Shaping the Region / „Bundesprogramm Ländliche Entwicklung und regionale Wertschöpfung (BULEplus)“

‘Resilient Regions’ Initiative

PeerCennect Resilience Workshop 2
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Resilient Regions

Sustaining Progress and Knowledge Transfer (Phase 2)

Region gestalten

Bundesministerium für Wohnen, Stadtentwicklung und Bauwesen

Bundesinstitut für Bau-, Stadt- und Raumforschung im Bundesamt für Bauwesen und Raumordnung

Contracting authority

Federal Ministry for Housing, Urban Development and Building (BMWSB)
Division S III 4 - Regional Policy, Equal Living Conditions
Management: Ute Krönert

Federal Institute for Research on Building, Urban Affairs and Spatial Development (BBSR) within the Federal Office for Building and Regional Planning (BBR)
Division RS 1 – Spatial Development
Management: Sebastian Schulz, Martin Radtke

Contractors

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plan + risk consult – Prof. Dr. Greiving & Partner
Ingenieurgesellschaft für Raumplanung und Umweltforschung, Dortmund
Dr. Mark Fleischhauer, Prof. Dr. Stefan Greiving, Jasmin Dettmar, Jona Meixner, Isabelle Frölich

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Institut für Ressourcenmanagement
Dr. Susanne Schön, Axel Dierich, Lena Horlemann, Dr. Sebastian Strehlau

Background to the ‘Resilient Regions’ Initiative



Regions and regional development not in the focus

‘Resilient Regions’ Funding Initiative (2022-2025)

Development of methods, tools, practices, processes and structures for regional risk prevention

Objective

- The aim of the funding initiative was to support pilot projects in developing methods, tools and practices for regional risk prevention and in addressing region-specific resilience challenges.
- Ten pilot projects received funding to develop and trial an integrated package of measures aimed at enhancing regional resilience:
  1. Preparation of regional risk analyses,
  2. Development of regional resilience concepts and strategies,
  3. Establishment of measures for risk communication
  4. Establishment of structures for resilience-oriented governance
- Recommendations for action to increase regional resilience were derived from the project findings; these can also be applied in other regions.

The Pilot Projects

Region gestalten

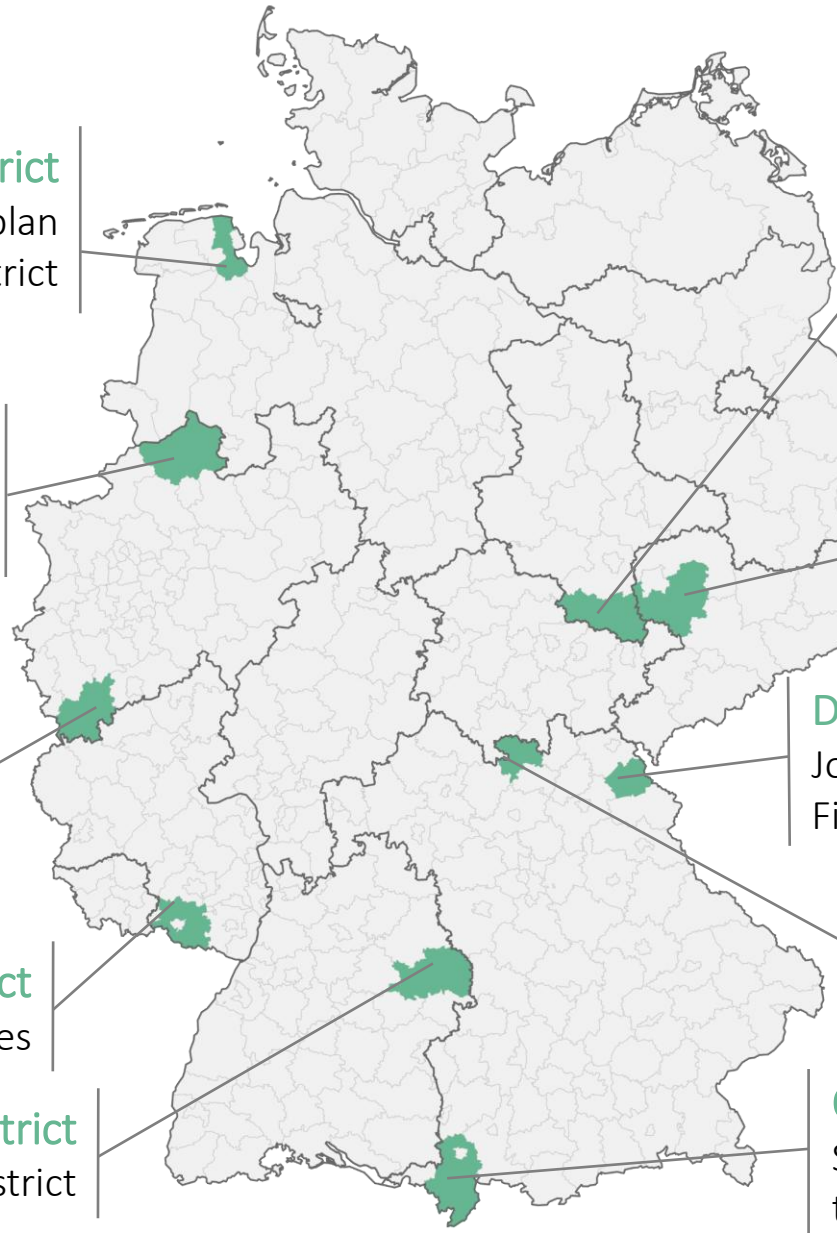
Friesland District
Defying the Blackout – Drawing up a risk plan for critical infrastructure in the Friesland district

