

DEBATING IMPACT AND MISSION-ORIENTATION OF R&I POLICIES

WOLFGANG POLT, KLAUS SCHUCH, MATTHIAS WEBER, ELKE DALL, MAXIMILIAN UNGER AND NELA SALAMON
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This paper summarizes the main findings from a survey¹ carried out at the occasion of the conference ‘RTI Policy in Service of Society: Impact at the Crossroads of Policy Design, Implementation and Evaluation’. This Austrian Presidency of the EU Council conference was organised on behalf of the Austrian Federal Ministry of Transport, Innovation and Technology by the Austrian Platform for Research and Technology Policy Evaluation together with Manchester Institute of Innovation Research and IFRIS – Institut Francilien Recherche, Innovation et Société, in Vienna in November 2018. It was devoted to the challenge of generating, understanding and assessing impact, in particular societal impact, through R&I policy. It discussed new rationales and new demands for R&I policy in service of society, reflected challenges in R&I policy-making triggered by these rationales and demands, and scrutinised what is expected and delivered from different policy intelligence approaches, in particular impact assessment and evaluation.

A part of the conference dealt with developing an understanding of mission-oriented policies (MOPs). The respective results are in the main focus of this paper (based on a survey which was carried out during the conference). The focus on mission-oriented policies emerged against the background of current discussion about the relevance, the pros and cons and the challenges for implementation of such approaches both in the context of the EU as well as on the national level.

By mission-oriented research, technology and innovation policy we understand “*initiatives [which] typically are ambitious, exploratory and ground-breaking in nature, often cross-disciplinary, targeting a concrete problem/challenge, with a large impact and a well-defined timeframe. More specifically, they have a clearly defined (societal or technological) goal with preferably qualified and/or quantified targets and progress monitored along predefined milestones. Directionality and intentionality of these initiatives is what differentiates them from other types of initiatives, such as systemic or challenge-oriented policies*” (JIIP, 2018a, p4). MOPs were suggested as a focusing device to bridge the gap between societal challenges and specific R&I projects (Lamy et al., 2017). With the recently published programmatic paper on mission-orientation in European R&I policy (Mazzucato, 2018), the rationales for a mission-oriented approach have been visibly spelled out as a trigger of further political debate and public consultation. This debate is backed up further by the recommendations from other expert groups (ESIR, 2017; RISE, 2018), two major analytical studies on the empirical evidence on mission-oriented policies (JIIP et al., 2018a and 2018b) and foresight activities (Weber et al., 2018).

While not being the sole topic of the conference, MOPs were addressed in several key-notes by Engelbert Beyer [Federal Ministry

of Education and Research, Germany], Mireille Matt [INRA], Goran Marklund [Vinnova] and Matthias Weber [AIT], as well as in dedicated sessions (e.g. sessions on ‘Policy designs for impact generation’, ‘Pathways to impact of R&I Policies’), workshops (e.g. on ‘The new mission orientation’ and on ‘The assessment of societal impact of R&I policy’) and plenary debates (e.g. Plenary 1 on ‘*Designing and supporting mission oriented research policy*’). In addition, at several points of the conference, the audience was encouraged by the moderator to participate in the live survey via the mentioned tool mentimeter. This survey also covered some general questions concerning impact assessments more broadly. The use of the mentimeter tool was regarded as suitable means to elicit some first views on a concept that has only recently re-emerged in policy debates, and on which there are currently no systematic studies available on the expectations that different stakeholder groups attach to it.

296 experts from 39 countries and all continents had registered for the conference. Of these, 255 actually attended the conference. 41.9% of the accredited participants came from Austria. Larger contingents came from the category ‘international institutions’ (8.1%), especially from the European Commission, but also from the OECD, EUREKA and COST, which made the European dimension of the event visible. 7.1% of the accredited persons came from Germany; 5.7% from the UK; 3.4% each from France and Norway; 3% each from Belgium and Spain and 2.7% from the Netherlands. With the exception of Malta, Slovakia and Slovenia, all EU countries were represented. Other accredited persons from non-EU countries came from Iceland, Norway, Russia, Switzerland, Ukraine, as well as Australia, Brazil, Chile, Iran, Japan, Nepal, South Africa and the USA. 42% of the participants were women and 58% men.

