# Responsible-Industry







# GA 609817

# WP4.1 Stakeholder Mapping and Dialogue Strategy

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#### 1. Introduction

This report aims to describe a stakeholder dialogue strategy for Work Package (WP)4 - Stakeholder Dialogue. As discussed in the initial stages of the project, WP4 will develop a stakeholder dialogue strategy that will feed into all steps of the project work including the exploration of conceptual issues in the Responsible Research and Innovation (RRI) initiative, the identification of tools fitting current industrial Research and Development (R&D) processes, and the creation of consensus between major players and ultimately the initiation of specific policies that would incorporate RRI in industry R&D.

Despite the fact that there is no standard definition of RRI to date, there is considerable clarity about the dimensions and activities related to it. The European Commission has identified five key dimensions or RRI pillars: engagement, ethics, gender equality, science education and open access. Each has its own conceptual debate, activity history and policy context that are well established in Europe. Hence, the concept of RRI becomes considerably more applicable when seen from these dimensions. Our project offers a full account of the RRI debate in relation to industry (see Deliverable D1.1). In this Deliverable, we offer a conceptualisation of RRI that takes into consideration both the policy and the academic debate of RRI and results in seven operational dimensions:

- 1. Engagement (citizen engagement and participation of societal actors in research and innovation);
- 2. Governance (responsible governance of research and innovation)
- 3. Anticipation (science foresight, anticipatory technology assessment, risk assessment and impact assessment)
- 4. Ethics (ethics of research and innovation)
- 5. Science education (science literacy and scientific education);
- 6. Gender equality (gender equality in research and innovation and gender dimension in research and innovation content);
- 7. Open Access (open access to scientific knowledge, research results and data);

There is an implicit differentiation between core and peripheral dimensions, some of which are more related to industry perspectives of RRI than others. We will not reproduce this discussion here but we will rather concentrate on related concepts that will further help us structure the stakeholder dialogue.

This report therefore starts with the examination of additional conceptual and theoretical frameworks that deal with stakeholder or public engagement that can offer insights into important aspects and issues for dialogues on RRI. Wide experiences from Technology Assessment (TA) or participatory Technology Assessment (pTA) as well as industry-driven concepts such as Social License to Operate (SLO) have been gained and show which methods, tools or aspects can





be key to enabling deliberation and exchange on issues surrounding RRI. At the same time, we have examined the concept of Corporate Social Responsibility (CSR) in relation to RRI as an additional industrial perspective on responsibility. By including this analysis, the dialogue strategy can create a conceptually strong platform for enabling discussion and consensus-building between relevant stakeholders.

In addition and in order to complete the report, we have created a mapping of the relevant stakeholders from industry, civil society organisations and policymaking. These have been identified as the main stakeholders in the debate and the prime movers of international initiatives in the field. Their roles within research and innovation processes are described along with their basic framing of RRI.

#### 2. Theoretical background

We will now provide the description of concepts and methodologies that are relevant to our inquiry of exploring RRI applications to industry innovation processes. Apart from the basic construct of RRI that is being exhaustively discussed elsewhere as previously mentioned, we will provide here the description of participatory technology assessment as a relevant well-established methodology approach, in addition to two industry-driven relevant concepts of social license toe operate and corporate social responsibility.

#### 2.1 Technology Assessment

Technology Assessment (TA) is central in discussions on RRI as it is basically a similar instrument in devising and promoting responsibility in the governance of R&D. TA emerged in the 1970s and today forms an interdisciplinary research area oriented towards providing knowledge and options for better shaping (new) technologies and innovation. Several lines of methodological focus within TA can be identified from participatory TA to constructive TA (Grunwald 2011). For RRI the experiences gained in TA can be helpful to inform a dialogue strategy as well as to decide which stakeholders are relevant. Further, questions surrounding the involvement of a wide spectrum of stakeholders, as intended in RRI, are still or maybe even more important. These revolve around aspects such as the role of participatory processes within decision making or agenda setting, their inclusion as legitimate processes within a representative democracy, whether they are more than just securing acceptance or which topics are actually adequate for participation. Further, experiences gained from various methodologies in TA can also offer valuable insights for RRI.