Steinfurt District
WiReSt – Economic Resilience in the Steinfurt District

Euskirchen District
KRITIS Dialogue – Protecting Critical Infrastructure through Resilience Governance

Southwest Palatinate District
Future with Village Values

Ostalb District
Resilience Centre Ostalb District



Burgenland District
Crisis-Resilient Communication and Organisational Structure of the Burgenland District

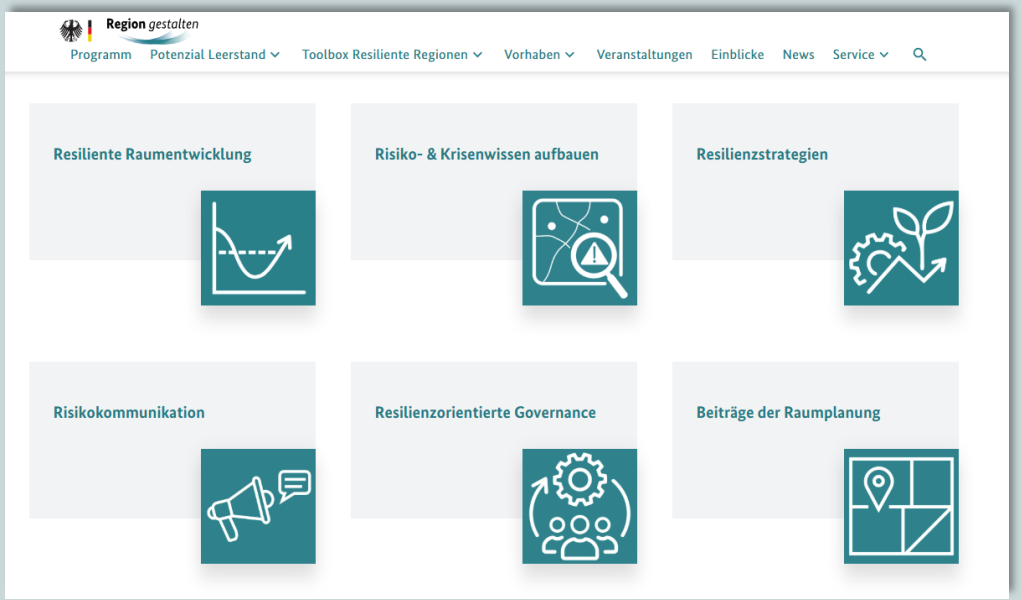
Leipzig District
GeRI – Designing Resilient Infrastructures

District of Wunsiedel in the Fichtelgebirge
Joint, Cross-Border Economic Area: Fichtelgebirge – Northern Bohemia (CZ)

Coburg District
Strong Together: Crisis Resilience Strategy for the Coburg Region

Oberallgäu District
Strengthening the resilience of a rural region in the pre-Alpine area

Products of the ‘Resilient Regions’ Initiative



Resiliente Regions Toolbox

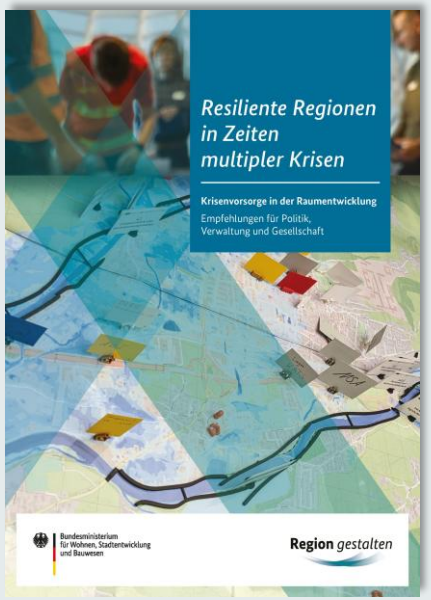
Resilient Regions:
Scientific Final Report