131 of the accredited persons can be assigned to academic research and evaluation. 73 came from agencies, 70 from policy, 13 from intermediary institutions including research infrastructures, 8 from the business enterprise sector and one from the press. For the following analysis they were grouped into ‘researchers/evaluators’, ‘policymakers/agency’ and ‘other’. The latter group consists of experts from intermediary organisations, the business enterprise sector and media.

As such, they represented a highly qualified audience to discuss the topic. Overall, 242 participants chose to log in the online survey at one or the other point of this two-day event. Generally, we observed a balance between the participants that identified as “policy maker / agency” (42% in one of the survey questions) and “researcher / evaluator” (47%, with the rest identifying as “other”).

While the first three questions were asked during the panel, it has to be noted that the MOP related questions (Q7 – Q10) were asked in

a separate parallel session where attendance was considerably lower (around 60 to 70 persons). Less than half of the participants chose to express their opinions. This in itself might be seen as an indication of the lack of information on, understanding of or interest in the concept and a pointer to the need for further, in-depth discussion. It also needs to be mentioned that, given the overall focus of the conference on the impact of R&I, the researchers attending the conference primarily came from applied and policy research rather than from basic research.

The statements addressed and analysed in this article were:

Q1: We are able to measure the social impact of R&I policy
(n= 120 or 47.1% of the conference participants)

Q2: We are able to attribute R&I Impacts to specific policies (n=120)

Q3: We are able to radically change our funding system (n= 119)

Q4: What do you think is most important for missions to succeed
(n=103)

Q7: Missions should be an important part of STI policy in the future (n= 27 or 10.6% of the conference participants)

Q8: For implementation of missions, you need substantially new approaches to governance (n= 27)

Q9: Missions can be more easily implemented on the national than at the international/EU level (n= 26)

Q10: Missions should be more narrowly defined in order to be successful (n= 27)

In the case of the questions 1-3 and 7-10 (see list above), participants were asked to agree/disagree with different statements. These were answered by a Likert scale item, whereby the Likert scale was a number between 1 and 5; 1 standing for "strongly disagree" and 5 for "strongly agree". Note that due to the large difference among the response rates between question groups 1-3 and 7-10, any induction based on comparison of observations among these groups would be misleading.

The main results in our perspective were:

- When assessing the ability to measure social impact of R&I policy (Q1; see figure 1) - a question that is also very important in the context of MOP² - one can observe a considerable amount of scepticism (the median values for all groups of respondents ranging from 2 to 3 (= average and below). What is remarkable though is the difference between the groups, with researchers/ evaluators being considerably more up-beat about these capabilities than policy makers / agencies or others.
- A slightly more (though again not very) optimistic picture emerges in the assessment of the possibility to attribute R&I impacts to specific policies (Q2), with the median hovering around 3 for both policy makers / agencies as well as researchers / evaluators. This was rather surprising when considering that attribution questions are in general more difficult to answer than impact questions. The impact needs to be identified first, before it can be attributed to the influence of specific policies.
- To a somewhat greater extent, both policy makers and researchers alike believe in the ability to radically change the R&I funding instruments (Q3), although again the overall assessment in these respects is only average, and it spreads across the full spectrum from strong agreement to strong disagreement. Hence, the overall estimation with respect to our abilities, both in terms

