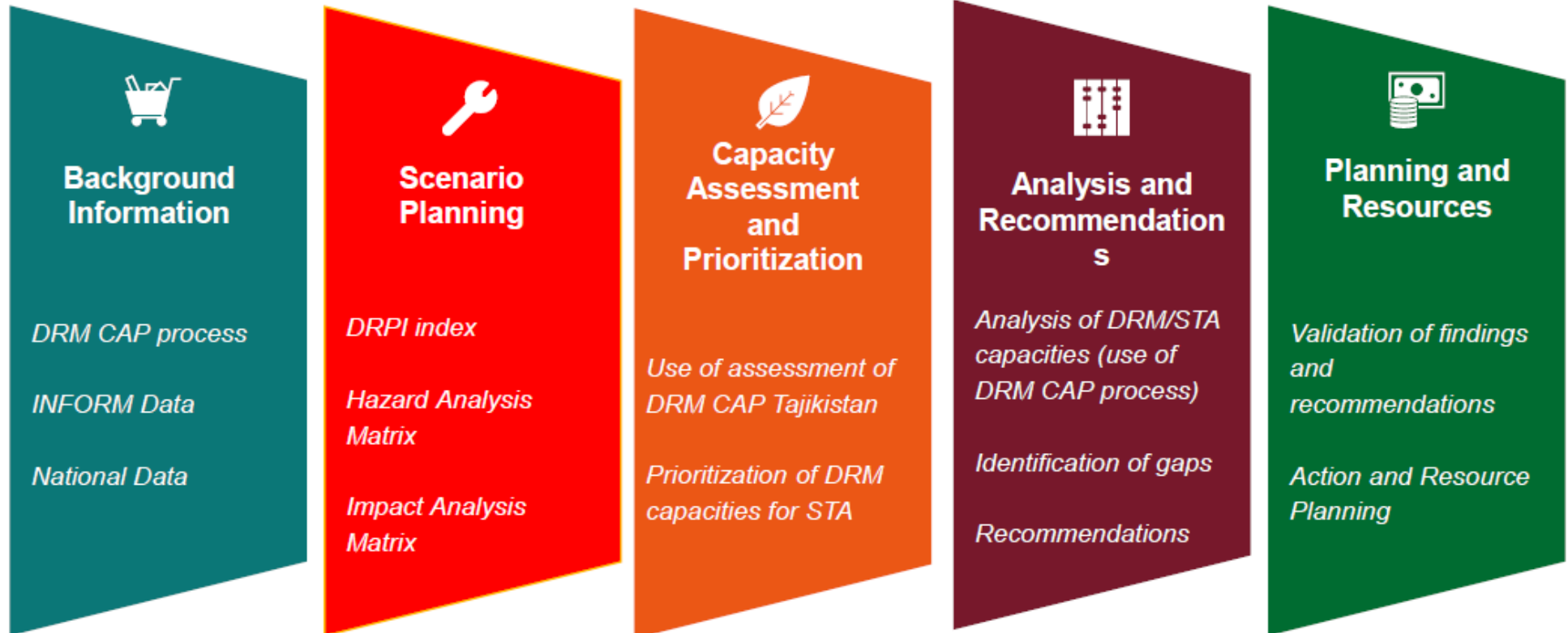
10 May 2023, Krakow

Stress testing the DRM system – what do we mean?

- **Goals:** Increasing the resilience of the system to possible disaster stresses through strengthened governance
- **Process:** analysis of potential response and/or reaction of the DRM system using participatory scenario-based approach
- **Expected results:**
 - Informing the development of action plans based on scenario-based capacity assessments.
 - Ensuring alignment with Sendai/EU requirements and resilience priorities

