# Partnering for Change: Link Research to Societal Challenges
Video Transcript

**Phase 2: jointly conduct research**

[Dr. Christian Pohl] The central challenge of the second phase of a transdisciplinary project is to jointly conduct research. 'Jointly' does not mean that all participants carry out all steps of research together. Rather, it means to fill and further develop the roles and responsibilities as discussed in Phase 1.

Looking again at the scheme, summarising our theoretical approach, the second phase is about defining the collaboration of researchers from different disciplines and actors of different societal sectors. Two key challenges of this second phase are: to jointly generate knowledge, to bridge different knowledges and interests (by some called 'integration').

The collaboration of researchers from different disciplines and actors of further societal sectors in transdisciplinary research is a dynamic process. Stauffacher et al. call it a functional-dynamic process. This process is symbolised by the blue line. 'Functional' means that not all societal actors have to be involved in the same intensity all the time. Rather, researchers of a particular discipline or stakeholders of a specific sector of society might be highly involved in some steps and not in others.

And, depending on the step, it might be adequate to inform them, to consult them, or to closely collaborate and co-produce knowledge. At the same time, the intensity of collaboration between the different disciplines, shown in pink here, can vary. So, the form and intensity of involvement of societal actors and the collaboration between the disciplines vary while the project is progressing.

A key challenge of jointly conducting research but also of the other two phases is integration. According to Jahn et al., integration in an abstract sense means to connect things that were not connected before. According to O'Rourke et al., integration is a process during which a series of changes to the inputs results in a 'bringing together' or a combination of inputs producing an output.

With this picture, I want to show that such integration is mostly based on partial knowledge about the subject. Therefore, different abstractions of the original subject exist. In both definitions, integration does not mean to fuse several elements into one, but it means connecting several elements and by doing so, producing something new.

A tricky question is how far integration should go and what form it should have. One form is a consensus, where all participants would have the same understanding of an issue and how to deal with it. Another

form is a boundary object, where integration means mainly to find an object all participants are interested in, for instance, a technological device, a risk map, or a new policy.

No consensus is needed about how things are, but about what should be done. In between both is what Boix Mansilla calls 'systems of thought in reflective equilibrium'. For me, that means different perspectives on an issue coexist and are in exchange, perhaps also leading to changes in one or several of them.

How far should integration go? How could an adequate form of integration look like? These are questions that have to be answered by the project team. The form of integration should serve the purpose of the project.

The td-net toolbox provides tools to support teams in jointly conducting research and in integration. The give-and-take matrix, for instance, supports coordination among sub-projects in larger consortia. The matrix asks each project to spell out what output they will provide for which other sub-projects and what input they would require from which other sub-project.

Another tool for integration are nomadic concepts. It asks all project participants to explain a key concept of the joint project, such as water, from their perspective. The tool helps both to get to know the various perspectives on an issue as well as to find perspectives that could be linked or that enrich each other. At the end of the second phase of a transdisciplinary project, there is ideally: some answers to the open questions co-produced by the participants, clarity about how far integration goes, and participants that, by jointly producing knowledge, had some interesting insights.