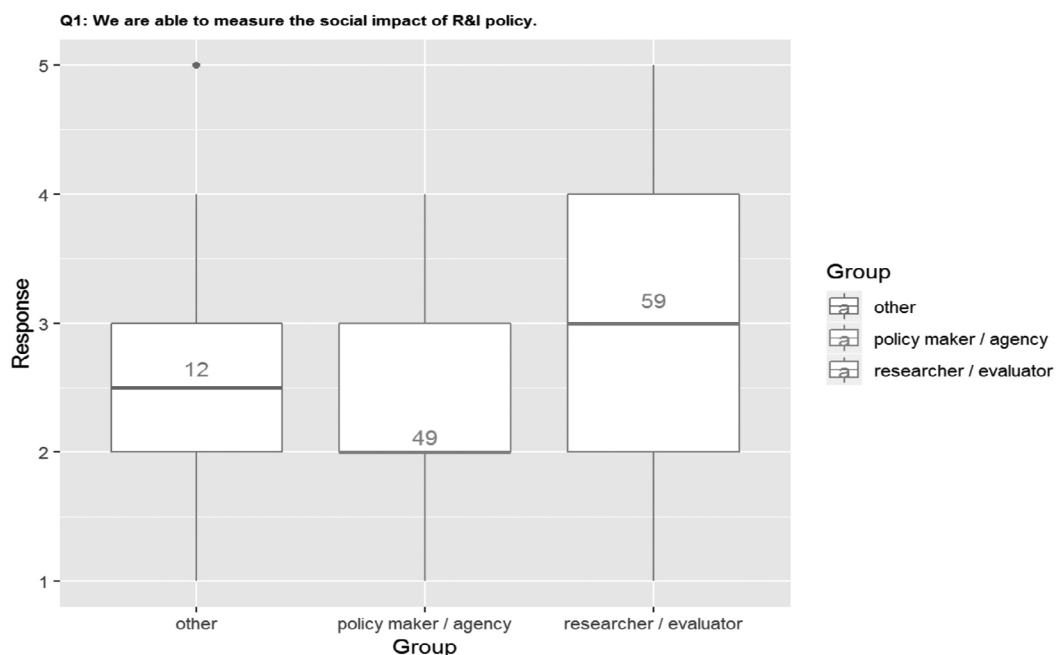


Fig. 1: Response to the statement "We are able to measure the social impact of R&I policy" by target groups

Note: The "heavy" line in the box-plot is the median and the ends of the box are the first and third quartile (25th and 75th percentile respectively). The extent of the whiskers are the most extreme values still within 1.5 times the box itself (by default). Values beyond the extent of the whiskers are considered to be outliers and are depicted as circles.

of analytic capabilities as well as in terms of abilities to radically change policies might be labelled as a kind of ‘sober realism’.

- When it comes to the *questions specifically addressing MOPs*, it has to be kept in mind that response rates were considerably lower than for the general questions. Against this caveat, it can be said that a substantial majority of those answering the question (Q7) supported the view that MOP should play an important part of STI policy in the future [see Fig. 2]. While the

median value of this assessment did not differ between policy makers and researchers, the latter were slightly more enthusiastic about this policy approach when taking into account the positive / negative spreads of the answers.

- Also, there is a general recognition that for the implementation of missions, a substantially new approach to governance would be needed (Q8; see Fig. 3).

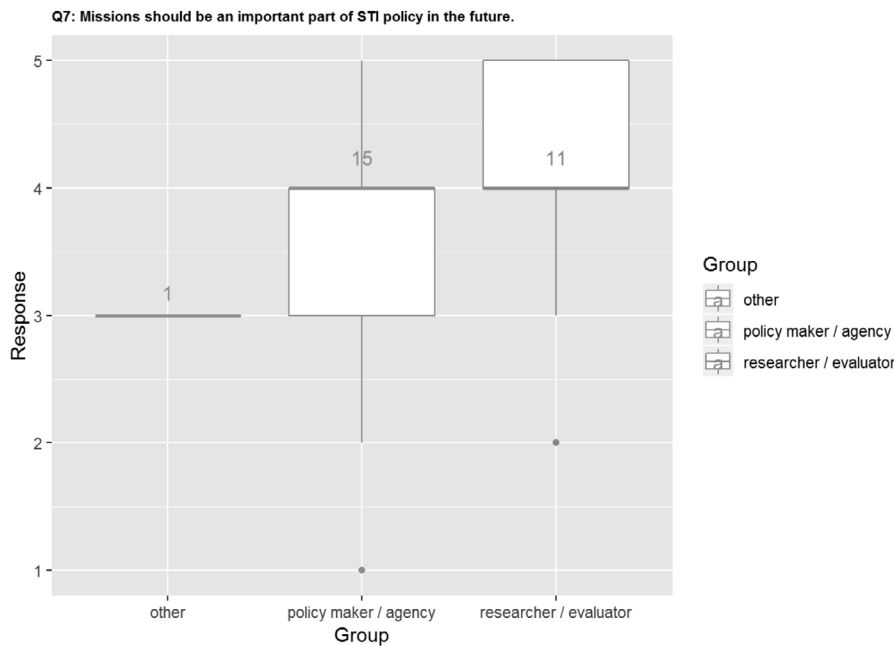


Fig. 2: Response to the statement ‘Missions should be an important part of STI policy in the future’ by target groups

