



COCTEAU Policy Makers User Input

Grant Agreement n° 822735, Research and Innovation Action



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement n° 822735. This document reflects only the author's view and the Commission is not responsible for any use that may be made of the information it contains.

TRIGGER

Trends in Global Governance and Europe's Role

Deliverable number:	
Deliverable name:	COCTEAU – Policy makers user input
WP / WP number:	6
Delivery due date:	1 July 2019
Actual date of submission:	1 July 2019
Dissemination level:	PU
Lead beneficiary:	CEPS
Contributor(s):	Andrea Renda

Changes with respect to the DoA

Deliverable is still preliminary since the Horizon Europe Mission Boards are still being created.

Dissemination and uptake

Public

Evidence of accomplishment


Report

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Policy makers user input



TRIGGER Project – Deliverable 6.3

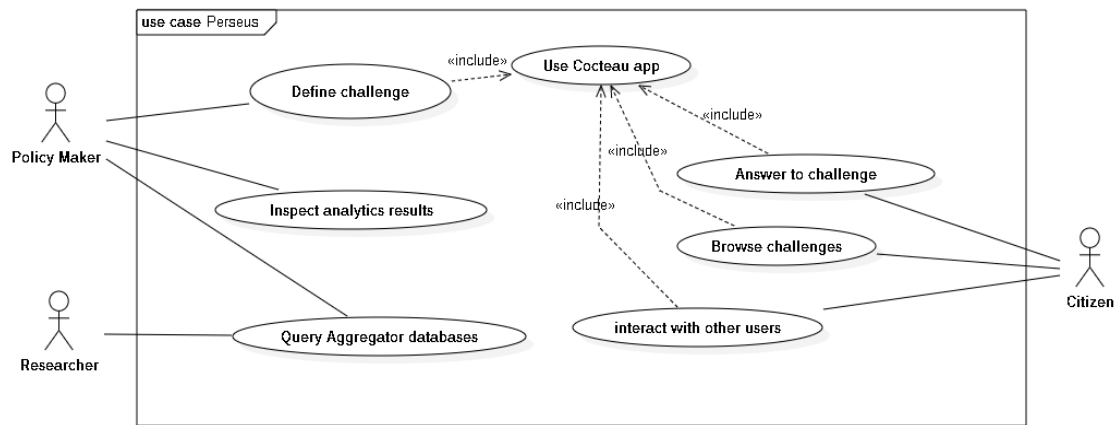
COCTEAU – Policy makers user input

Preliminary draft – to be integrated after the appointment of Mission Boards

This report includes a description of possible use cases for policy makers wishing to use the future COCTEAU to be released by the TRIGGER project, especially for the purpose of defining challenges within mission-oriented innovation policy. COCTEAU (Co-Creating the European Union) will then be integrated with the PERSEUS software suite, which will be the main final result of the TRIGGER project.

In COCTEAU and PERSEUS, policymakers provide the main inputs to the tool and they also collect and use all the outputs produced. They have the main task of defining challenges about possible future scenarios: challenges are set up based on a specific topic, they are enriched with additional information and they are presented using a specific interaction technique. **The objective is to engage citizens through gamification and start discussions about future trends, which eventually lead in the definition of ideas and alternatives.** The tool to reach this objective is COCTEAU. In PERSEUS, policy makers will also be able to query the Aggregator tool in order to have guidelines and hints for the challenges definition: Perseus provides an interface with the Aggregator databases, so that the information is easily accessible. Furthermore, PERSEUS allows this actor to inspect the results of the AI-enabled design thinking and sentiment analysis: this additional output can be used as feedback to better understand the outcome of the challenge, as well as to improve challenges generation process.

