Network Session – Novel engagement and communication tools for science and decision making for system-based management

## Network Session Report

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Novel engagement and communication tools for science and decision making for systembased management

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## Session synopsis

In this network session, we presented a variety of innovative engagement and communication tools. The session was set up as an exploratory exhibit, where participants could engage with materials. Participants were not given any introductions to tools and were asked to fill out a survey about who they thought the intended audience was and the goal of the tool. Results were summarized at the end of the session.

There was a short introduction presentation to describe communication:

Communication is a process by which information is exchanged between individuals or groups through a common system of language, symbols, signs, or behaviour. This includes different forms of communication products (e.g., art, music), but also how communication happens (e.g., language, rhetoric).

Communicating Ecosystem-Based Management and Ecosystem Approaches is difficult due to the complex ideas, interdisciplinarity, diverse audiences, and that science/policy/management communications are often determined by governance processes (e.g., standardised reporting, institutional culture).

We highlighted five different types of engagement and communication tools that have been used for Ecosystem Approaches to Management:

1. **Fish and Ships card game:** This was a game designed to better understand the intricacies of fisheries and ecosystems. There are two versions one for the Benguela (South Africa) one for the Adriatic Sea (Europe).

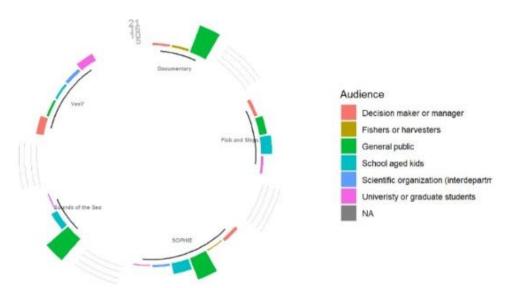
2. Seas, Oceans & Public Health in Europe (SOPHIE) comic strip: This summarised the research on the links between the health of the ocean and human health.

3. **Documentary: The making of As die See Byt:** This is a documentary about the making of a play designed to reach out to small scale and local fishers in South Africa about the impacts of climate, political, economic scenarios, and fishing.

4. **Virtual Ecosystem Scenario Viewer (VES-V)**: A video game designed by NOAA-Fisheries that allows users to visually explore ecosystem models. The tool demonstrates how to better present and visualize marine ecosystems.

5. **The sound of ocean colour:** a project by Ryan Vandermeulen that puts ocean colour from satellite-based remote sensing to musical instruments.

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*Figure 2. Word clouds from the responses of participants to the intended goal of the communication tools.* 

After engaging with materials, there was a group discussion on the impacts of these types of novel communication tools and how they can reach different audiences. The results in Figures 1 and 2 were compiled and presented at the end of the session and used to stimulate discussion. There were questions regarding the ability to evaluate the impact of such tools and the costs to develop them. The results were that many of the tools had obvious audiences, but that some participants did not estimate the reach of certain products. For instance, the SOPHIE comic was developed as a summary for policy and management, and although a comic might seem a light-hearted product (thought to be intended for the public by many participants), it did not distract from the seriousness of the material when presented in a more formal setting.

## Conclusion

This network session was well attended and had a lively discussion. The conclusions from the audience, and through observing engagement from participants, the communication tools were interesting and captured the attention of the participants. Many enjoyed the different communication tools and may have found them inspirational for their own work but had practical concerns regarding the costs of development and how to evaluate their impact. The conclusions were to consider the development of novel tools within grant proposal budgets, and to seek opportunities and partnerships to explore such tools, being mindful of the budget, audience, and purpose. Further work on evaluative tools is also important, and there were probably methods within the Social Sciences and Humanities that could be explored. Overall, participants were encouraged to seek opportunities to develop novel communication tools to advance operational ecosystem approaches.