The inclusion of multiple perspectives reflects in constructive TA, which is based on the assumption that TA should be integrated into the seamless web of technology development. This is made up of very heterogenic social, cultural, economic, technical and scientific factors in which permanent course setting





takes place. TA should therefore permanently accompany this process by informing and reflecting to actively manage processes of technological development with the goal of achieving "better technology in a better society" (Rip et al. 1995). Within RRI this reflects in the key aim of intervening in the development and innovation process also by including perspectives of stakeholders gained through participatory processes.

Regarding the links between science and society, another stream of TA can provide useful insights. Real-time TA (Guston/Sarewitz 2002) aims at closely integrating natural sciences and engineering with social sciences and policy research from the beginning. With this its "communication and early warning components [real-time TA] helps assure awareness about innovation among researchers and the public, and its technology assessment and choice component provides a mechanism for such awareness to be reflexively incorporated into innovation" (ibid: 109).

Possibly most important for RRI are experiences with participatory methods and processes in TA. Here a wide range of formats with different actors can be found, which have been conducted for more than 20 years in the context of science and technology. Regarding the thematic and spatial aspects of participation, TA can offer insights that rely on experiences through implementation. Participation in the context of planning processes, regionally and locally grounded, is often regarded as successful. In contrast, cases of participation dealing with new materials (e.g. Nano) or more general topics of (future) technologies are often difficult to conduct (Grunwald 2010). A motivation within TA regarding the shaping of technology according to social values seems to be a main source of RRI. The assumption that "if technology could be designed according to social values [...] problems of rejection or conflict would no longer occur at all" (Grunwald 2011: 14) is one that finds its expression in the use of participatory processes. TA has developed many approaches that range from involvement of citizens, consumers and users, civil society, stakeholders, the media and the public throughout the different stages of technology development and governance. The motivation is that including these actors results in an improved knowledge basis according to values and ethical considerations and how different groups frame issues. For this TA has a set of interactive, participatory or dialogue methods that organize and facilitate these social interactions (ibid: 15).

From its beginning TA has included participation as "not simply some arbitrary method [...] but an essential part of its conception [...] as an attempt to implement or step toward democratic governance of technology policy" (Hennen 2012: 30). Important to note is that participatory TA is conducted as a way of gaining knowledge rooted in social values and interests in a wider context of policy consultation and not as political participation in decision making itself (ibid: 39). Because of this, high expectations regarding the use of participatory TA methods for the democratisation of science and technology policies cannot be fulfilled. This results in a 'sobering up' of actors involved in these processes (e.g.





citizens, stakeholders but also initiators and organisers). It also shows in critique of participatory processes that includes lack of impact, instrumentalisation or the pushing through of acceptability.

Yet, as in any form of consultation, it is practically impossible to find direct links between the outcomes of participation and political decisions, as they only support political decision-making. Further, any kind of assessment can be framed or understood differently by "power and justification strategies" (ibid: 35) and therefore is in danger of being instrumentalised. As a consequence, "studies on participatory TA [should] distinguish between the shortcomings of project management and the structural limits or deficits of the participatory procedure itself" (ibid: 36). The question here becomes a basic one for TA: how to deal with outcomes (of participation or other methods such as vision assessment, scenarios or life cycle assessment) within the context of policy advice and consultation. An approach is that of the idealized "Honest Broker of Policy Alternatives" that goes together with a stakeholder model of science and "seeks explicitly to integrate scientific knowledge with stakeholder concerns in the form of alternative possible courses of action" (Pielke 2007: 17). In this way the honest broker clarifies and expands the scope of choices and alternatives available for the decision maker to determine according to their values and preferences (ibid: 3).

On this more general level, a rise in demands and pressure for accountability of science results in wide requests for more transparency and participation in what Jasanoff characterizes as a "participatory turn" (Jasanoff 2003: 235). Here, the hope is to gain robust knowledge by embedding it in society and as Stirling describes "opening up a process of technology choice" (Stirling 2008: 279) offering "plural and conditional policy advice" (ibid: 280). Participatory processes and methods are needed for "technologies of humility" that can bring forward knowledge on "the possibility of unforeseen consequences; [...] make explicit the normative that lurks within the technical; and to acknowledge from the start the need for plural viewpoints and collective learning" (Jasanoff 2003:240).