Practical Handbook on
Regional Resilience



Policy Paper:
Resilient Regions in
Times of Multiple Crises



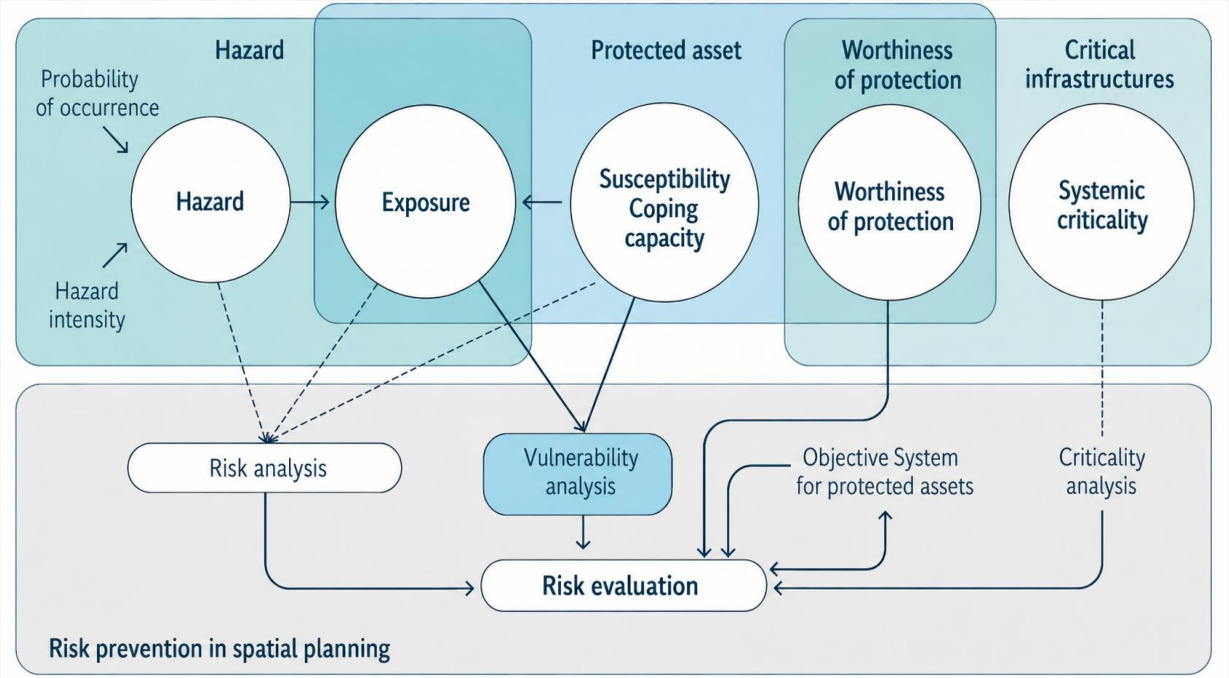
Risk and Crisis Knowledge

- A spatially differentiated risk analysis is a key step towards **operationalising risks for spatial planning**. On the basis of such risk-oriented spatial analyses, risk prevention measures can be implemented at a site-specific level.
- The pilot projects began their work on enhancing regional resilience by first **building up crisis knowledge** in order to identify current and future threat scenarios in the region and to raise awareness amongst regional stakeholders of the significance of these **threats and risks**.

What would you like to find out?	If you wish to carry out a systematic analysis…
Hazard analysis	…of the risks to which the region is exposed.
Vulnerability analysis	…of how vulnerable a protected asset is.
Criticality analysis	…of which infrastructures are particularly important for maintaining certain functions or structures.
Multi-hazard-/ Multi-risk-analysis	If you wish to draw up an overall picture of the situation in the region and prioritise risks.