Figure 1 – Users and actors in PERSEUS, AGGREGATOR and COCTEAU



COCTEAU will be tested in particular within the missions earmarked by the European Commission, DG RTD within the context of Horizon 2020. The process of creating the governance for the missions is, however, still ongoing. This deliverable, thus, offers a first, theoretical description of the possible uses of COCTEAU within the future missions. Once the Mission Board will have been created, it will be possible for TRIGGER researchers to approach the Board members to obtain input from possible uses of COCTEAU to define missions and co-create their specific implementation. This will be done in a future iteration of this deliverable.

1. Mission-oriented policy

Mission, etymologically, recalls the idea of a mandate to achieve a specific result. This, one could argue, can be expressed in terms of quantitative targets (-20% of CO₂ emissions by time x); one-off achievements (“man on the moon”; “eradicate poverty”); or a specific direction, unaccompanied by measurable targets (“cleaner water”). When policies are mission-oriented, they can adopt any of these types of missions. For example, economists would argue that economic policy is normally inspired by the generic mission to contribute to social welfare; competition policy typically gave itself the mission to promote consumer welfare, although in Europe this mission was shared with the concomitant objective of market integration. All these can be defined as generic missions: but presumably not the types of missions we are

interested in, when we look at the future of R&I innovation policy in Europe. The problem is that setting a generic mission such as improving subjective well-being or social welfare is likely to prove an insufficiently actionable starting point for successful “mission-orientation”.

1.1. Towards mission-orientation

So, how do we achieve mission-orientation? Orienting policy towards a specific mission requires three additional elements, one of which is essential, and the other is desirable.

The really essential element is **accountability**. Whatever the mission, the institution that has been “mandated” (Latin: *mittĕre*) to achieve it should be held accountable for the choices made, the process followed, and the results achieved. This is why very often specific missions have been achieved by creating or empowering specific institutions to pursue them, as reported by Mariana Mazzucato (2018) in her examples of successful cases of mission-oriented organizations. **Achieving accountability is thus a result of governance** arrangements, and the attribution of sufficient resources and competencies to the agency or institution that is tasked with mission accomplishment.

The additional, related and important but not essential element is **measurability** (or, a co-called “theory of success”). Keeping track of whether the mission is being achieved, especially if targets have been set, allows a more precise and accurate attribution of responsibility, which arguably aligns the interests of the agent (ie, the agency) with those of the principal (ie, government, and ultimately citizens). While it is not only true that “what gets measured gets done”, it is true that reporting on steps made and results obtained towards the achievement of a given target might in certain circumstances motivate agencies to become more effective in pursuing that target. Depending on the type of mission set (see above), measurability can occur in various ways: by reporting on progress on *ad hoc* indicators (e.g. surveys of well-being; indicators of average pollutants in water); by reporting in terms of distance from a target (e.g. 15% of the 20% reduction in CO₂ emissions has been achieved); or in a binary way, whether a one-off achievement has been achieved (“man went to the moon”).

Against this background, I would argue that measurement through indicators should normally occur through output and outcome indicators, especially in innovation policy. Input and process indicators typically constrain the institution in charge of pursuing the mission and are often non-technologically neutral. One of the key problems in the Europe 2020 agenda was exactly the use of an input indicator (R&D expenditure over GDP) as a measure of success. Mission-oriented policies and spending programmes thus most often take the form of **outcome-based policies**, which limit accountability to the outcome achieved, rather than the way in which it was pursued.

1.2. Mission-oriented policy in general

All policies are in principle mission-oriented. However, when it comes to ultimate policy goals, a growing practice is that of orienting all policies in a coherent way towards the achievement of broadly similar, homogeneous targets. To a large extent, regulatory policy in the US has been traditionally aimed at achieving a single goal, which can be summarized (rather bluntly) as creating a cost-benefit state. Current US regulatory policy can be seen as increasingly consistent with the stated goal of “reducing regulatory costs”, or even “deconstructing the administrative state”. The whole branch of policy coherence for sustainable development (PC4SD) has been elaborated by international organizations, including the OECD, to signify the importance of strengthening policy coherence in both horizontal and sectoral policies, to oriented government action towards a common set of coherent goals.