## 2.2 A Social License to Operate

SLO offers a useful concept since it comes from the area of corporate responsibility and therefore frames potential interventions in communities or public debates on concrete corporate activities from an industry perspective. This can show how industry understands issues such as responsibility and accountability while trying to achieve a specific goal. It also takes into account the dynamics and multi-levels as well as local specifics and offers companies the possibility of attaining more economic certainty when implementing new projects. In a sense it acknowledges the argument that without stakeholder or public approval of industry activities even a higher trade-off will not enable a decision allowing the proposed activities (Nelsen 2006: 161).





From the 1990s on SLO emerged out of the mining industry as a "set of concepts, values, tools and practices that represent a way of viewing reality for industry and stakeholders (Nelsen 2006: 161). Regarding decisions on mineral development it "gained popularity as one way in which "social" considerations can be addressed" (Prno and Slocombe 2014: 672). SLO is dynamic and context dependent and since an explicit or formal license is hardly ever given by a community it is mainly intangible (ibid: 673). In a study of representatives from industry and consulting firms Parsons et al. (2014) describe broad themes of how these stakeholders understand SLO: social license as legitimacy (acceptance, approval), localisation (spatial boundaries the representatives attach to social license and who, at which point in the process is legitimate as a stakeholder shows the complexity and dynamic behind SLO), process and continuum (a SLO is not fixed and has to be continuously renewed through communication and negotiation), manageability ('hard' concepts such as business, management, risk, economics as well as 'soft' concepts like community, responsibility, environment are referred to by representatives).

A framework to help guide SLO analysis and management should regard the contextual and complex elements in SLO settings. For this Prno and Slocombe (2014) suggest a systems-based conceptual framework that takes into account four aspects: *systems characteristics* (characteristics inherent in SLO change, uncertainty, emergence, feedback which illustrate that there is no general 'one size fits all' approach, *multi-scale variables* (regional, national and international variables that effect local scales and SLO outcomes and can be categorised as governance and institutional arrangements, socio-economic conditions or biophysical conditions), *local variables* (specific to the mining context these include the community and the mine-community relationship), as well as *SLO outcomes* (whether or not SLO was granted by the community and if desirable outcomes for both community and company were attained).

Within the current and very controversial debate surrounding shale gas and hydraulic fracturing ("fracking") developments within the industry can be found that also incorporate SLO considerations. In the document "Golden Rules for a Golden Age of Gas" by the International Energy Agency (iea) guidelines are formulated that aim to help adopt "the highest practicable standards [...] gaining industry a 'social license to operate'" (iea 2012: ii). Here the perspective is on putting certain mechanisms in place that help in "paving the way for the widespread development of unconventional gas resources on a large scale, boosting overall gas supply and making the golden age of gas a reality" (ibid: 10). Among the 'Golden Rules' are measures that show aspects of RRI, yet specifically formulated to the shale gas context: "Integrate engagement with local communities, residents and other stakeholder into each phase of development [...] listen to concerns and respond appropriately and promptly [...] Minimise disruption during operations, taking a broad view of social and environmental responsibilities [...] Put in place robust rules on well design, construction" (ibid: 13). The perspective taken here is that of the gas industry based on the





motivation that there is a constant drive needed from industry and government to develop better performances regarding public trust and acceptance. Even though the SLO framework is developed for a specific context (mining industry) it still offers valuable considerations for what SLO can provide generally and what can be gained by generalising and translating it into a context of dialogue strategies for RRI. Also, understanding how stakeholders conceptualise and frame is a key aspect of actually understanding how concepts are used in the specific areas, which keywords are taken up and how they are operationalised. The examination of SLO, its conceptualisation and uses as well as frameworks is helpful for a dialogue strategy because SLO is industry-driven.

Therefore, incorporating findings and discussions around SLO can help be attentive towards expressed by industry, while critically reflecting on the concept. Because SLO is set in a specific context of industry, mainly mining activities, the argument could be made that its main focus is on gaining community acceptance for something that will be done anyway. Engaging in a participatory process with a set goal (establishing a mine in a specific location) bears the danger of closing down the dialogue and becoming 'alibi participation'. This stirs up questions of accountability of deliberation processes and events. In relation to RRI, the framework of SLO differs as it is about a concrete measure, which is more or less set from the beginning of the SLO process. RRI aims to actually allow innovations to be formed and potentially changed from early on in the process. In this sense the exact innovation may not even be developed yet and the engagement of the public or relevant stakeholders offers the possibility that paths and goals can shift or change according to socially desirable goals.

