

July 15, 2024

The World Sustainability Forum welcomes the United Nations Environment Programme recent report "Navigating New Horizons". The report addresses the intersection of planetary health and human wellbeing, presenting a foresight process to identify emerging issues and potential disruptions. The report's "findings are an opportunity for being more deliberate about what, where and when actions are taken and to critically examine whether current interventions are fit for purpose [...] and to arrive at solutions that address many of the pressing issues being faced today." While there is much to commend the report, its lexical ambiguities, metaphoric approach and absence of a diagnostic systems analytic, mean that its recommendations on governance are merely metaphorical and not requisite to the challenges the report seeks to address. Metaphors produce merely metaphoric results, and should have no greater claim on our attention. A Viable System Model (VSM) and organizational cybernetics diagnostic framework offers deeper insight into current interventions; highlights areas for improvement; proposes alternative solutions; and advocates a viable governance system requisite to the complexity of the polycrisis.

#### VSM and Organizational Cybernetics Framework

The Viable System Model developed by Stafford Beer and elaborated by among others Markus Schwaninger, provides a powerful framework for diagnosing and designing the structures and processes necessary for a governance system to remain viable in a changing environment. It consists of five systems:

1. System 1 (Operations)
2. System 2 (Coordination)
3. System 3 (Control)
4. System 4 (Intelligence)
5. System 5 (Policy).

The science of effective governance, organizational cybernetics extends this model by emphasizing the importance of feedback loops, self-regulation, and adaptive capacity within governance systems.

Comments:

#### System 1: Operations

The report discusses the operational aspects of environmental monitoring and response but lacks detailed mechanisms for implementing these operations at the ground level. For instance, the identification of "signals of change" and "critical shifts" provides a broad understanding but does not translate into specific, actionable plans. The inclusion of case studies or pilot projects demonstrating successful operationalization of foresight insights could strengthen this section.



### System 2: Coordination

The foresight process described in the report involves multiple stakeholders, including experts, member states, and youth voices. However, the coordination mechanisms between these diverse groups are not clearly outlined. Effective coordination requires robust communication channels and shared platforms for information exchange. The report could benefit from proposing a dedicated coordination body or task force to ensure seamless integration of inputs and actions across different levels.

### System 3: Control

Control in the VSM context involves monitoring performance and ensuring compliance with set standards. While the report highlights the importance of monitoring emerging issues, it falls short in specifying the control mechanisms to be employed. For instance, how will UNEP ensure that the identified signals of change are continuously monitored and that appropriate actions are taken promptly? Introducing a structured feedback loop with periodic reviews and adjustments based on real-time data could enhance the control aspect.

### System 4: Intelligence

The report excels in its intelligence function by gathering extensive data and insights through horizon scanning and Delphi surveys. However, it could further enhance its intelligence system by incorporating advanced predictive analytics and artificial intelligence tools to analyse trends and provide more accurate foresight. Additionally, the report should emphasize the need for continuous learning and adaptation, ensuring that new information is rapidly integrated into the decision-making process.

### System 5: Policy

The policy system in VSM defines the overarching goals and values guiding the organization. "Navigating New Horizons" emphasizes the need for a new social contract and intergenerational equity, which align well with the policy function. However, the report could strengthen its policy recommendations by proposing concrete governance frameworks and policy instruments that member states can adopt. For example, suggesting specific legislative measures or international agreements to address identified disruptions would provide a clearer path for implementation.

### VSM-based Solutions

1. Enhanced Coordination Platforms: - Establishing digital platforms for real-time collaboration and information sharing among stakeholders can improve coordination. These platforms could host regular virtual meetings, provide updates on emerging issues, and facilitate collaborative decision-making.
2. Adaptive Control Mechanisms: - Implementing adaptive control mechanisms, such as dynamic risk assessment tools and scenario planning exercises, can help UNEP respond more effectively to emerging threats. These tools should be integrated into the organization's regular operations to ensure continuous readiness.

3. Leveraging Artificial Intelligence: - Utilizing AI-driven analytics can enhance the intelligence function by providing deeper insights into complex data sets. AI can identify patterns and correlations that human analysts might overlook, thereby improving the accuracy of foresight predictions.

4. Concrete Policy Frameworks: - Developing detailed policy frameworks that outline specific actions for member states can facilitate the implementation of the report's recommendations. These frameworks should include clear guidelines, timelines, and metrics for success to ensure accountability.

5. Capacity Building and Training: - Investing in capacity building and training for stakeholders involved in the foresight process can improve the overall effectiveness of the initiative. Training programs should focus on strategic foresight, risk management, and adaptive governance to equip stakeholders with the necessary skills and knowledge.

### Closing Remarks

“Navigating New Horizons” offers a foresight report on planetary health and human wellbeing, highlighting the exacerbation of human crises by the triple planetary challenges of climate change, biodiversity and nature loss, and pollution and waste. These crises are leading to geopolitical conflicts, displacement, and declining health.

However, the report falls short in addressing how organizations and governments can effectively manage the increasing variety and complexity of global challenges. It lacks specific strategies for reducing complexity while enhancing regulatory capabilities to handle diverse issues. Despite recognizing the interconnected nature of crises, the report does not provide concrete mechanisms for managing this complexity in a dynamic and adaptive manner.

The Viable System Model (VSM) and organizational cybernetics framework offer a robust approach for diagnosing and designing governance systems. These frameworks reveal areas for improvement in operationalization, coordination, control, intelligence, and policy. By creating intelligent, adaptive, and viable governance systems, VSM and organizational cybernetics ensure long-term survival and adaptability.

The World Sustainability Forum commends the report’s systemic approach, ethical considerations, and focus on adaptability and foresight. However, it notes the lack of detailed, actionable steps to integrate these principles into organizational practices. The Forum advocates for a more systemic approach to embedding ethics and sustainability into core governance functions and calls for a stronger application of cybernetic principles and tools to effectively manage complexity.