

# SSD

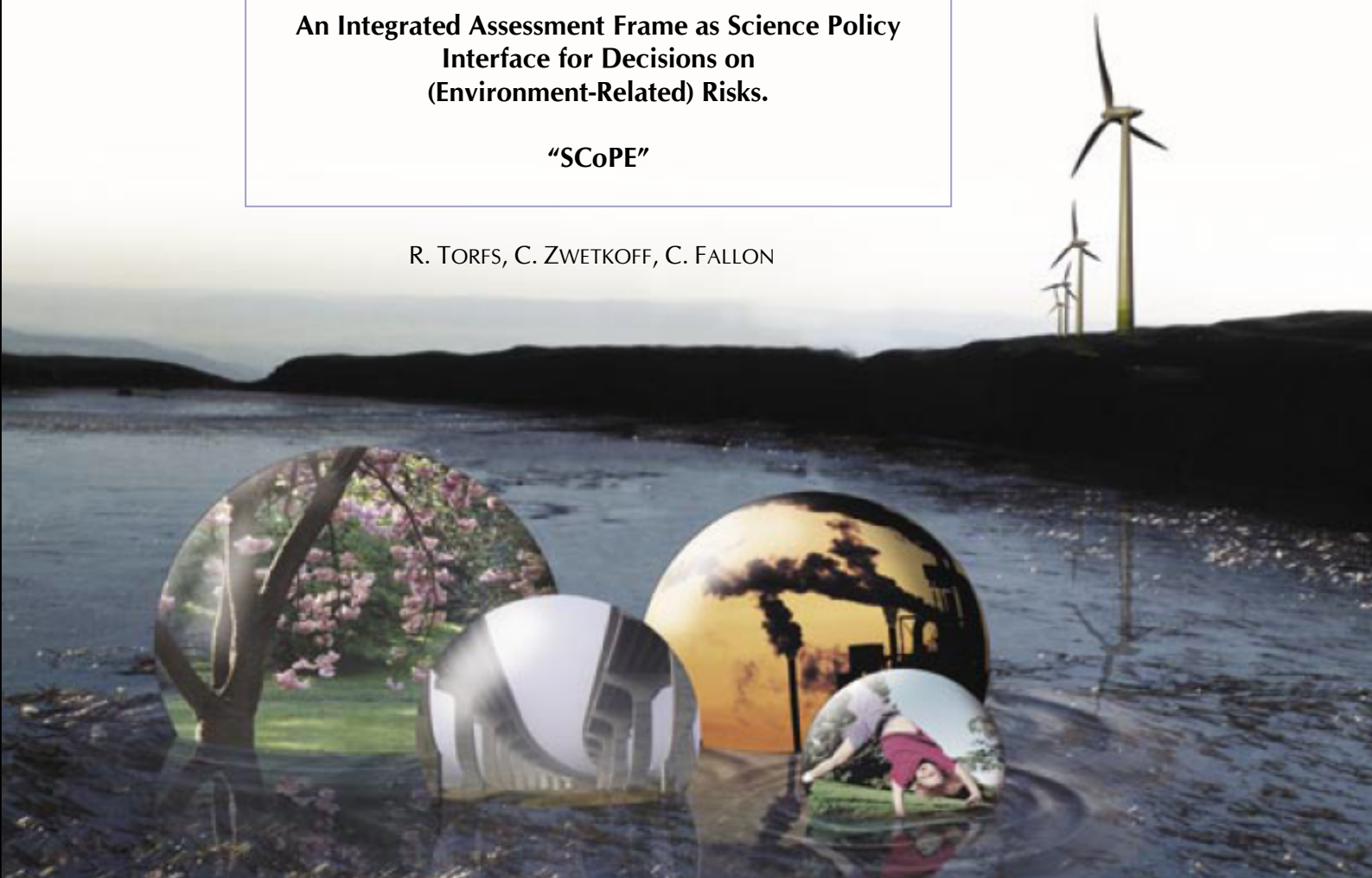
SCIENCE FOR A SUSTAINABLE DEVELOPMENT



**An Integrated Assessment Frame as Science Policy  
Interface for Decisions on  
(Environment-Related) Risks.**

**“SCoPE”**

R. TORFS, C. ZWETKOFF, C. FALLON



ENERGY

TRANSPORT AND MOBILITY

AGRO-FOOD

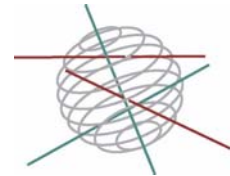
HEALTH AND ENVIRONMENT

CLIMATE

BIODIVERSITY

ATMOSPHERE AND TERRESTRIAL AND MARINE ECOSYSTEMS

TRANSVERSAL ACTIONS



***Transversal Actions***



FINAL REPORT PHASE 1  
SUMMARY

**An Integrated Assessment Frame as Science Policy Interface  
for Decisions on  
(Environment-Related) Risks.  
“SCoPE”**

**SD/TA/10A**

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## Summary

Classical risk assessment paradigms no longer suffice to deal with complex, uncertain and ambiguous risks. Therefore, new approaches to prevent, control, communicate, and deal with the causes of these risks and with public anxieties about risks are necessary. In phase 1 we analyzed the **available concepts** to integrate risk and economical assessment with social aspects in one framework, and discussed the **relevant criteria** that need to be considered in order to develop a final risk assessment framework. Furthermore, still in phase 1, **empirical work** was performed in the form of **case studies** to analyze and define a framework, or to select criteria. We are in the process of reviewing, selecting, and testing **tools and instruments** that can be used in this appraisal framework, to go from concepts to practice.

To grasp the full complexity of controversial, uncertain and immature risks, to cope with different values and views, and to develop a good communication we consider the appraisal framework as a procedural decision making process. It requires a more participative approach as the legal rational approach does not deliver adequate public management tools for handling these issues. We propose a sequential model, going through a series of steps, that can be used both in cases of strategic planning and management, and in the management of local projects usually related to siting conflicts. In each phase of the model integrated assessment tools and methods can be applied up to the point where consensus or a clear representation of different values and views (ideal in very uncertain and ambiguous problems), or an optimal balance between different criteria (in more simple cases) is achieved. All together our Appraisal Framework [is shaped] as a process, structuring and supporting the decision-making process.

- To promote and organize a mutual learning of all actors entering into the policy cycle spiralling up through the different phases.
- In the context of local siting conflicts, local contamination issues and urban planning topics (all with very close relationships with individuals), including regional, global E&H issues (food, climate, air, transport...)

It's a policy cycle, focused around a certain problem, organised to formulate and evaluate policy options, with stakeholders involved at different phases and steps of the process.

Here the AF is structured as a learning network composed of all the players entering into the decision-making process at different stages.

The quality of the decision making process can be appreciated either on the basis of its outcomes or on the process itself. Our framing falls under the latter. It also rests on the procedural equity feeling and its impact on the acceptability of the effects of the decision (Joss S. and Brownlea A., 1999). Such an approach opens the way to a greater legitimacy of decisions whose substantive effects or outcomes are essentially dubious – a fortiori in the context of the precaution. It encourages a reflection on the manner of combining the opening of the decision-making process through participative methods with others meta-tools such as strategic management, integrated and comparative approach of the risk, or the evaluative method. These meta-tools structure the

participative step, giving it objectives, precise questions and ad hoc means. It contributes to the technical quality of the decision and to its social acceptability, particularly when it is the product of a decision-making process which the actors consider precautionary and adapted to the context of great scientific uncertainty.