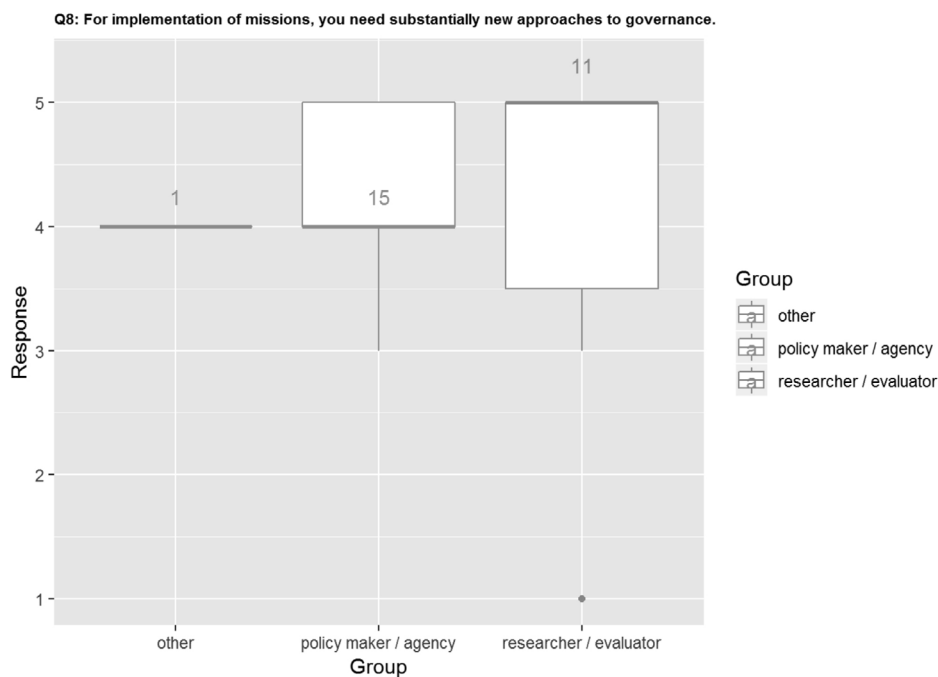


Fig. 3: Response to the statement ‘For the implementation of missions you need substantially new approaches to governance’ by target groups

- Major differences in the perceptions of MOP emerge when actors responded to the questions whether MOP could be more easily implemented at the national than at the EU level (Q9): While policy makers predominantly perceived the national level as less suitable entry point (median=2), researchers strongly saw the national level as the one to prefer (median=4, see Fig 4.). This picture might be explained by the strong recent emphasis on MOPs in the conceptual debates in the European Commission, while on the national level, policy debates only very recently have also centred on this issue. On the other hand, researchers, from their experiences with the empirical material might be led by the observation that most MOPs currently in place are in fact carried out at the national level and hence their perception might be a 'positivist' one. Moreover, the granularity of missions may vary considerably: some missions can well be addressed at the level of even smaller EU member countries, but others (and probably the better known examples) require the bundling of capacities of several European countries to have a chance to be addressed successfully.
- Likewise, the perception whether a MOP should be more broadly or more narrowly defined in order to be successful (Q10) was markedly different between policy makers and researchers. The former being much more in favour of a more narrow definition (median=4, range from 5 to 3, see Fig. 5), while the latter seemingly leaning towards a broader concept of MOP (median=3, range towards 2). Here, policy makers seem to show some hesitation with respect to broader and hence more managerially

more challenging MOPs, which is coherent with the answering patterns vis-a-vis the questions on the implementation challenges. In line with this argument, the answers also seem to reflect a different understanding of policy makers/agencies and researchers/evaluators when referring to "success" in addressing a mission. For the former, running a good R&I programme relevant to a mission may well be a success, whereas the latter may see this from a longer-term perspective of triggering change in society and economy.

- When asked, which factors are most important for a mission to succeed (Q4, see Fig. 6), the 'engagement of national and regional stakeholders' ranked first, followed by 'the development of capacities for pro-active, flexible management' and the 'portfolio of instruments'. Of lesser importance was seen the 'measurement and impacts by goals and milestones'. This perception is in line with the one seeing MOP as a challenging task of aligning the actions of a considerable number of actors associated to a mission and the corresponding management challenges. This ranking broadly coincides with the one of the importance of challenges (again stakeholder engagement being seen as the most important challenge) and the capacity development of management on second place. Interestingly, though, the 'portfolio of instruments' was seen as a major challenge only by a minority – maybe reflecting the fact that the respondents mostly came from countries with well-developed tool boxes of STI policy instruments.