Risk management framework for spatial planning and development



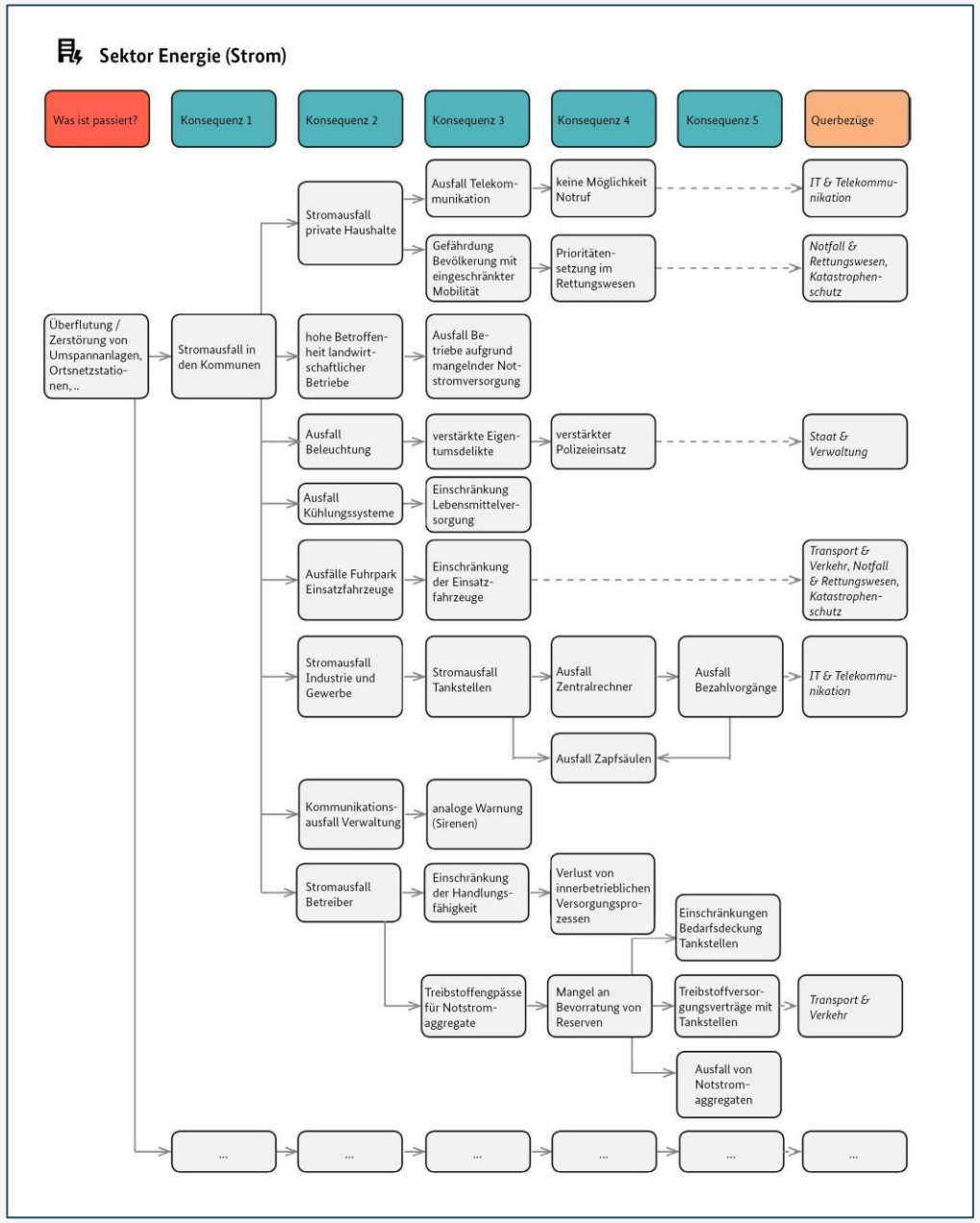
Source: Hartz et al. 2020

Euskirchen District
Cascade effects of critical infrastructure (CI)

Example of:
criticality analysis, CI-perspective, participatory approach

- Identification of **CI-risks** by cross-referencing the components of hazard and vulnerability, and the creation of hazard maps
- Analysis and presentation of cascade effects and the systemic cascade potential in **cascade diagrams**, based on the 2021 flood disaster in the Ahr Valley as a common scenario independent of sector and operator
- **Fact sheets** for assessing the risk to CI operator institutions as a basis for a joint risk dialogue
- Results of the risk and criticality analysis as a **systematic basis for decision-making**

Cascade chain for the electricity sub-sector



Source: TU Dortmund 2025

Resilience strategies

- The **German Resilience Strategy** provides a comprehensive, expert-led framework for holistic resilience strategies at various levels.
- A regional **overarching strategy** brings together, align and coordinate all objectives, (sub-)strategies and measures relating to crisis prevention and disaster management.
- **Sub-strategies** address specific areas of regional resilience and different phases of crisis prevention and management. They enable focused analysis of priority threat scenarios and resilience tasks, with measures tailored to relevant stakeholders.

What types of strategy are there?	You should choose this strategy,…
Spatial strategy	…if you wish to integrate crisis prevention and crisis management considerations into the tools and procedures of regional development.
Target-audience-oriented strategy	…if you wish to provide targeted support to specific crisis-related stakeholders or the general public and strengthen their capacity to act in crisis situations.
Crisis management strategies	…if you wish to work with key stakeholders to prepare for improved joint crisis management.

