Governance roadmap for a citizen science network

A proposal for guiding the process

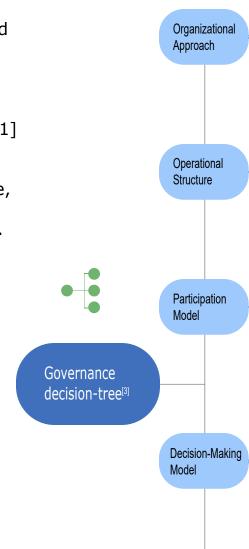
Soacha Godov, K.^{1,2,6}, Varese, M.^{3,4,6}, Villa, C.⁵, Piera, J.^{1,6}

What are the key agreements that need to be put in place while creating a citizen science network? What are the different forms that these agreements can take? We provide a roadmap, a decision tree, and a process for thinking about these questions that we hope can guide these conversations, in both existing and emerging citizen science networks, and enables them to arrive at a governance arrangement that suits their needs.

Governance refers to the collective processes of interactions, formal or informal, that determines the norms and decisions relating to a group's common interests [1].

There is no single model of governance that is desirable for networks to foster.[1] However, there are desirable characteristics of network governance, such as a dynamic and flexible structure, that in turn requires decentralization, pluralism, and cooperative relations.[2].

Based on these characteristics, we propose a process, a roadmap and a decision tree to guide people and organizations that wish to create or strengthen a network.









For each one of the areas of the governance roadmap, the decision tree provides a preliminary set of divergent options. These options facilitate making decisions about specific aspects of a network's governance. Your network may choose to opt for an "in-between" option as well. This tool, which will continue evolving and improving, provides a structured and organized decision-making tool for networks in the process of creating, revising or

consolidating governance agreements.

The choices should be evaluated by the network in the most collaborative way to ensure their legitimacy going forward.

Governance is also about achieving the greatest-possible balance and representation of interests of the different stakeholders. This is key when evaluating and selecting the most desirable or viable options.



Stakeholders

Thematic

Independent

Dependent

embership

Planning

Elections

Decision

Centralized

Decentralized

Distributed

Centralized

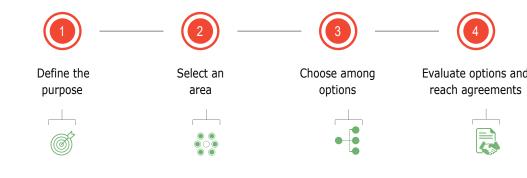
Collaborative

Communication

Financial

Sustainability

Process: How does one use the governance roadmap and the decision tree?

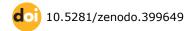


We took into account the governance analytical framework (GAF) [1] while building the roadmap. We also undertook a comparative analysis of the governance arrangements of multiple citizen science networks, including the European Citizen Science Association (ECSA) and the Australian Citizen Science Association (ACSA).

This roadmap was tested and improved in 2019, while developing governance models for the Citizen Science for the Amazon Network (CC Amazonía), the Iberoamerican Participatory Science Network (RICAP) and in 2020 for the Women in Conservation Network.



Want to contribute? Share with us your opinions and comments about the governance roadmap and decision tree in the poster's web page









The purpose behind the network depends The six areas —organizational approach, on whom and how the network seeks to have influence or impact.

The purpose is usually expressed through statements on objectives, principles and values. Networks should first define their purpose and only then start navigating the six areas of the roadmap and the associated decision tree.

operational structure, participation model, decision-making model, communication flows, financial sustainability— of the governance roadmap are closely related among each other, but they are not sequential; they can be addressed in the order that best responds to the needs of the network.

A collaborative process navigates between chaos and order. The roadmap should make it easier to find the right balance between the two states.

The roadmap is exactly that: a map. It is not a checklist that indicates how complete or not a governance model is.

Institut de Ciències del Mar (ICM-CSIC) Spain 1 Open University of Catalonia (UOC) Spain² Wildlife Conservation Society (WCS) Perú³ CC Amazonía Network⁴, Alexander von Humboldt Biological Resources Research Institute (IAvH) Colombia⁵, Ibero-american Participatory Science Network (RICAP)

[1] Hufty, M. (2008). A proposal to concretize the concept of governar ce: The Analytical Framework of Governance', in Governance and governance in the territories of Latin America.

[2] Provan, K. & Kenis, P. (2008), Modes of Network Governance

Structure, Management, and Effectiveness', Article in Journal of Public Administration Research and Theory doi: 10.1093 / jopart / mum015. [3] Soacha, K. (2019). Bases conceptuales y análisis de alternativas Modelo de gobernanza de la Red de ciencia ciudadana para la Amazonía. Wildlife Conservation Society (WCS).

Soacha Godov, K., Varese, M., Villa, C., Piera, J. (2020) Governance roadmap for a citizen science network. Poster presented at the ECSA Conference 2020: Encounters in Citizen Science the online conference for citizen and participatory science 2020 in Trieste, Italy

More information

The description of the roadmap is available in the article (in prep.) Governance roadmap for citizen science networks, a proposal for

Acknowledge

This research was supported by:

Wildlife Conservation Society (WCS) financed the development of the governance model of the Citizen Science for the Amazon Network Co-designed Citizen Observatories Services for the European Oper Science Cloud (Cos4Cloud) an H2020 project as part of the research

about governance in citizens observatories

Special thanks to the management group (2019) of the RICAP and the management group (2019) of CC Amazonia; their contributions were key to consolidating this roadmap to Pranesh Prakash, his contributions and review of the texts were so valuable and to Jose García for his help with the design

· Icons made by Freepik- Prosymbols from www.flaticon.co