# **Chapter 1 About This Book and the RRI-Practice Study**



1

**Abstract** In this Chapter, we give an overview of the book and the RRI-Practice study. The book is an analysis of data collected in the RRI-Practice study. It comprises an organizational analysis and an analysis of national discourses, thus analysing conditions for the uptake of RRI in research funding and research performing organisations in the science system.

**Keywords** Responsible research and innovation · RRI-Practice study · Organisational analysis · Neo-institutional theory · Discourse and practice · Sociotechnical imaginaries · Organisations as embedded

## 1.1 The Structure of the Book

The book is composed of two main parts:

- Chapters 2–5: reports on the organisational analysis in the project
- Chapters 6–8: reports on the analysis of national discourses and practices in the project

The two parts are written by two collaborating research teams: Part I by Christian Wittrock (Oslo Metropolitan University, Norway) and Ellen-Marie Forsberg (NORSUS Norwegian Institute for Sustainability Research, Norway); Part II by Auke Pols, Philip Macnaghten and David Ludwig (Wageningen University, the Netherlands). While the two parts are connected, each part employs different theoretical frameworks, Part I *neo-institutional theory* and organisational scholarship (Scott and Davis 2007), while Part II employs Jansanoff's (2015) *sociotechnical imaginaries*. We report on the organisational analysis and the national discourses together, as the wider (national) organisational environment has significant impact on intra-organisational conditions in neo-institutional theory (Strang and Meyer 1993; Lee and Strang 2006). Hence, the view of organisations is that of organisations as embedded in contexts, and organisational practices such as RRI seen as embedded in organisations (Granovetter 1985) (Fig. 1.1).



Fig. 1.1 Organisations as embedded in national discourses and practices

#### 1.2 The Content of the Book

The book disseminates both the organisational analysis conducted in the project, and the comparison of the national discourses and practices of relevance to RRI. As the overall research design and the theoretical framework employed in the project is of direct import on the coding scheme used in Part I, we treat the research design and theoretical backbone of the project in Part II, while the analysis of national discourses and practices are discussed in Part II. The national discourses and further national environment are frequently discussed and shown to be of importance for the organisations surveyed in Part II allows us to deepen our understanding of the impact of the national environments of the organisations surveyed with respect to conditions for the uptake of RRI. We conclude the book with reflections on the relation between the organisational and national analyses.

# 1.3 Introduction to the RRI-Practice Study

RRI is the acronym for *Responsible Research and Innovation*, a concept supported by the European Commission, calling for a new relation between society, research, and innovation<sup>1</sup> (von Schomberg 2012). The RRI-Practice project reviewed RRI-related work in 23 research performing and research funding organisations located in 12 different countries. The organisations vary on parameters such as size, teaching obligations, and impact in the national funding landscape. Additionally, some are policy organisations, closely tied to the political system in the countries, while others

<sup>&</sup>lt;sup>1</sup>https://ec.europa.eu/programmes/horizon2020/en/h2020-section/responsible-research-innovation, Accessed 1 June 2020.

operate at arm's length to political management or are formally independent entities. (See Tables 2.2 and 2.3 in Chap. 2 below for details of organisations researched).

Through interviews, focus group interviews, workshops of various formats, and document reviews, the project traced organisational practices that can be related to the five RRI policy keys (also called thematic elements)<sup>2</sup> and four RRI process dimensions, central to current theorised understandings of what constitutes RRI-Practices (e.g. Owen et al. 2012; Stilgoe et al. 2013).<sup>3</sup> A common denominator for the keys and dimensions is 'RRI aspects.' It is only in a subset of the surveyed organisations that the notion of RRI is widely known; in some organisations only a smaller portion of the employees are familiar with the RRI concept; and in most cases, this project constituted the first contact for the notion of RRI. This does not leave out the possibility of organisational practices that are commonly parallel or what Sally Randles and colleagues have termed 'de facto rri' (e.g. Randles 2016; Randles et al. 2016). In collaboration with each organisation, the national project research teams developed RRI Outlooks outlining RRI objectives, targets and indicators for each organisation. The result of this work was 12 publicly available country reports, comprising an analysis of the national context for the uptake of RRI, the status of RRI-related practices in each organisation, action plans for developing and sustaining RRI practices, and suggestions for indicators for individual organisations.

It is the data from these 12 national reports that inform this book, and which are summarised in Table 2.4 in Chap. 2.4 In addition, the project developed a report comparing implementations across case studies at the level of specific RRI keys and process dimensions of RRI (Hennen et al. 2018); a booklet with recommendations to national policy makers (Owen et al. 2019); as well as a handbook on how to develop RRI in organisations, showcasing 11 good practices, and the provision of practical advice to managers, change agents, and researchers with an interest in RRI (Wittrock and Forsberg 2019). We draw on the latter material selectively in our analysis.

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<sup>&</sup>lt;sup>2</sup>https://ec.europa.eu/programmes/horizon2020/en/h2020-section/responsible-research-innova tion. Accessed 25 May 2020.

<sup>&</sup>lt;sup>3</sup>These were adapted in the RRI–Practice project as follows: that research and innovation need to be diverse and inclusive, anticipative and reflective, open and transparent, and responsive and adaptive to change.

<sup>&</sup>lt;sup>4</sup>All reports are available at https://www.rri-practice.eu/knowledge-repository/publications-and-deliverables/.

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