Areas of action under the overarching strategy ‘Regional Resilience’



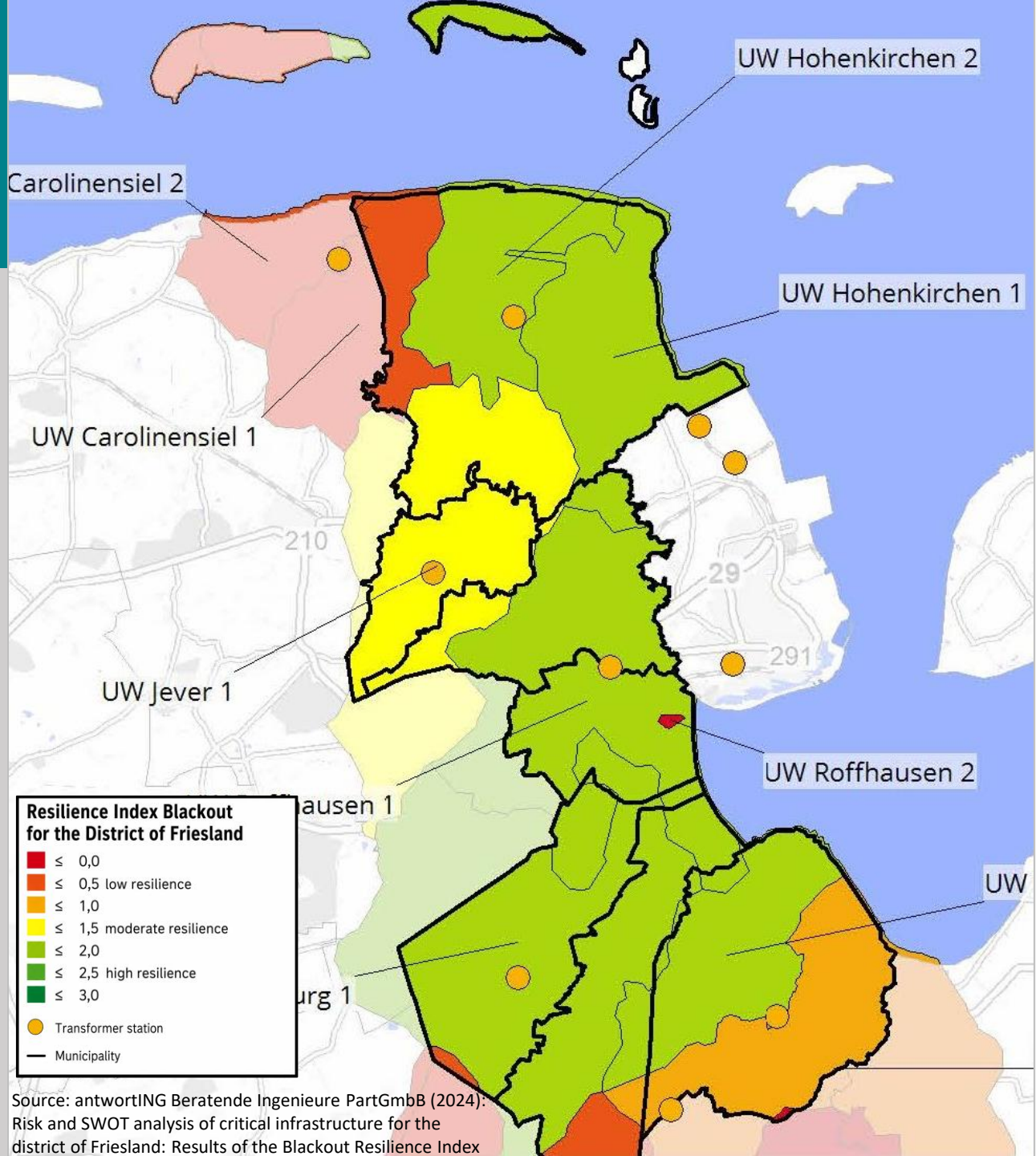
Source: agl 2026

Friesland District

A multi-method approach to identifying energy-self-sufficient resilience areas

Example of: vulnerability analysis, criticality analysis, SWOT analysis, participatory approach, mixed-methods approach

- **Definition and spatial localisation of municipal KRITIS** as the basis for the resilience analysis
- **Modified SWOT** analysis to identify strengths, redundancies and support and supply requirements in relation to the electricity supply.
- GIS-based analysis at the level of transformer districts and the creation of **resilience area profiles** to identify spatial vulnerabilities
- Sectoral risk analysis and development of a **resilience index** for the quantitative assessment of the partial resilience of individual KRITIS sectors
- **Needs analysis for a self-sufficient electricity supply:** comparison of local energy potential and the electricity requirements of KRITIS to **identify potential supply gaps**.



