Preface

This scientific anthology elucidates new views on emergency management and understanding the unforeseen in society and learning processes by introducing the concept of *samhandling*, a Norwegian term that connotes interaction, collaboration, cooperation and coordination in one word.

Interaction: "Samhandling" Under Risk. A Step Ahead of the Unforeseen has a background in several research projects: Military Pedagogies (2004–2008), Leadership, Collaboration and Samhandling in Flexible Organizations (2006–2010), respectively resulting in two scientific anthologies and, not least, the research program "Educational Basic Research on the Unforeseen" (2010–2015). The latter program resulted in the research-based anthology Pedagogy for the Unforeseen, a collaborative work by 20 scholars (Torgersen, 2015, see Chapter 1). In connection with these projects, there have been countless presentations at research conferences around the world, including the Conference for the Society for Risk Analysis – Europe (SRA-E) and the Congress of the Nordic Educational Research Association (NERA).

One of the most important findings reported in *Pedagogy for the Unforeseen* was the identification of several generic competence structures that must be developed to cope with unforeseen events in all its phases. The various generic competence structures were assembled in a didactic model called *The Strategic Didactic Model for the Unforeseen* (SD-UN). A key competence structure was *samhandling*. The present anthology elaborates on what this *samhandling* competence can be and how this competence can be developed.

After the scientific anthology *Pedagogy for the Unforeseen* was launched on the United Nations' International Day of Peace (September 21, 2015) at the House of Literature in Oslo, my research group and I immediately began investigating the scientific contexts of the research we had completed during the last decade. In this work, the following people contributed in particular: Professor Herner Saeverot (Western Norway University of Applied Sciences), Associate Professor Trygve Steiro

(Norwegian University of Science and Technology), Professor Torbjørn Rundmo (Norwegian University of Science and Technology), Researcher Tone Cecilie Carlsten (Nordic Institute for Studies in Innovation, Research and Education), Lieutenant Colonel Bjørn Eidsvaag (Norwegian Defense University College), Associated Professor Leif Inge Magnussen (University of Southeast Norway), Lieutenant Colonel Marius Herberg (Norwegian Ministry of Defense) and Assistant professor Gila Hammer Furnes (Western Norway University of Applied Sciences). After several weeks of theoretical and practical analyzes, we were left with the following research question:

What are the basic structures of the concept of *samhandling* under risk and how can *samhandling* be created when conditions are unpredictable?

This research question became the start of the research project "Interaction: *Samhandling* Under Risk. A Step Ahead of the Unforeseen". To go one step further within such a complex issue, it was necessary to gather some of the most prominent researchers working on the topic of *samhandling*, embracing several disciplines, methodological perspectives and sectors. This resulted in 28 research studies conducted by a total of 32 contributors. They are all presented in this anthology.

This scientific anthology conveys new knowledge that forms the basis for a new view on strategic, emergency-preparedness management, and understanding of the unforeseen in society and in learning processes. The approach is interdisciplinary but has a particular focus on disciplines such as pedagogy, psychology, health sciences, military science and organization and management, applied in various industries and sectors related to practical examples, experiences and challenges. The book's primary target group is the scientific research community within these disciplines.

Originally, this anthology was intended to be written in Norwegian, which would mean that it would only be accessible to Scandinavians. The reason for this was that we found the Norwegian word *samhandling* closely linked to cultural aspects. The Norwegian word *samhandling* equates with English terms like "interaction", "social interaction", "coolaboration", "cooperation", "coordination", "join forces with", "joint

action", "teamwork" and "working together" (see also Chapters 1 and 2). If we had translated samhandling to one of the English equivalents, we believe that some nuances would have been lost in translation. However, thanks to conference participants at The Society for Risk Analysis Europe (SRA-E) in Maastricht 2015, Bath 2016 and Lisbon 2017, there was a strong request that our work should be written in English and therefore made accessible to a wider audience. This clearly has its advantages. But samhandling is also closely linked, as we see it, to a Norwegian and Scandinavian context that readers should be aware of and reflect upon. However, these nuances are also the very reason why the international research community wanted to know more and participate in a discussion about this context. I therefore hope for understanding for our choice of using the Norwegian word samhandling more or less throughout the entire anthology. At the same time, I am optimistic that this choice may contribute to further interest, conceptual discussions and research on nuanced and basic processes connected to the topic of samhandling, of benefit for all worldwide. An example can be the conceptualization made in Chapter 28, where the concept samhandling is linked globally and discussed in light of the corresponding Japanese expressions.

