

Natural Hazards (Safety and Security)

Natural hazard management is a complex and ongoing task whose significance has grown in recent years as a result of climate change and urban concentration. Efficient protection against natural hazards requires an integrated approach. All measures designed to improve prevention, reduce disaster risks, response readiness and reconstruction must be well-coordinated.

We support you in developing strategies and concepts that enable you to establish and improve the integrated risk management for natural hazards such as flooding, landslides, rockfalls, hail, storms and earthquakes. We carry out vulnerability and resilience assessments that take account of climate change and we assist you when it comes to implementing efficient measures.

Our services:

Risk analysis, risk overviews and risk evaluation: We assess the degree to which areas, locations and facilities may be exposed to risk. We identify risk hotspots, assess whether certain risks are acceptable, and ascertain the need for action.

Risk-based measures planning: We draft risk-management recommendations and carry out cost-effectiveness analyses to support you in prioritizing protective measures.

Risk-based spatial planning and development: We develop concepts for spatial planning and spatial development that take account of existing and future risks.

Emergency and evacuation planning: We draft GIS-based emergency-response and safety plans. We also assist you when it comes to organizational and process planning.

Loss prevention and mitigation: We draft strategies that support you in avoiding and reducing damage to buildings associated with natural hazards. This includes information on construction of buildings in a hazard-appropriate way. We also issue building and site-protection certificates.

Maintenance management for protective structures: We develop concepts for the maintenance of protective structures, as well as IT-based registers of protection works. We develop tools that enable you to assess the status of protective structures and to plan medium and long-term investments.

Resilience analyses and measures: We ascertain the degree to which infrastructures and social systems are capable of withstanding natural disasters and climate-related events. We identify measures that enable you to increase your resilience.