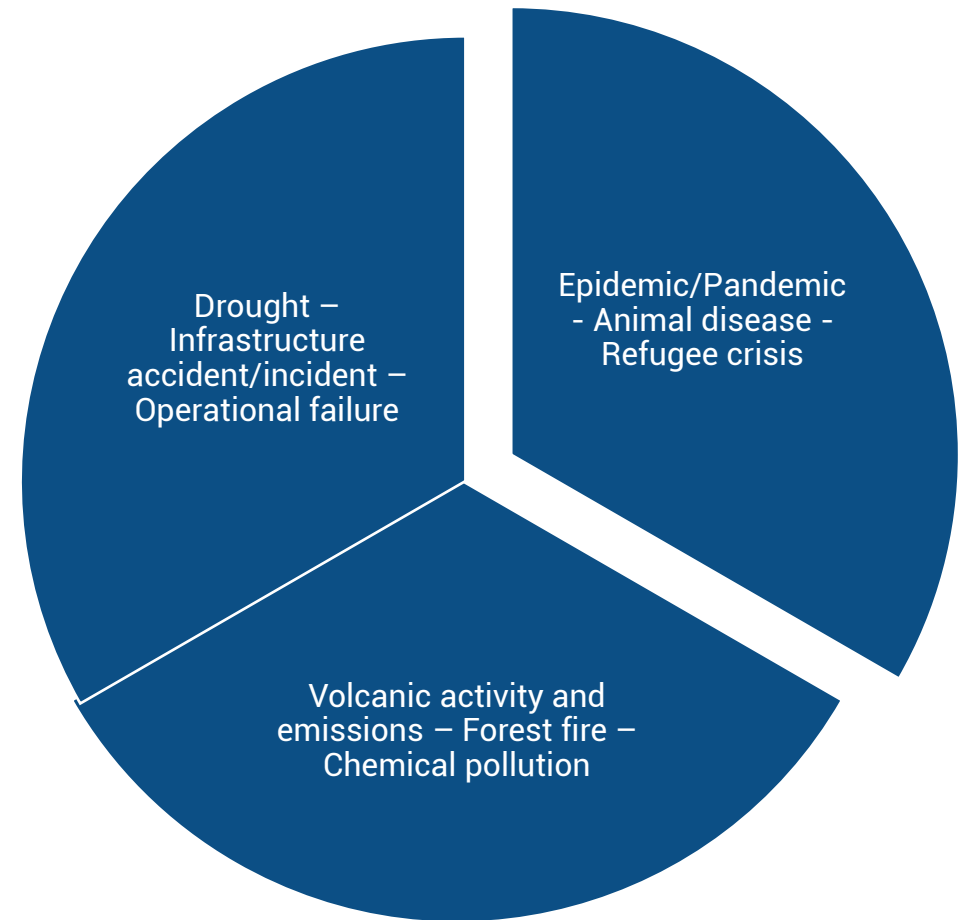


Stress testing – the approach

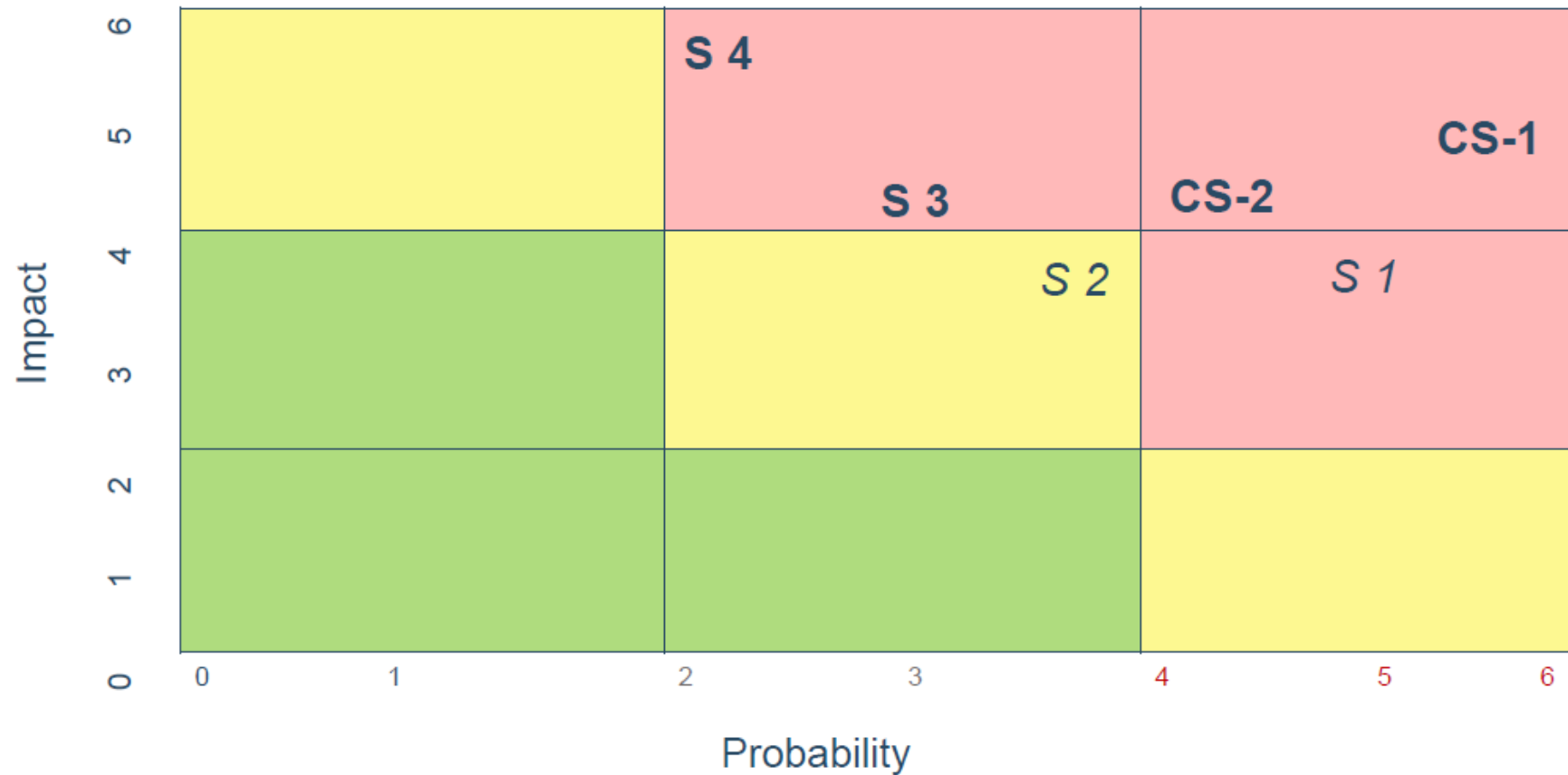


Step 1: Scenario planning

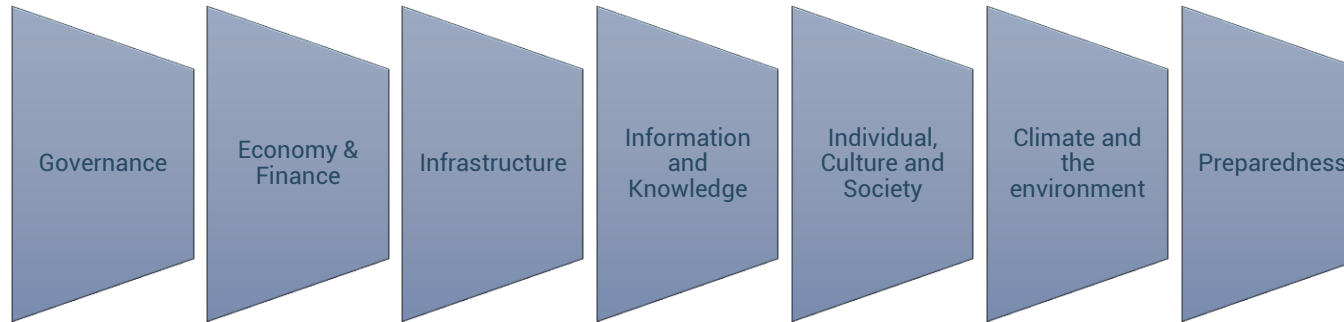
- Background information: INFORM, climate projections, Disaster Risk Perception Index, etc.
- Nomination of coordinator and consultation of expert group (National Platform)
- Scenario development
 - Complex and cascading hazards up to 3 levels
 - Framed around INFORM hazards (earthquake, flooding, drought and pandemic)
 - Integrating climate projections (qualitative)