#### 2.3 Corporate Social Responsibility

For the context of RRI, corporate social responsibility (CSR) is interesting since it has become a well-established term in the business world. Also there is critique of the concept regarding some companies' use of it for merely symbolic instead of substantive reasons (Perez-Batres et al., 2012), which can provide important insights for RRI. Since CSR takes place on a company level and can broadly be defined as "actions of the firm that appear to advance some social good, beyond the immediate interests of the firm and its shareholders and beyond what it required by law" (Perez-Batres et al. 2012: 158) it can be useful for RRI. Further, it is seen as a reaction to a shift in public awareness and debate surrounding issues such as sustainable development as well as stakeholder interests and pressure (ibid.). Generally, the question surrounding CSR is what are responsibilities for companies in the interface of business and society? What the response to this question can be is very different, making CSR "an eclectic field with loose boundaries, multiple memberships, and different training/perspectives" (Carroll 1994: 14). Among the theories of CSR this results in a wide array of its implementation based on how corporations are understood. It can be a means to an end ("instrumental theories"), in which "[o]nly the economic aspect of the interactions between business and society is considered" (Garriga/Melé 2004: 52). Another group can be identified as





"political theories" that account for the "social power of corporations [...] specifically in its relationship with society and its responsibility in the political area" (ibid.). "Integrative theories" are based on the assumption that business needs society for its continuation and "ethical theories" understand "that the relationship between business and society is embedded with ethical values" making it an obligation to take on their social responsibilities (ibid.).

Here we find similarities to RRI, especially regarding the focus on using business in a responsible way, contributing to a 'good' society and including societal demands within business practices. Yet, the critique of CSR if understood as merely "meeting objectives that produce long-term profits" (ibid: 65) can provide an understanding especially in terms of public or stakeholder pressures. As Owens et al. write: "If RRI risks becoming a new label for business-as-usual, it also risks being used instrumentally, to smooth the path of innovation in society, and/or to achieve precommitted policies" (Owen et al 2012: 757). Therefore, case studies of how RRI is understood among stakeholders can offer the possibility of identifying and differentiating normative or other motivations and reasons for acting 'responsible' or 'irresponsible'. The dialogue strategy enables the uncovering of specific contexts and therefore insights into the stakeholders' actual practices and the rationalities behind them. Here Owen et al. propose different motivations for RRI processes, not only instrumental (providing social intelligence to precommitted policy objectives), but also normative (because it is the right thing to do within a democracy) and substantive motivations (policy can be coproduced with the public in ways that actually embrace diverse social knowledge and values) (ibid). As in CSR the motivations behind RRI can influence the accountability of the activities and outcomes ranging from merely wanting to acquire acceptance to actually embedding various forms of knowledge (expert, lay people, stakeholders) throughout the development or innovation process.

#### 3. Dialogue platform

The three theoretical concepts described above (pTA, SLO and CSR) provide the main input for the creation of the stakeholder dialogue as it is envisaged in the Responsible Industry project. As we strive to uncover and deconstruct the meaning of RRI in the industrial context, we ought to be able to connect it with other similar concepts already in use in the field. Questions on the methodological antecedents of RRI in industry are intimately collected with, for instance, pTA as long as it is used in informing R&D efforts and in creating consensus amongst key stakeholders. Even closer to industry's perspectives of participation is SLO, a concept created for the needs of industry but incorporating participatory approaches from the onset of industrial development. On the other hand, CSR represents industry's attempt to introduce "responsibility" in its structure and activities. Not specifically related to R&D, it is nevertheless a concept that can be used in the stakeholder dialogue to help define RRI from an industrial perspective.





All three concepts will be employed in the discussion to help deconstruct RRI and create a new implementation plan as it is aimed in the project (as per WP2). pTA is particularly useful in this respect as it provides established methodology tools that can be used to structure an RRI plan in terms of engagement and ethics. SLO and CSR on the other hand, will be used to bring in the industrial perspective in RRI in the same fields.

