

Foresight within ERA-NETs: Experiences from the preparation of an international research program

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Abstract

In this paper, we address challenges of organizing future-oriented consultation processes within European coordination tools for ‘Open Method of Coordination’ – such as ERA-NETs – which are promoted by the European Commission towards the establishment of the European Research Area. Specifically, we report experiences from a recent consultation process that was organized within WoodWisdom-Net (ERA-NET) with the aim of creating an international research agenda, based on the recognition of long-term challenges of the European forest sector and the attendant identification of gaps and new opportunities in wood material science and engineering. This consultation process involved eighteen funding organizations from eight European countries, as well as over 400 participants who represented relevant stakeholder groups, most notably leading researchers and industrialists. Methodologically, the process was based on the Internet-based solicitation and assessment of research issues, the deployment of Robust Portfolio Modeling (RPM) in the identification of promising research issues, and facilitated workshops where the results of Internet-based activities were discussed, validated and synthesized. In addition, extensive network analyses were conducted to support the identification of possible collaboration networks and the development of joint calls for proposals. Drawing on the results from the WoodWisdom-Net consultation process, we discuss the broader potential of Internet-based decision support tools and participatory workshops in promoting foresight activities within ERA-NETs and European coordination tools. © 2008 Elsevier Inc. All rights reserved.

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1. Introduction

Increasingly, foresight activities exhibit elements of international collaboration and are even launched as multi-national efforts (e.g., [1,2]), in the recognition that the engagement of stakeholders from several countries may help anticipate scientific, technological and societal developments, for example. A visible focus on international collaboration, however, may foster high expectations concerning shared vision-building and formation of new research and technology development (RTD) networks. Such expectations are not necessarily easy to fulfill due to the complexities of vertical and horizontal coordination in national innovation systems [3]. Indeed, it is striking that despite methodological advances (see e.g. [4,5]), not much attention has been devoted the challenges of coordinating foresight activities at the international level [3].

Apart from explicitly initiated local, national or international foresight projects (see. e.g. [6]), foresight activities can be conducted within RTD programs and other instruments of innovation policy [7]. In this paper, we examine issues in the organization of foresight activities within European coordination tools – such as “Integrated Projects”, “Net-works of Excellence”, “ERA-NETs”, “European Technology Platforms” and “Technology Initiatives” – which seek to foster European collaboration in innovation policy. Specifically, we report the design and implementation of an embedded foresight process that was organized in the ERA-NET program on wood material sciences [8]. Building on the experiences from this process, we discuss the deployment of Internet-based methods and multi-criteria analyses based on Robust Portfolio Modeling (briefly RPM Screening; see [9,10]). Particular attention is given to the development of a foresight design that responds to scalability requirements (e.g., the ability to accommodate inputs from large number of participants) and the management of multiple interfaces present in European-wide innovation policy coordination.

2. Foresight within ERA-Nets

The ERA-NET scheme³ seeks to strengthen the coordination and cooperation among national and regional research programs organized by ministries and national funding agencies in the member states. To-date, a large number of ERA-NETs have been launched, each with a focus on a specific field of science and/or technology, for the purpose of supporting mutual learning, opening-up of national innovation systems and the development of new collaborative forms of European RTD funding.

ERA-NET activities pose several cooperation challenges. Because the participating funding organizations have evolved through path-dependent processes that reflect the characteristics of their respective national innovation systems, they may be intent on advancing their national interests. The funding organizations have different priorities for research themes and resource allocation; they also operate subject to different regulatory and institutional constraints that limit what kinds of organizations and activities they can fund (e.g., availability of funding to foreign researchers). Furthermore, they have different management practices as concerns the launching, monitoring and evaluation of RTD projects; this means that ERA-NETs must operate in the presence of a multitude of governance cultures. These and yet other complexities are amplified by the many administrative options that can be pursued in the implementation of shared research agendas, ranging from the relatively weak coordination of national

³ <http://cordis.europa.eu/coordination/era-net.htm>.

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