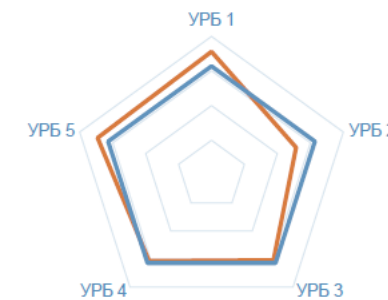
Step 2: scenario mapping & prioritising



Step 3: assessing capacities



Score	Significance of capacity
1	Insignificant. This kind of capacity is not important in the context of this scenario. Its absence does not affect the development of the situation.
2	Minor importance. This kind of capacity is of minor importance for counteracting stress under this crisis scenario. However, it can play an important role in supporting and enhancing other, more significant capacities.
3	Important. This kind of capacity is an important component of the disaster risk management system in terms of prevention, response and recovery under the specified stress scenario
4	Highly important. This capacity is of high importance for the disaster risk management system in terms of prevention, response and recovery under the stress scenario. The degree of importance tends to increase depending on the level of development of other related components.
5	Critically important. This capacity is critical for the entire disaster risk management system for the specified stress scenario. Lack of the necessary level of this capacity can lead to irreparable losses and even destruction of the entire disaster risk management system.



Components of the DRM system :

- 1 - risk identification;
- 2 - risk reduction;
- 3 - preparedness and response
- 4 - post-disaster recovery;
- 5 - disaster risk financing.



Components of stress resilience:

- 1 - Management system
- 2 - Finance and Economics;
- 3 - Technology and Infrastructure;
- 4 - Knowledge and Information
- 5 - Social development and culture
- 6 - Preparedness for crises and disasters