Such goals are today represented by the **Sustainable Development Goals**. In November 2016, the European Commission adopted a series of communications that outline the future agenda for 2030, centred on SDGs¹. Despite the fact that sustainable development is considered as a fundamental and overarching objective of the EU, enshrined in Article 3 TEU, and despite the existence of a EU strategy since 2001 and a set of Sustainable Development Indicators since 2005, the salience of this strategy at the highest political level had never been particularly strong until the 2030 agenda was launched: in particular, the strategy was heavily criticized for lacking ownership and governance (Gregersen et al. 2016). Interestingly, the Commission presented the new agenda as a joint commitment with Member States and “many different actors”,

¹ http://ec.europa.eu/europeaid/policies/european-development-policy/2030-agenda-sustainable-development_en

aimed at fostering a “stronger, more sustainable, inclusive and prosperous Europe”². While the language closely mirrors the narrative of Europe 2020 (smart, sustainable and inclusive growth), emphasis on policy coherence both internally and in the external action agenda appears to be stronger. And importantly, the new agenda carries recognition of the important role that better regulation could play in fostering policy coherence for the long term. The Communication on “Next steps for a sustainable European future” clarifies that use of the Commission’s better regulation tools is a “way to ensure further mainstreaming of sustainable development in European policies”, since “all Commission impact assessments must evaluate environmental, social and economic impacts so that sustainability is duly considered and factored in”³. The Commission then adds that also *ex post* evaluations must also analysed all three dimensions “in a strong integrated approach”. In the Commission’s view, the current Better Regulation Guidelines (which include also guidance on stakeholder consultation) provide a strong basis for this mainstreaming exercise⁴.

Can the SDG focus provide the mission orientation that is needed in EU policy? Yes, at some conditions. Work has to be performed to achieve the following objectives:

- SDGs must be analysed with a view to build a EU “frontier”, more actionable and ambitious than the overall SDGs. To this end, additional policy goals that are specific to the EU debate might be added (e.g. resilience, market integration in services);
- Each of the goals must then be broken down into sub-goals and accompanied by methods to assess distance from the frontier.

² See Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, Proposal for a new European Consensus on Development. Our World, our Dignity, our Future, COM(2016) 740 final, 22.11.2016 (“The EU seeks to mainstream the SDGs into the Commission’s everyday work and to engage all stakeholders, Member States and the European Parliament in its implementation to work towards full implementation of the 2030 Agenda for Sustainable Development”).

³ Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, Next steps for a sustainable European future European action for sustainability, COM/2016/0739 final.

⁴ See Section 2 below for an assessment of this level of readiness.

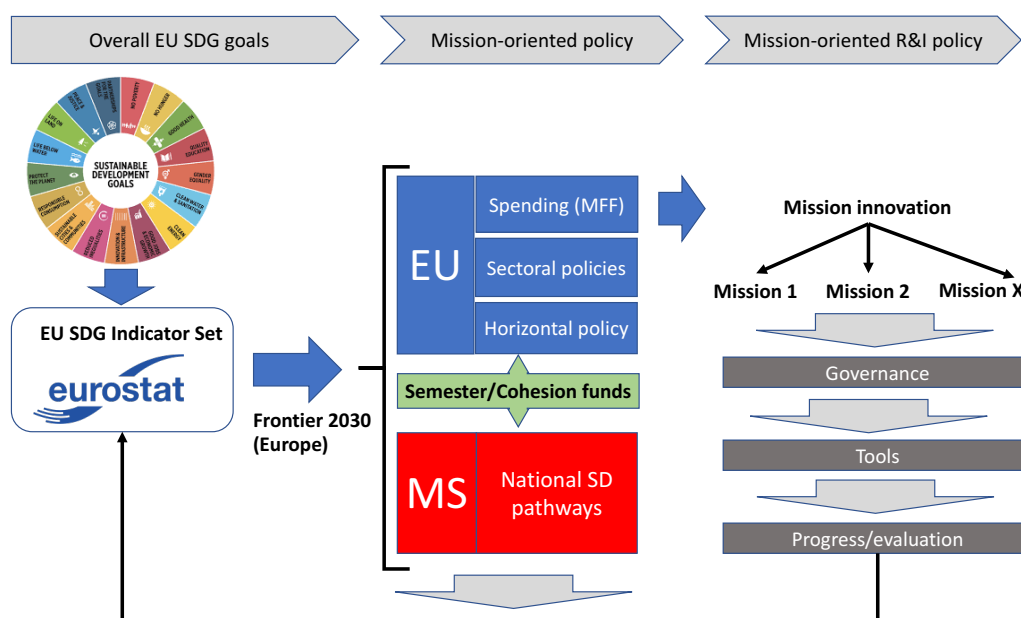
- For each goal, a dedicated strategy has to be developed, which includes an assessment of the contribution that R&I policy can provide to the overall achievement of the 2030 target (see below).