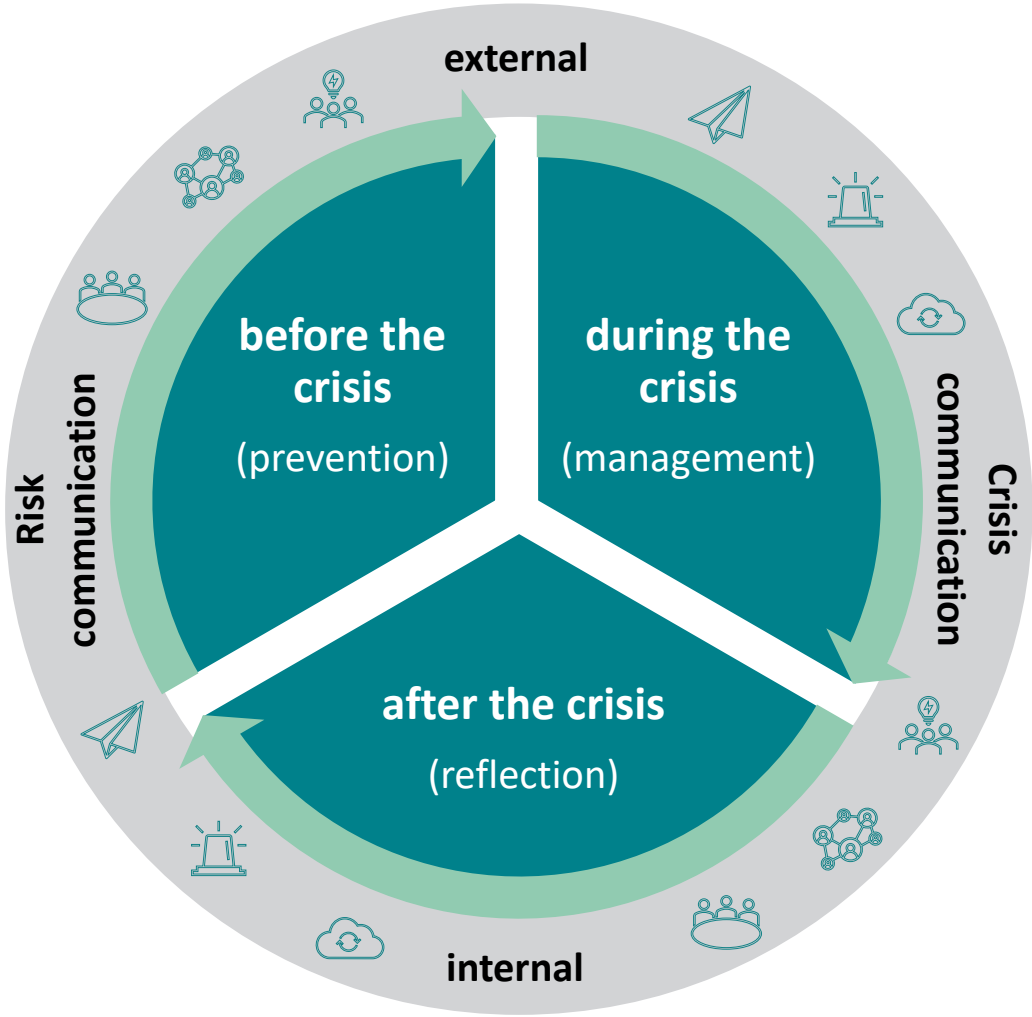
Source: antwortING Beratende Ingenieure PartGmbB (2024): Risk and SWOT analysis of critical infrastructure for the district of Friesland: Results of the Blackout Resilience Index

Risk communication

- Risk communication is essential to effective risk management and plays an **important role in all phases of crisis prevention and management**. It helps to convey knowledge about risks, improve cooperation between relevant stakeholders and raise risk awareness amongst the general public.
- Risk communication can be examined from **various perspectives**: according to the phases of the risk cycle, the stakeholders involved, and the respective communication formats. A fundamental distinction can be made between **risk communication** and **crisis communication.**

Who do you need to communicate with?	What knowledge of risk should you impart?
Stakeholders relevant to crises	Exploring roles, responsibilities and courses of action
	Develop a framework for crisis management/crisis prevention strategies
	Develop communication strategies
General public	Explain potential hazards and assets to be protected
	Identify individual precautionary measures
	Recommend how to behave in crisis situations
	Highlight ways in which people can contribute to crisis management