Due to our global perspective, additional international research journeys and field studies were also conducted to gain insights into how different countries, cultures and businesses perceive and relate to phenomena such as *samhandling* and the unforeseen. In particular, I will mention the stay in Japan in the autumn of 2017, including visits to the National Defense Academy (NDA) in Yokosuka (Obaradai). I would like to express my sincere gratitude to Professor Hitoshi Kawano, Dean at the NDA, for very useful and professional contributions. Furthermore, I would like to highlight visits to safari guide training schools in Kenya and Tanzania, with particular focus on learning processes related to the interpretation of hazard signals in nature and measures for unforeseen events in the field.

This anthology may be read in any order, but because several concepts and models are commonly used throughout the anthology, such as *samhandling*, "interaction", "unforeseen", "SUR structures" and "Bow-tie model/UN SUR model", I suggest it is a good idea to start by reading Chapters 1 and 2. The last chapter, Chapter 28, aggregates the findings

from the other chapters and suggests an overall model and definition of "SUR structures".

The project has been administered by the Norwegian Defense University College (NDUC) and has been part of the basic research program "The Unforeseen". I have been the leader and editor of the project, with very good support from and interaction with Herner, Tone Cecilie and Bjørn, as well as the rest of the contributors to this anthology. However, special thanks must be given to Trygve Steiro at the Norwegian University of Science and Technology, for the overall effort that he has contributed, both professionally and editorially along the way.

With a total of 32 researchers as well as an administrative support group, both at NDUC and the individual researchers' institutions, this has not only been a continuous and hard-working research group. We have become a solid research community, with enormous enthusiasm, motivation and commitment to basic research. In addition to almost daily contact with each other, there have been several research seminars with presentations and discussions of findings as part of the quality assurance. Each contributor has also participated in conferences and other research dissemination within their own fields of study, discussing their results with their own research and academic environments along the way. As such, this work is the result of favors from all researchers and institutions involved.

All of this has been carried out in a good, "old-fashioned", basic research spirit, without commercial motives or interference in the choice of research topics. Our slogan has been:

Basic research for the benefit of society – SAMHANDLING under risk:

There is no doubt that the message of the book is more relevant than ever ...!

With this slogan, we have suggested a benefit to global society. Therefore, I give my sincere thanks to all researchers, supporters and institutions who have had faith in this project throughout the last three years.

An anthology like this is dependent on many. Thanks to the publisher, Cappelen Damm Akademisk, and the publishing editors Dorte Østreng and Simon Aase, who have contributed with their expertise and professionalism throughout the work on manuscripts. Thanks also to the

publisher's proofreaders and reviewers who have contributed to quality assurance of the chapters along the way. In addition, several in our scientific network, both nationally and internationally, contributed with academic input and critical feedback to our findings and texts throughout the three years, for whose efforts we are sincerely grateful. Furthermore, we thank our students, at both bachelor, master and PhD levels, who have contributed to discussions and provided feedback along the way.

I believe that our project work and this anthology can, at least, contribute to a new way of thinking in strategic preparedness management and corresponding subject areas, with particular emphasis on developing interpersonal competence to meet unforeseen events in all their forms.

Obviously, the anthology does not provide exhaustive answers. Nevertheless, I hope that it may serve as a stepping stone towards providing some principles for a way of thinking that can contribute to reflection on existing practices, and, not least, encourage further research. We trust that readers do not stop with our words and discoveries but actively draw on their own perspectives, experiences and findings, to get yet another step closer to how *samhandling* may work best when it counts the most.

Finally, as was underlined in *Pedagogy for the Unforeseen* (p. 7, my translation):

The Unforeseen (UN) affects everyone in one way or another, both in earlier times, here and now, and in the future. Therefore, my main message is that everyone should develop a relationship to the UN and should also, in their own way, try to prevent dangerous and unwanted situations from occurring, while at the same time seeing opportunities for learning and development in unforeseen and spontaneous situations that occur along the way, both in teaching and in the rest of the world.

This book is dedicated to you all, and all of us who have contributed hope that the book, directly and indirectly, may contribute to better *samhandling*, both in general and when it counts the most, and to knowledge, peace, love and safety in society.

Oslo/Tistedal, May 2018 Glenn-Egil Torgersen