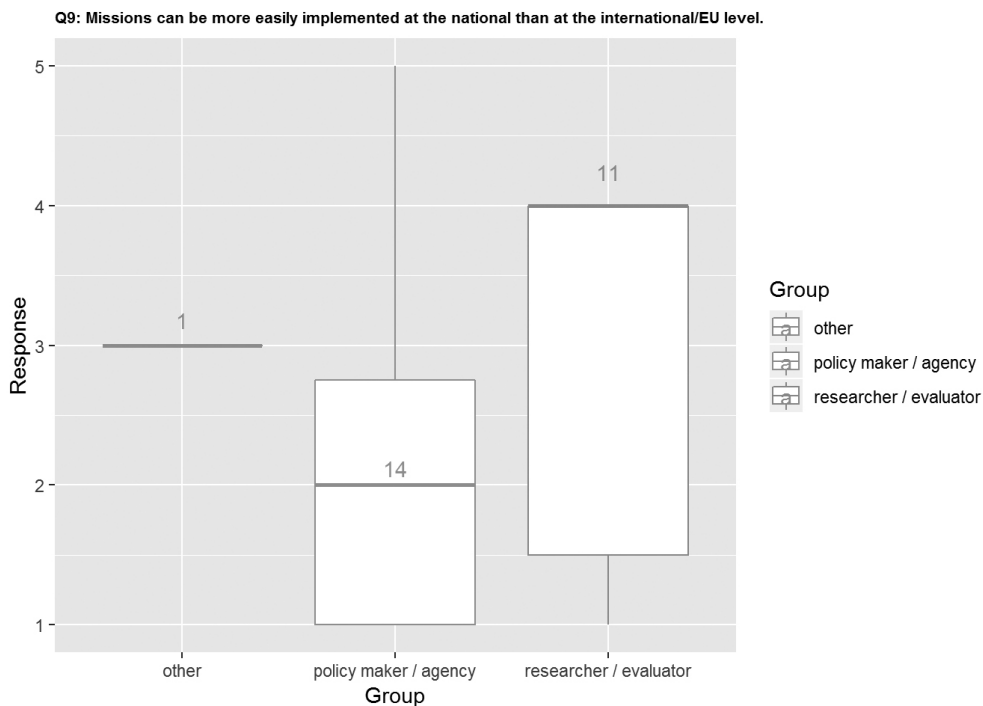


Fig. 4: Response to the statement 'Missions can be more easily implemented on the national than at the international/EU level' by target groups