Risk communication and stages of the risk cycle



Source: agl 2026; Icons: Euskirchen District

Burgenland District
Crisis Communication Kit (KriKom-Koffer)

Example of: stakeholder-oriented communication

- Development of a **crisis-resilient communication and information structure** by equipping ‘disaster protection lighthouses’ with communication kits
- Communication system comprising **mobile kit units** and **supplementary InfoBoards**: a tried-and-tested solution meeting the requirements of a fail-safe system
- **Location-independent communication** via a robust 2-metre band radio network, even in the event of a failure of central network infrastructure
- Virtual InfoBoards that function as Wi-Fi access points: the public can **receive information** via smartphone and **send messages** to the incident command centre themselves using feedback forms
- Objective: to ensure **reliable and consistent information sharing** between authorities, emergency services and the media



Source: agl 2025

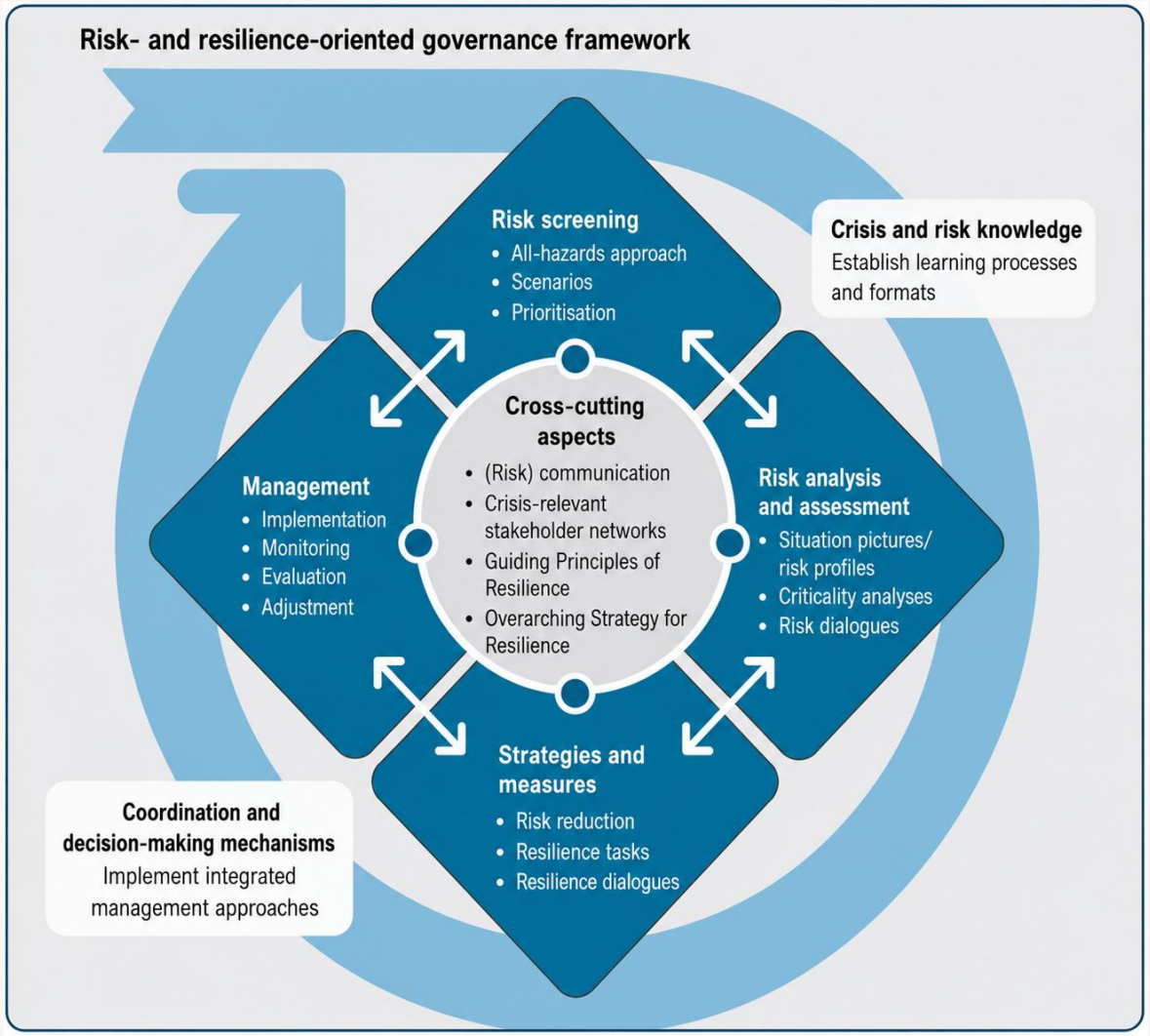
Crisis Communication Kit of the Burgenland District

