

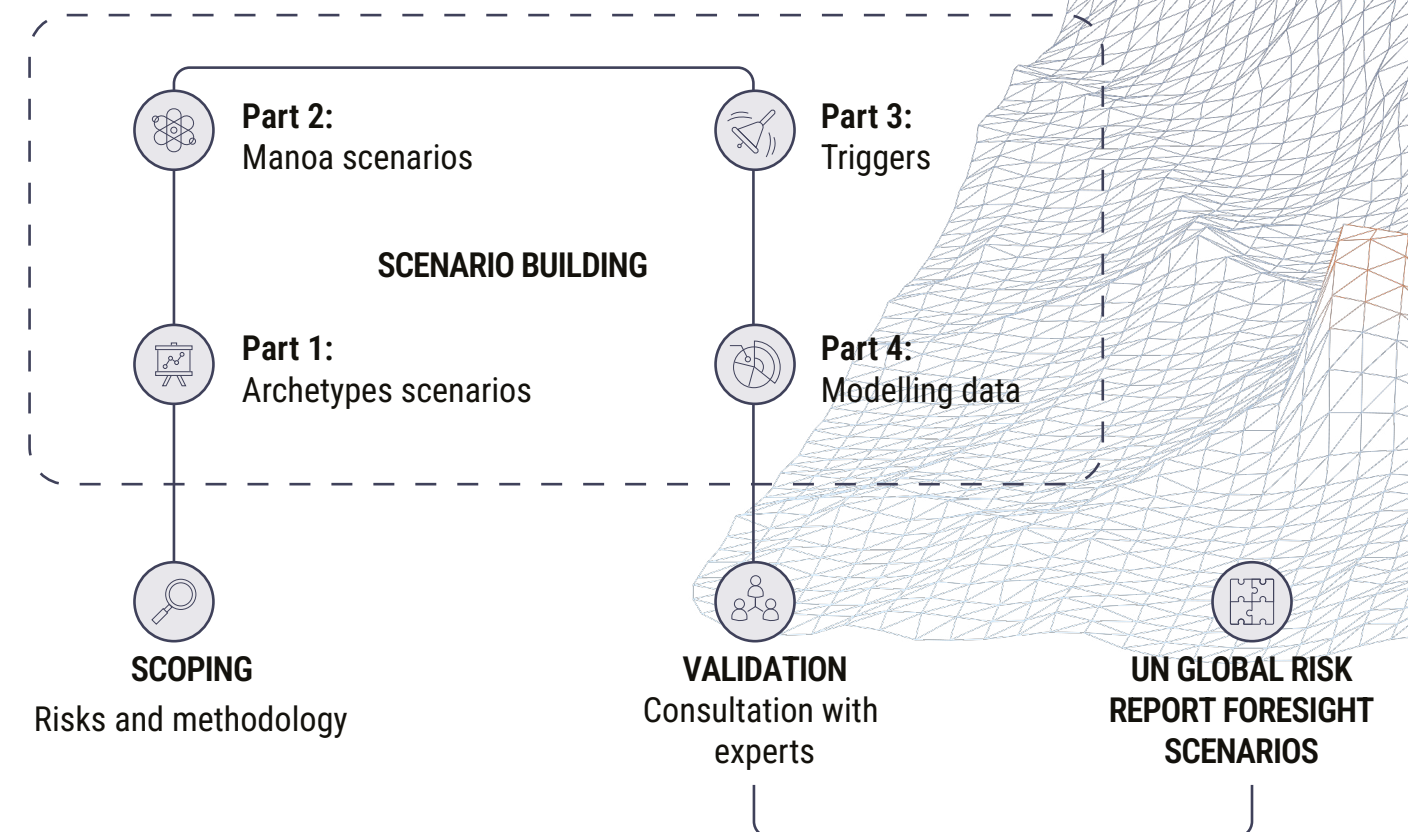
ANNEX 3: FORESIGHT SCENARIO BUILDING METHODOLOGY

The four foresight scenarios in the UN Global Risk Report aim to analyze the implications for the multilateral system, provide a nuanced understanding of the Global Vulnerabilities (Chapter 3) with a focus on their interconnectedness, and support proactive planning, policy formulation, and decision-making. To meet these objectives, the UN Futures Lab/Global Hub developed the scenarios using a hybrid approach, integrating elements from three established foresight methodologies (*Archetype Scenarios*¹, *Manoa Scenarios*², and *Triggers*) and modeling data from Denver University's International Futures integrated framework (IFs)³. This approach ensures a comprehensive exploration of the key vulnerabilities and assesses the preparedness of the multilateral system to manage them.

The scenarios are based on the top 10 risks by interconnectedness, as identified from the survey results (Figure 13). Using these risks, the **Archetype Scenarios** methodology frames four distinct future patterns for the evolution of the multilateral landscape:

- **Breakdown:** Fragmented joint action exacerbates the cascading effects of natural hazard risks.
- **Status Quo:** Uncoordinated joint action leads to uneven consequences after a global disinformation attack.
- **Progress:** Improved joint action mitigates the impacts of a new pandemic outbreak.
- **Breakthrough:** Strong joint action overcomes an acute global cybersecurity incident.

Figure 13: Scenarios Methodology



¹ Dator, J. (2009). *Alternative Futures at the Manoa School*.

² Schultz, W.L. (2003). *Systemic Scenarios: Creating Synergy through Scenarios and Systems Thinking*.

³ The IFs model is a large-scale, long-term, recursive dynamic tool that includes broad and integrated projections for 188 countries over long time horizons (B. B. Hughes 2019). The tool is open source and freely available (pardee.du.edu) and has been under development since the late 1970s. The tool has been published frequently in analysis by international organizations and governments (Hanna, Bohl, and Moyer (2021); B. Hughes et al. (2020); Meisel et al. (2021); Moyer et al. (2019); Moyer, Kabandula, et al. (2020); Verhagen et al. (2021-2022)).

Building on the Archetype Scenarios, the **Manoa Scenarios** methodology delves deeper into the dynamics of risks interactions within each scenario. Each scenario prominently features a risk (e.g. natural hazards, mis- and disinformation, new pandemic and cybersecurity) from one of the vulnerability clusters. Recognizing that risks are interconnected and rarely occur in isolation, each scenario depicts additional risks and their cascading impacts based on the degree of interconnectedness as identified by the survey results. This analysis provides a comprehensive understanding of the complexity of risk dynamics and helps anticipate potential cascading effects, which are crucial for effective risk management and strategic planning.

Expanding on the above analysis, the scenarios incorporate the potential impact of disruptive risks using **triggers**. This aspect examines potential outlier events that could significantly alter the global risk landscape and for which the multilateral system may be least prepared. This analysis encourages proactive planning and decision-making to enhance resilience against unforeseen disruptions.

As a final step, modeling data from **Denver University's International Futures integrated modeling framework** was used to strengthen the robustness of the scenarios. The narrative of the scenarios was transformed into parameters introduced into modeling framework by making assumptions about which key variables are impacted as well as the magnitude of the effect. To do so, each narrative was synthesized, the core drivers were isolated, and mapped to the IFs model. The results of this scenario building process were then presented to a **group of experts** for feedback and validation before the scenarios were finalized. Summarized, shorter versions of the scenarios, which do not include the results of the modeling data, are featured in the main body of the report.

By integrating these methodologies, the UN Global Risk Report provides a comprehensive, multidimensional exploration of future global risks and assesses the preparedness of the multilateral system to manage them.

