

GIR 2025 DRI Dialogue 1: Technologies for Resilient Infrastructure

16 September 2025 | 17.30 – 18.30 IST

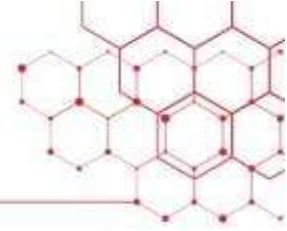
The Global Infrastructure Resilience Report

The **First Global Infrastructure Resilience (GIR) Report**, published by the Coalition for Disaster Resilient Infrastructure (CDRI) in October 2023, marked a significant milestone in the global efforts to advance disaster and climate-resilient infrastructure. Addressing the unique challenges faced by Low- and Middle-Income Countries (LMICs), it outlined pathways for strengthening resilience by leveraging data from the first-ever fully probabilistic global risk assessment of infrastructure assets – the *Global Infrastructure Risk Model & Resilience Index (GIRI)*. GIR provided data-driven, country-specific risk metrics to support investments in infrastructure resilience, with pathways for scaling up finance, applying Nature-based Infrastructure Solutions (the thematic focus of the first edition), and strengthening infrastructure governance. Most importantly, by reframing resilience from a cost to an opportunity, the Report emphasized the idea of a “**resilience dividend**” that can generate long-term benefits for all stakeholders alike.

Following its success, the upcoming **Second Global Infrastructure Resilience Report (GIR 2025)**, to be released at COP30 in November 2025, builds directly on this foundation while broadening both its scope and depth. It seeks to address some of the questions raised during the preparation and dissemination of the First Report, expanding its remit and strengthening the connections between risk analysis and the financial, institutional, ecological, and technological dimensions of resilient infrastructure. GIR 2025 further aims to reinforce the evidence base and advocate for upscaling resilient infrastructure by shifting the conversation from defining what the resilience dividend is to exploring how it can be effectively realized.

DRI Dialogue on Technologies for Resilient Infrastructure

In the lead-up to the launch of GIR 2025, CDRI is hosting a curated series of thematic dialogues on governance, finance, nature-based solutions, technology, and risk assessment. Intended to foster reflection and exchange of ideas, the series brings together global experts and practitioners, including contributors to GIR 2025 as authors and advisors, alongside other notable voices with deep expertise in these areas.



In this context, the **First Dialogue on “Technology for Resilient Infrastructure”** builds on the emerging narrative and key findings of the corresponding workstream under GIR 2025. At its core, this dialogue aims to explore how technologies can strengthen infrastructure systems across their lifecycle, enabling them to better absorb, respond to, and recover from disasters.

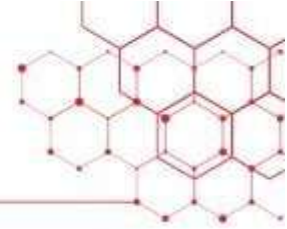
Rapid technological advances are opening new opportunities to enhance infrastructure resilience. For example, open data platforms are improving transparency and coordination, while generative AI, virtual reality, and high-performance computing are transforming disaster modelling and scenario planning; and innovations in construction such as updated building codes, new materials, modular methods, and 3D printing are enabling rapid, robust, and cost-effective rebuilding.

Technology therefore holds significant potential for strengthening resilience across users, assets, and systems, offering opportunities throughout the disaster lifecycle, including:

- a. Improving **data collection, analysis, and accessibility**
- b. Enhancing **connectivity, communication, and collaboration**
- c. Strengthening **asset and network performance**

Building on this rationale, the First Dialogue will feature a fireside chat to address the following questions:

1. How can technology enhance infrastructure resilience across the disaster resilience cycle (the capacity to absorb, respond to, and recover from disasters)?
2. What are the enablers and barriers to adopting and scaling technological solutions for resilient infrastructure?
3. What are some real-world applications and case studies that demonstrate how technologies have been implemented in diverse contexts to capture the resilience dividend?
4. What are the future pathways for integrating technology into infrastructure policy, governance, and investment strategies to build long-term resilience while effectively addressing changing risks, new innovations, and evolving resilience needs?
5. How does the technology component of the GIR 2025 contribute to the broader conversation on harnessing technology for resilient infrastructure?



Session Flow

Time (60 mins)	Proceedings	Anchor/Speaker
3 minutes	Welcome and Opening Remarks	Aishwarya Raj (CDRI)
5 minutes	Opening Presentation: GIR 2025 Overview and objectives of GIRI 2025, focusing on effectively capturing the 'resilience dividend' and leveraging technological innovations in resilient infrastructure.	Raina Singh (CDRI)
40 minutes	Fireside Chat Moderated by Ajay Lavakare (CDRI)	Key speakers: - Harriette Stone (CDRI; GFDRR) - Nagaraja Rao Harshadeep (World Bank) - Samhita R. (Resilience AI) - Kaitlin Shilling (Arup) - Behrang Shirizadeh (Deloitte)
10 minutes	Open Q&A	Ajay Lavakare (CDRI)
2 minutes	Closing Remarks	Ranjini Mukherjee (CDRI)