#### 4. Stakeholder Mapping

The goal of this report is to provide a stakeholder mapping for the dialogue strategy. For RRI multistakeholder involvement is essential because it enables a wider perspective of ideally all aspects of research and innovation to be included in practices and consequently, in the outcome. In this respect the concept of stakeholder mapping does not entail identifying opinions or registering specific activities amongst key players. This is indeed the outcome of the Delphi study and the Dialogue itself. Here, we are identifying the main actors in the debate on RRI and we are creating exemplary representative groups that will feed in the RRI debate in considerable depth.

As discussed in the initial stages of the project, the main actors in the debate on industry RRI have been identified as industry, policy makers and civil society organisations (CSOs). Each has a specific role in the debate as they represent the main perspectives on which the concept and application of RRI is being developed. In order to identify and describe these RRI perspectives, along with the subsequent RRI practices, through a dialogue form, a basic framing of each stakeholder group is desirable. Hence, we offer a group framing on which we based our choice of participants in order to enable the stakeholder dialogue with the aim of developing principles and tools for the implementation of RRI in industry practices.

#### 4.1 Industry

Industry actors are the main focus of the project and comprise individuals involved in research and innovation, development, production, and marketable end products. They are a key addressee of RRI; challenging them to include societal considerations in the innovation and production of their goods. Von Schomberg (2013) identifies different forms of irresponsible innovation, some especially relevant for industry development. Technology push can challenge responsible innovation as it creates complex situations for the involved stakeholders. By using the example of GMOs, Monsanto and NGOs von Schomberg describes "how substantial dissent among major stakeholders frustrates responsible development" (ibid: 15). This shows how essential the coresponsibility for innovation trajectories is and how "[t]echnology push is a selfdefeating strategy" (ibid: 16). Therefore, for industry to adopt RRI considerations throughout the entire product chain is important and presupposes paying attention to regulatory regimes, quality procedures, ethical reviews as well as building trust among consumers. Particularly in the area of ICTs for health, demographic change and wellbeing, the development and





implementation of technologies per se requires the inclusion of RRI aspects in order to ensure acceptable and desirable outcomes. Within this industry field it can be expected that many considerations already include ethical issues either explicitly or implicitly stated. Therefore, by implementing a dialogue with these actors one can uncover the main practices, tools or even thoughts that play a role in routine RRI-related activities in the field. Thus, including industry stakeholders at different responsibility and input levels (from developers to managers) will show the understanding of the concept of meta-responsibility that shapes and coordinates the research and development done is a part of a broader general understanding of one's work. Examining whether these considerations and the surrounding arguments change through RRI can be crucial, also when extrapolating the results to other industry sectors.

In the Responsible Industry project we decided to include a wide range of industries in the stakeholder group in order to allow for the maximum perspective in the required input. For instance, we included industry associations in addition to single entities since they can provide us with a wider perspective of industrial RRI that is relatively free from the strict agenda-setting one that strong individual partners are going to have. At the same time, we have included participants from both big industry names (e.g. Philips, Siemens) with very extensive global R&D activities covering a wide range of products, concepts and cultures, to smaller specialised companies with highly flexible structures (e.g. Me.te.da., Contexta). Considering that we have a limitation of seven to eight individual participants per stakeholder group, we are conent with the outcome of our effort to attract such a wide but key membership with specialisation in the field of focus. The industry stakeholder group is:

Table 1: Industry Stakeholder Group

Name of Organisation	Name of Participant in Responsible Industry Stakeholder Dialogue
Philips Group Innovation,	Keith Baker
Research	Director, Divisional Partnerships
International Industry	Dr. Thierry Keller
Society in Advanced	Director, Area Rehabilitation
Rehabilitation Technology	
Adecco Foundation	David Morales Mesa
	Director, RSC & Comunicación 2.0
Virtualware Labs	Jon Arambarri Basanez
	R&D+i Manager
Motek Medical	Frans Steenbrink
	Manager, New Product Development





Siemens Health	Anirudha Ashok Dambal Manager, Healthcare Sector Clinical Products Division
CUP 2000 S.P.A.	Valentina Soluri Project Manager AAL
Me.Te.Da. s.r.l.	Sandro Girolami Project Cooordinator, AAL Helicopter
Contexta Network Solutions	Davide Merico Chief Executive Officer

### 4.2 Policy makers

Another key stakeholder group in the RRI debate is policy-makers. Although RRI per se cannot fit legislative structures, in the same way that the concept of "responsibility" rarely features in legislative actions, it is evident that R&D programmes create the necessary preconditions for the development of RRI. This is true in both the public and the private R&D sectors. For instance, key aspects of RRI such as ethics, engagement or open access, feature extensively in many countries' public research programmes with the result of creating specific expectations on private research programmes as well. Moreover, these expectations become actual prerequisites in public-private research collaborations.