Step 4: Contributing to action planning

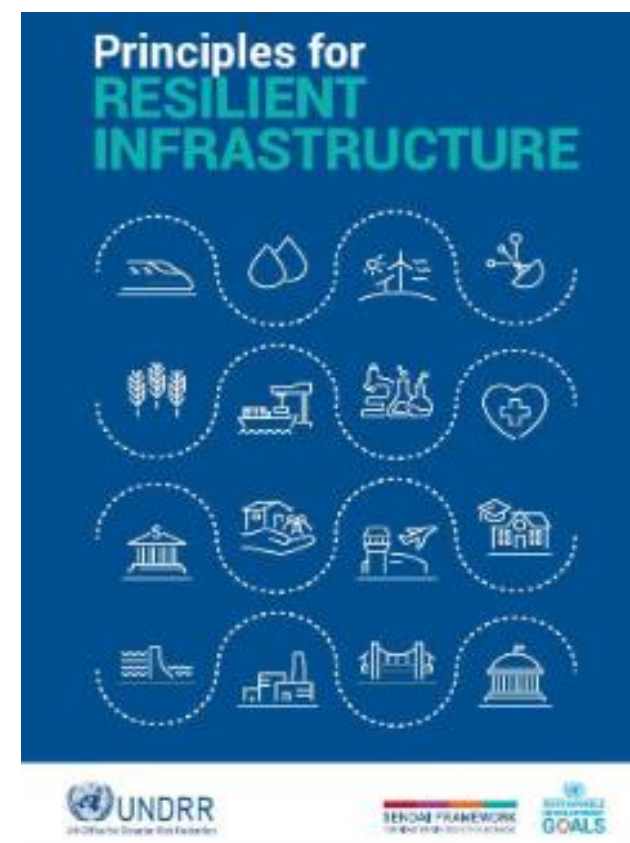
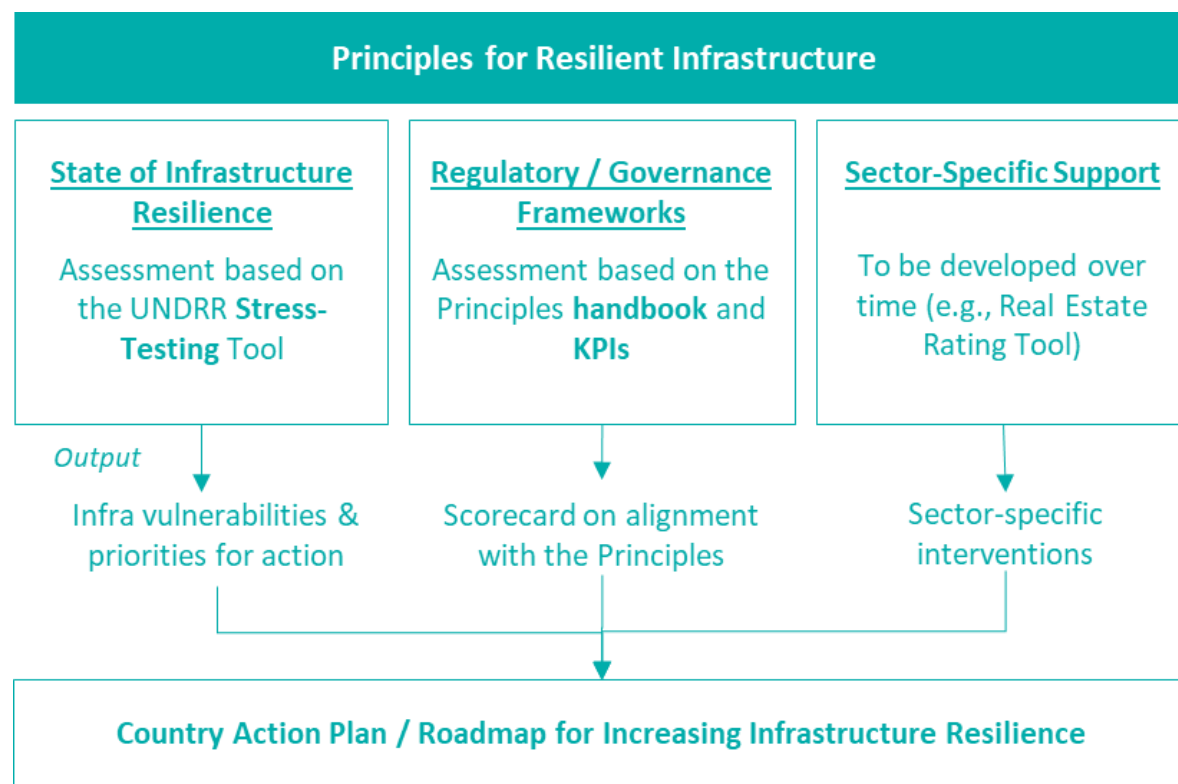
DRMS Index	Activities and Interventions	Period /year/	Responsible organization	Involved partners	Budget. Sources of funding

Sections of Action Plan to build stress resilience:

1. Managing situations that cause stress;
2. Management of system components to support performance under stress;
3. Post-stress recovery

Looking ahead – focus on Resilient Infrastructure

- Implementation of the **Principles of Resilient Infrastructure** to improve the continuity of critical services such as energy, transport, water, wastewater, waste, and digital communications, which enable health, education, etc. to function effectively.
- Embedding infrastructure resilience in development strategies through **stress testing tool, scorecard on alignment of regulatory/governance frameworks with Principles, and sector-specific interventions**



Roll out in the Europe and Central Asia region

Finland

Rotating Presidency of the Council of the EU – conceptual development

- Complex risk and hybrid threats
- Methodology developed

Poland

Pilot: support to capacity assessment

- 3 scenarios explored – prototype tested
- Involvement of National Platform
- Preliminary findings and feedback

Tajikistan / Kyrgyzstan
Country implementation: support to Action Plan 2023-2024 development

- Participatory testing – scenario-based
- Linking STT with INFORM and Risk Knowledge priorities
- Basis for actions and potential future budgeting

Croatia

Pilot: infrastructure stress testing – tier 1

- 1 of 3 tier piloted
- Initial findings with potential for scaling up

Thank you

Andrew.bower@un.org



UN Office for Disaster Risk Reduction