Resilience-oriented governance

- **Complex risks** cannot be managed solely through traditional risk mitigation or linear control mechanisms
- The **governance framework** therefore combines risk analyses, adaptive control elements and discussions on societal resilience within an **integrated approach**
- Processes, procedures and organisational structures must be realigned to integrate aspects of risk and crisis management more closely and to enable **resilience-oriented processes of learning, adaptation and transformation**

What should you do?	What exactly is your role?
Organising stakeholders relevant to crises	Identify, contact, engage
Defining guiding principles and objectives	Developing a shared understanding, setting objectives, raising awareness in the region
Claryfing management	Clarify roles, define responsibilities
Developing skills	Organising further training, conducting exercises, advising the public
Establishing learning processes	Evaluating activities, setting up and using digital tools, employing playful learning formats

Risk- and resilience-oriented governance framework



Source: agl 2026; based on the IRGC's Risk Governance Framework, 2017: 10

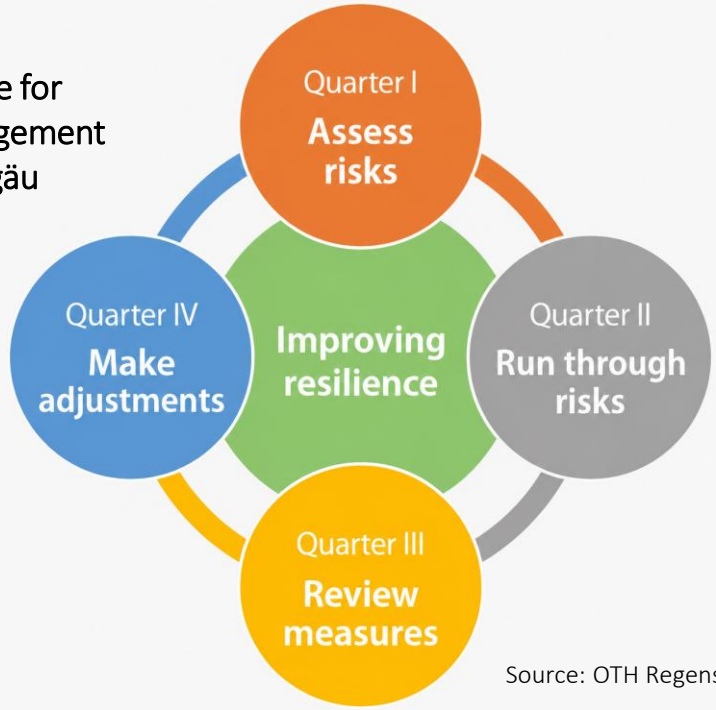
Oberallgäu District

PDCA cycle for sustaining resilience-oriented governance

Example of: Building structures, establishing learning processes

- Two key tools were developed as part of the project: a **scalable simulation game concept** that fosters cross-organisational skills whilst highlighting organisational risks, and a **GIS-based tool for analysing regional risks**.
- To ensure that these innovative approaches remain effective in the long term and support continuous improvement processes, a **PDCA cycle** is to be established within the district.
- The PDCA cycle comprises the **four phases of Plan, Do, Check and Act**, and provides a structured framework for regularly applying, reflecting on and further developing the concepts and strategies devised.
- A **three-month focus topic** is planned for each of these phases, although individual sub-tasks may also take place outside the respective focus period.
- This results in an **annual plan aimed at the continuous development of expertise within the Oberallgäu District Office**. The specific aim of the concept is to ensure that risk analysis becomes a permanent feature of the organisation.

The PDCA cycle for disaster management in the Oberallgäu region



Source: OTH Regensburg

Source: agl 2025



Table top simualtion exercise in the Oberallgäu District

Follow-up initiative (2026-2027)

Resilient Regions – Sustaining Progress and Knowledge Transfer

- The ‘Resilient Regions – Sustaining Progress and Knowledge Transfer’ initiative (2026–2027) aims to:
  1. **embed resilience-oriented approaches permanently** within spatial development structures and processes and
  2. to **transfer** tried-and-tested approaches **to other regions**.
- **Five pilot projects** will continue to be supported in order to consolidate the resilience-building processes that have already begun.
- In addition, **eight further ‘transfer regions’** have been selected which can benefit from the results and optimise their own resilience efforts.

Scan the QR code and visit the project website!