In that respect, the policy making community is central in developing the concept of RRI, particularly when seen from a wider membership perspective. Related policy communities include actors from government departments and agencies, advisory or funding bodies that are involved in regulatory initiatives, certification and standard settings, as well as S&T evaluation programmes. These actors are the main organizing, informing, supporting and shaping stakeholders when it comes to research and innovation agendas. For these stakeholders RRI can be described as a research and technology development policy programme, which aims to incorporate considerations regarding societal grand challenges into innovations. Von Schomberg (2013) also identifies irresponsible innovation, which can result out of the implementation of policies. For him a strong policy pull by politicians and policy makers promoting a certain technology begs the danger of resulting in losing sight of "how to judge the proportionality of the introduction" (ibid: 18) of a technology. To prevent this, RRI demands that policy makers should take into account RRI principles and practices in their decisions so they can enable an appropriate framework for establishing RRI in research and development they fund.





For the purposes of the project, we have created an eclectic policy making group compromising the main RRI-related Government departments in Germany, UK and Italy, along with a specific ICT and welfare representation from the European Commission, S&T policy advisory bodies from some of the most active countries in Europe and the only European engineering association that has attempted to standardise RRI-related activities in its members.

Table 2: Policy Makers Stakeholder Group

Name of Organisation	Name of Participant in Responsible Industry Stakeholder Dialogue
Federal Ministry of	Engelbert Breuer
Science and Education, Germany	Head, Innovation Department
Technology Strategy	Michael Pitts
Board, UK Government	Lead Specialist for Sustainability and RRI
Italian Ministry of	Luigi Lombardi
University and Research	Manager, AAL Programme
European Commission	Peter Jensen
	Project Officer, AAL Programme
German Parliamentary	Tanja Bratan
Office of S&T	Project Manager, Technological advances in health care
Association of German	Volker M. Brennecke
Engineers	Coordinator, Society and Innovation
The Norwegian Board of	Hilde Lovett
Technology	Project Manager, eHealth
Austrian Institute of	Walter Peissl
Technology Assessment	Project Manger, Value Ageing

#### 4.3 Civil Society Organisations

Civil Society Organisations (CSOs) are crucial stakeholders in the development of RRI so long as they are representing the rightful citizenry in the field of focus. They could be non-governmental organisations, consumer or human rights advocates and any organisation with a focus on the public good and wide representation. Within our focus, CSOs could also be patient or public health focused associations and organisations. Their role is to "give voice to the





voiceless" and as such put otherwise disregarded considerations on the agenda. This would represent a truly participatory approach to discussing S&T developments.

In terms of RRI, one could argue that they promote safe, secure, ethical and sustainable products and processes by taking on the function of a watchdog. As von Schomberg (2013) describes the neglect of fundamental ethical principles, such as privacy issues can result in irresponsible innovation (ibid: 16). Here, CSOs can offer a valuable role within the societal implementation of innovations. In a RRI sense they can facilitate early stakeholder involvement or public engagement as well as lobbying for wider societal concerns. Within RRI they should therefore cooperate with industry, science and policy actors in order to develop concrete and effective responsible practices in research and innovation activities and policies.

In the Responsible Industry, CSOs are directly represented in the research consortium by Euclid that in turn has brought in a number of national and international CSOs in the field. They are all focusing on elderly people and their relationship to health care, welfare and S&T. Some are even focusing exclusively on ICT developments. We have invited key European CSOs such as AGE Platform Europe or the European Federation of Older Persons, along with some country focused specialised CSOs such as AGE UK, E-Isotis Greece, 50plus Austria etc. Although all have confirmed their participation in the project, some have not yet provided us with a specific name as an organisation representative.

