

Key Questions for Defining the Network's Structure

As described in the strategy report,¹ the recommendation for engaging scientists in a trusted network to address inaccurate and misleading information that fuels mis- and disinformation is as follows:

Recommendation 1: Leaders of established scientific networks in Southeast Asia jointly should create a distributed network of individuals and organizations (i.e., a network of networks) that draws on a diversity of scientific disciplines and sectors needed to correct inaccurate and misleading scientific information about infectious diseases and other biological threats. The network should be regional and have a leadership structure that includes scientists from countries in the regional network. The network itself should be virtual only, leveraging recently developed online collaboration tools, but should be based in a host nation within Southeast Asia to support key operations (e.g., website, email addresses, and resource repositories) and gain credibility by regional and national authorities.

In considering whether a network of individuals, consortium of associations and institutions, or hybrid model would best address the overall vision of the network, several key questions were asked. These questions guided the structure of the network, which is described in detail in the associated strategy report.²

- **What are the mission and objectives of the networks?** This question relates closely to the articulated vision of the network. Per the recommended strategy, the vision is to create a transparent, trusted, sustainable, long-term network of eminent scientists, both regionally and internationally, who are contacted to address mis- and disinformation on biological threats dynamically and when the need arises. The specific mission of the network is to correct inaccurate and misleading scientific information by providing authoritative, defensible, evidence-supported scientific information through analysis, peer review, or another approach.
- **Who are the members of the network?** Per the recommended strategy, the members are regional scientific networks and organizations (e.g., scientific associations, universities, and other research institutions) and individual life, social, and computer scientists with expertise on various issues related to emerging infectious disease and other biological threats. This focus area is inclusive of experts from a diversity of life, social, and computer sciences, including but not limited to scientific and risk communication, computational biology, network science (including expertise in the generation, spread, and flow of information online and within social media networks), statistics, and quantitative and qualitative risk assessment.

Criteria for evaluating prospective members may include traditional measures of expertise or demonstration of broader skills. Traditional measures include publication record, education and research experiences, and demonstration of leadership and service (e.g., serving on scientific associations or institutional committees). Broader skills include science communication to technical and non-technical audiences, engagement with members of the public and other stakeholders, and an established reputation of transparency, openness, and trustworthiness.

¹ See <https://www.nap.edu/catalog/26466>.

² See <https://www.nap.edu/catalog/26466>.

Identifying prospective members to evaluate can be done through various means, including a nominations process or another means that more effectively promotes diversity and inclusivity of scientists from a variety of experiential levels including early-career, genders, countries, and scientific disciplines. Diversity in scientific pursuits drives excellence, a stated goal of the proposed network (Díaz-Faes et al. 2020; Freeman and Huang 2014; Swartz et al. 2019).

- **Who is the expected audience?** Per the recommended strategy, the primary audience is the broader scientific community. However, policymakers and decision-makers, journalists, and members of the broader public (e.g., lay and religious leaders) also are critical stakeholders and may be among the network's preferred audiences. Interaction and communication with this broader set of stakeholders require sustained engagement, trust building through transparency and openness, and carefully crafted communications to reach these audiences effectively and prevent the generation and/or perpetuation of additional inaccuracies and misleading information. Identifying the audience in part also depends on the desired reach of the network.
- **What type of logistical and technical support is needed to maintain and sustain the network?** Per the recommended strategy, the proposed executive committee could maintain the network; develop and implement actions for sustaining the network; provide training and other opportunities and offerings to members; adjudicate claims that need to be corrected and facilitate cross-disciplinary teams of members to address those claims; and build relationships with other networks, organizations, and key government ministries. In addition, this executive committee could include or hire experts in science communication and public affairs, including individuals who can liaise with journalists. This committee or a subsequent subcommittee could be created to maintain connectivity to and facilitate active engagement among regional networks and other stakeholders, such as the media. Building trusted and transparent relationships with stakeholders and producing high-quality, accurate, and authoritative materials can lead to the network being viewed as an invaluable resource to be invested in and supported over the long term.
- **What network structure is best suited to realize the vision and mission of the network, provide logistical and/or technical support to its members and non-member stakeholders, and be sustained over time?** Per the recommended strategy, the proposed network is distributed and dynamic, being leveraged when critical inaccurate information needs to be corrected. Identification and determination of which information needs correcting is the role of the network leadership group and should be documented in the recommended implementation plan, as described in Recommendations 4–6. However, to maintain such a network, provision of resources, opportunities to contribute to network-produced products, ability to receive professional development training (e.g., science communication and risk assessment), and regular meetings may be needed.
- **What network structure is best suited to protect its members from harms that might arise from correcting inaccurate information?** Recently individuals involved in identifying publication fraud have been targeted by others who are unhappy with their efforts (Devlin 2021; Shen 2020). Networks that allow scientists to correct information anonymously could help reduce privacy and security risks to individual experts.
- **How does the network gain credibility and visibility among key scientific and non-scientific stakeholders?** The quality of the products, interactions, and resources provided either on an ongoing basis or when called-to-action to address inaccurate and misleading scientific information can help to increase the network's credibility. The individuals and organizations involved in establishing and governing the network in-and-of-themselves can lend credibility to the network. The work of the governance committee in building trusted relationships with regional networks, securing sponsorship from well-regarded regional networks, and promoting open lines of communication with various stakeholders and regions can enhance both the credibility and visibility of the network. Sponsorship by governmental or intergovernmental organizations (e.g., the Association of Southeast Asian Nations or the Association of Academies and Societies of Sciences in Asia) is critical for ensuring the network has the support needed to operate.

References

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