

Building e-resilience: Enhancing the Role of ICTs for Disaster Risk Management. A report for ESCAP

Rohan Samarajiva

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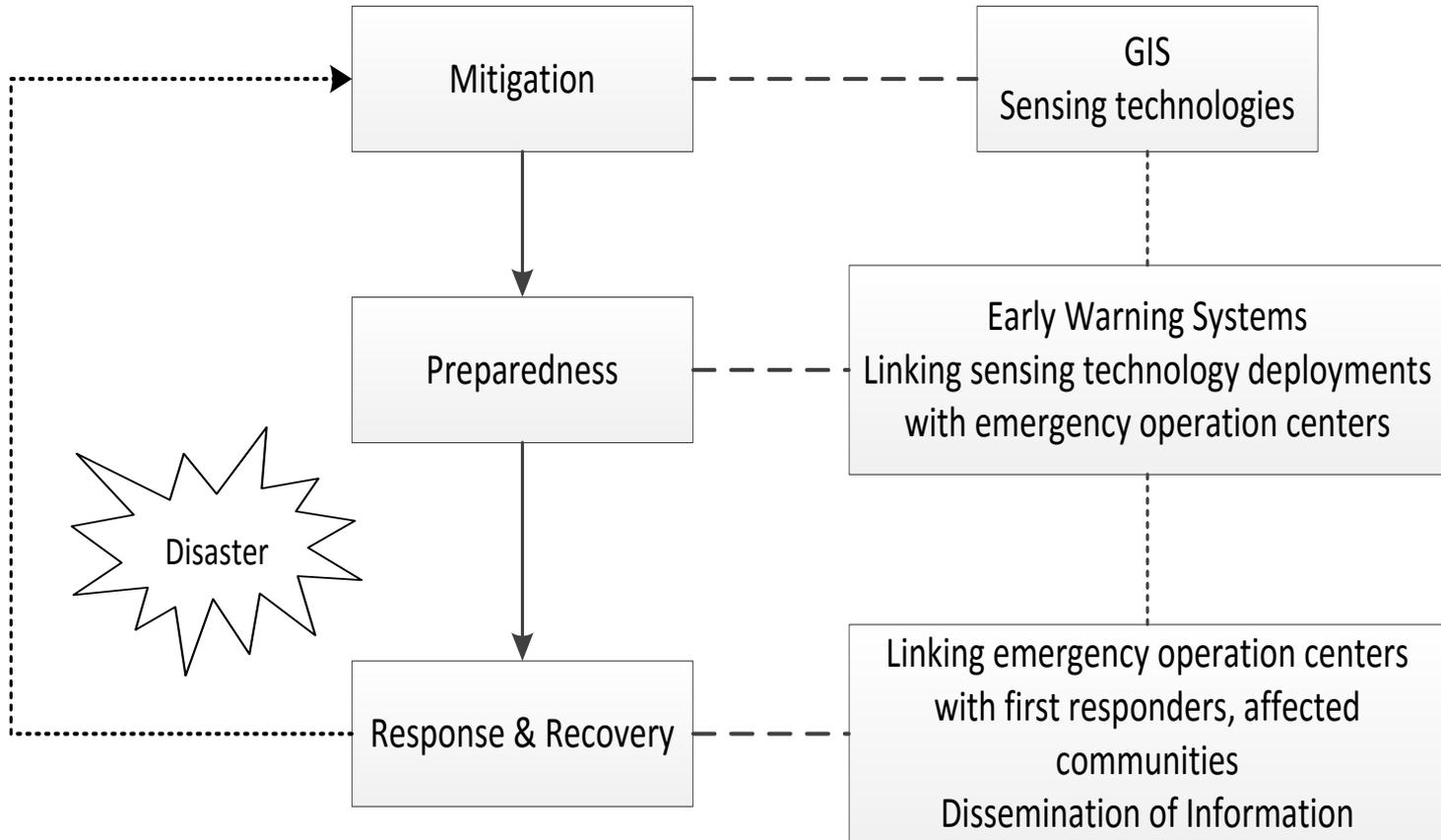
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Sustainable Development Goal 9.1

- Develop quality, reliable, sustainable and resilient infrastructure, including regional and trans- border infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all

Examples of ICT applications



Recommendations for international/regional organizations

- Enable policies conducive to resilient mesh networks across the Asia Pacific for international backhaul of ICT services that include terrestrial and maritime components
- Encourage coordination among different parts of UN system to increase resilience of all infrastructures, including ICT infrastructures
- Engage with member governments to impress upon them the concepts of inter-dependent and critical infrastructures and the need to transcend silo thinking
- Commission studies on the feasibility of risk pooling to enable the introduction of insurance as a risk-mitigation instrument

Recommendations for national governments

- Participate in regional efforts on resilient infrastructures and on using insurance as a risk-mitigation instrument
- Integrate disaster risk reduction (DRR) into development planning
- Foster greater cooperation among different parts of government responsible for resilient infrastructures
- Utilize technological innovations for disaster mitigation and warning, including GIS and, in particular, introduce ICT-based elements into the electricity grids and distribution networks to enhance resilience of the power infrastructure

Recommendations for national governments

- Take steps, including open data policies, to ensure that agencies with responsibility for resilience and disaster response have access to the data they require
- Ensure adequate redundancy and risk reduction in international elements of the ICT infrastructure, including location of cable landing stations (CLS) in diverse locations and ensuring adequate safeguards in the links from the CLS to main network nodes
- Define “conditions of exception” that can trigger mandatory national roaming under specified terms

Recommendations for telecom service providers

- Pay increased attention to the need for reliable connectivity services by customers, overcoming the obsolete thinking that sees resilience and affordability as mutually exclusive
- Improve contingency planning and provisioning of BTS power supplies and ensure adequate cells on wheels (COWs)
- Enable robust core networks using the capabilities of all-IP networks. Ensure that residual capacity of RNCs are used to supplement weak elements