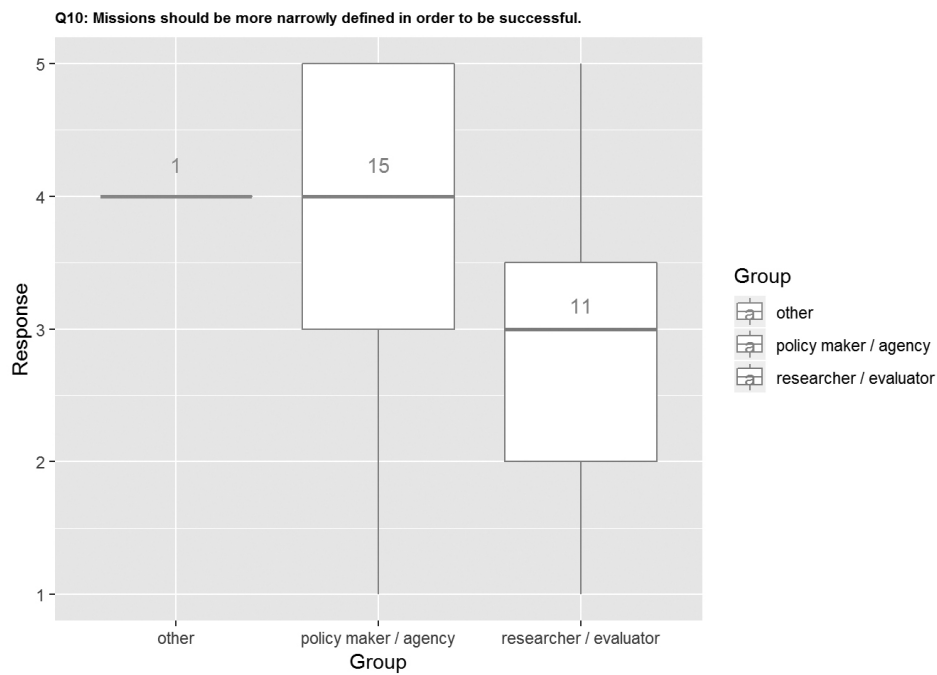
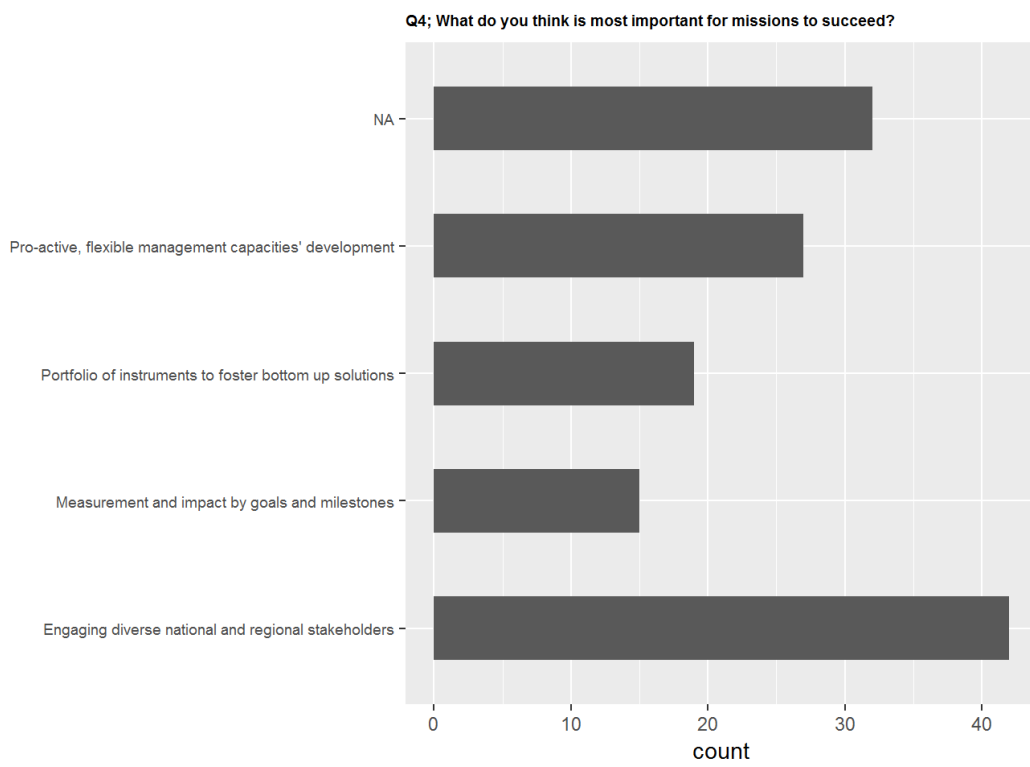


Fig. 5: Response to the statement ‘Missions should be more narrowly defined in order to be successful’ by target groups



Code: NA = no answer

Fig. 6: Response to the question “What do you think is most important for missions to succeed”

To sum up: the survey might shed some light on the current state of debate on MOPs, especially on the differences in perceptions between actor groups: its implementation is seen as challenging and would have to be accompanied with the development of substantial new management capabilities and probably a quite radical change in policy orientation. There seems to be some hesitation (especially on the side of the policy makers) whether such a change can be achieved and the respective capabilities could really be developed. By analysing the answers to the open question about “perceived challenges”, it seems that at the stage of discussion we are, the definition and selection of missions is perceived as the main concern. This major concern is closely followed by issues addressing the governance of MOP, centring on the issue of necessary political support. The participants also addressed the challenge of coordination and communication with the main stakeholders and the resistance that might be encountered. Subcritical funding of the missions and over-ambition are other potential critical issues mentioned.

On the positive side, most respondents would see and welcome an increased role of MOP in STI policy. Apparently, there is still need for an intense debate about MOP for which the near future will already provide quite some opportunities.

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AUTHORS

WOLFGANG POLT, MAXIMILIAN UNGER

Joanneum Research POLICIES

KLAUS SCHUCH, ELKE DALL, NELA SALAMON

Zentrum für Soziale Innovation ZSI

MATTHIAS WEBER

Austrian Institute for Technology