6. Poland

6.1 General dialogue details Poland

Dialogue data

Location of the dialogue	Bialowieza (hosted by Bialystok University of Technology)
Topic	Nanotextiles
Date of the dialogue	21 October 2017
Participants	12 participants (4 men, 8 women): • Representative of foundation dealing with issues of sustainability • Representative of budget commission of city council • Architect and civil engineer • Foresight specialist (1) • Foresight specialist (2) • Representative of the citizen dialogue (1) • Representative of the citizen dialogue (2) • Representative of foundation active in the field of education and sustainable development • Representative of strategy department of the city hall • Representative of major textile company • Former economic journalist and tax expert • Entrepreneurship, innovation and industrial policy specialist

6.2 Recommended directions for change

The discussions in the Polish multi-stakeholder dialogue seemed to revolve around three main themes, which are elaborated below. A note that should be made here is that the conversation seemed primarily centered on the question of what is needed to promote responsible innovation, instead of how to better identify and integrate societal perspectives. Although these questions partly overlap, the former has a slightly broader scope and thus resulted in recommendations and directions for change that relate more generally to the notion of responsible development.

Fostering collaboration and trust

Collaboration and trust were prominent themes in the dialogue discussions. Participants considered true cooperation of different stakeholders in the realm of responsible nanotechnology development critical, but also a hard challenge. They referred to having experienced “trust issues” in the Polish society, which obstructs willingness

of different stakeholders to interact and collaborate. Participants spoke of the different goals that each of the stakeholders has when it comes to nanotechnology development and the resulting conflicts of interests. Participants indicated that the trust issues might be overcome by putting stakeholders in (direct) contact with one another. They strongly recommended the creation of spaces in which stakeholders could exchange their goals and work on enhancing mutual understanding. Both online platforms as well as face-to-face events were indicated as possible solutions to eliminating prejudice. One participant suggested that local/regional collaborations between stakeholders might be a good starting point, since these types of relationships are more personal and lasting. Local communities, businesses and representatives of NGOs should form ties, and universities and researchers should also be active in the field of local and regional collaboration. It was considered the task of government programmes to create the conditions for the cooperation of various groups of stakeholders, but not to give guidelines on what this cooperation should look like exactly.

Involving citizens by focusing on current social problems

Participants stressed that, in an ideal situation, researchers and innovators should focus on developing products for which society has a real need. It was pointed out that the timely involvement of citizens would therefore be important. The question of *when* such citizen involvement should take place was raised. Many participants seemed to agree that citizens should be consulted about their needs and perspectives at the stage of applied research (put very simply), right before products enter the market. This way they can influence the actual development and creation of the products, instead of just evaluate products that are already on the market. Participants seemed hesitant to already involve citizens in earlier stages of development. Some particularly stressed that basic research should retain sufficient degrees of freedom and political influences should thus be minimized at this stage, while others used softer phrasing and spoke of “the dilemma between the researcher’s autonomy and the responsibility for his/her actions”.

Participants seemed to struggle with the question *how* to involve citizens in consultations. They referred to the usual lack of interest in these kinds of events, and pointed out that many citizens have to cope with more urgent daily struggles, such as poverty. So why would they be interested in joining a discussion on nanotechnology? It was suggested that current social problems (such as aging societies) might be a more productive starting point for discussions on responsible innovation and general reflections on technological, social and economic development in different countries and regions. Since such social problems affect everyone, participants considered it a great opportunity for broad involvement and the creation of joint activities to strengthen cooperation for responsible approaches.

Enhancing attention for ethics, safety and legislation

Participants mentioned that sufficient attention should be paid to ethics and safety around nanotechnology innovations. Some participants stressed that attention to ethics should not solely be focused on traditional bio-ethical issues, but should also consider the broader societal effects of new (nano)technologies. The questions that remained to be answered were *who* should identify such broader effects and at what stage of the research and innovation process should attention be paid to such matters? Some participants suggested that the third sector could play an important role here, but others countered this view by pointing out that the high levels of secrecy – present in the industrial world and surrounding contracts between researchers and companies - would make it difficult for the third sector – or any outsider - to find out what innovations people are currently working on, let alone to explore potential broader for society.

Participants seemed to recognize an increase in attention for user safety in the industrial sector and emphasized the importance of legislation and safety standards for product development. Yet, participants seemed concerned about the inability of legislation to keep up with the rapid developments in research and innovation. Several ideas were voiced on how this problem should be tackled, including: 1) raising early awareness amongst decision-makers on the potential effects of new developments to ensure timely consideration of implications for legislation 2) sufficient money for the ministry of development to make laws that can cope with novelties, and 3) improving the knowledge-level of legislators and policy-makers on the structure of innovation processes and their global dimension to make sure that the legislation matches the real-world situation.