Table 3: Civil Society Organisations Stakeholder Group

Name of Organisation	Name of Participant in Responsible Industry Stakeholder Dialogue
AGE platform Europe	Ilenia Gheno
Eseniors	Monique Epstein
European Federation of Older Persons	Dirk Jarré
National Elderly Foundation (Netherlands)	Nina van der Vaart
Knowledge Society Association (Poland)	Artur Kolesinski
Eldy Association	Name tbc
Active retirement Ireland	Name tbc
E-ISOTIS (Greece)	Name tbc





AGE UK (UK)	Name tbc
Association of Care Giving Relatives of Jyväskylä Region (CAJYR), Finland	Name tbc
50plus GmbH (Austria)	Name tbc
Autonom'Lab (France)	Name tbc

## **Global and Emerging Stakeholders**

Since RRI takes on a meta-responsibility perspective the level of global RRI actors is important for the mapping of stakeholders. These can comprise stakeholders from outside of Europe, from so-called developing as well as industrialised countries. Their inclusion can offer feedback loops and reflection on pursued paths of research and innovation and can thus potentially enable to "open up alternative research and development trajectories" (ibid: 19). Further, they provide insights into local, regional, national specifics when implementing technologies. The needs and uses might differ substantially depending on the specific context and cultural prerogatives; something that RRI needs to take into account in this era of globalisation. Furthermore, it is well established that grand challenges are global and can only be approached on in a holistic way based on international collaborations. Research and technology development have become international meaning and especially relevant regarding worldwide issues such as demographic change or sustainability. This makes the global stakeholder perspective within a dialogue strategy important for enabling a responsible approach to research and innovation.

As identified in the initial description of the project, we will establish a global stakeholder group at a later stage to complement the work of the stakeholder dialogue and provide comparative analysis and input from their country perspective. Three countries will be represented in the global group: USA, Japan and China. The group will consist of:

- Prof. David Guston; Consortium for Science, Policy, and Outcomes at Arizona State University, USA
- Prof Yandong Zhao; Science and Society, Chinese Academy of Science and Technology for Development, China
- Prof Tateo Arimoto; Japan Research Institute of Science and Technology for Society, Japan Science and Technology Agency, Japan

#### 5. Conclusions





When it comes to creating the stakeholder dialogue in Responsible Industry, one needs to clarify the engagement concept that is guiding the dialogue structure in the project. While the concept is being developed as part of other WPs and an implementation plan for industry RRI is developed at the same time, we have seen that the stakeholder dialogue is based on an eclectic choice of well-established engagement concepts. Central in our approach is the concept of participatory Technology Assessment. It represents a tried and accepted way of engaging a number of stakeholders with different backgrounds and agendas in a consensus-building or bridge-building exercise. Participatory TA experience has taught us that a structured dialogue with clear aims can go a long way in increasing mutual understanding and respect amongst diametrically different opinions and approaches on the same issue. This is an experience that we are going to employ in the Responsible Industry dialogue.

At the same time and due to the specific focus of the dialogue, we have described two industry-driven engagement concepts. One is the Social Licence to Operate (SLO), a concept that has been developed in the mining sector in order to promote meaningful dialogue and consensus building with local communities where mining projects are to be developed. SLO has been successfully implemented in different settings and cultures and it provides a paradigm that we ought to take up in the project dialogue as an example of a very applied nature that pTA rarely provides us with. Similarly, the concept of Corporate Social Responsibility (CSR) is another example of industry-driven engagement with local communities that is well established to merit particular mentioning in our approach. While not designed to promote consensus building in any form, CSR introduces the concept of "responsibility" in a very applied and structure form. Could CSR methods be used to promote RRI in the industrial setting? This is a question that needs to be taken up in the dialogue process.

Finally, we provided a basic mapping of the relevant stakeholders that will take part in the dialogue. Industry, Policymakers and CSOs are the main stakeholders that provide the key perspectives in creating a new RRI implementation plan that our project aims at. We have established a very good representation of various actors within each group with a quality membership and geographical spread in order to include all necessary input in the dialogue process. In addition, we have established an international group to provide input from non-European major economies with similar industrial R&D focus. Overall, we are confident that the stakeholder dialogue part of the project is on the right footing and schedule.





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