Mission-orientation of all policies then becomes possible by mainstreaming the EU SDG agenda in all aspects of EU policy, and in particular (i) in the better regulation toolkit, (ii) in the EU semester, and (iii) in EU cohesion policy with the aim to strengthen the alignment of policies adopted by EU and Member States with medium-term SD goals.

1.3. Wrapping up

In one sentence, **mission-orientation requires an exercise in policy coherence for sustainable development**. And such exercise should be meant to lead to identifying missions as a function of the possible contribution that R&I can provide to the achievement of the 2030 goals. The graph below sketches the main steps in which this could be achieved.

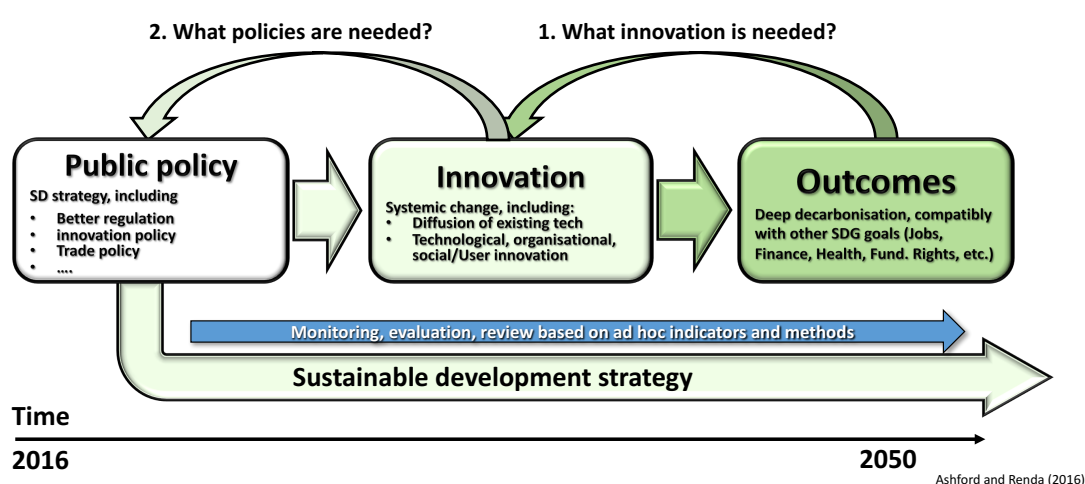
Figure 2 – From SDGs to Missions



The upper part of the picture depicts the sequence that goes from goals to mission-oriented policy, to mission oriented R&I policy, where missions follow an assessment

of what contribution R&I could give, under a project portfolio approach, to the 2030 agenda. As shown in the rest of the picture, it is obviously not only innovation, but also other forms of spending (cohesion funds, EFSI) and policy (horizontal, sectoral, EU and national) that should contribute to the 2030 agenda, in the spirit of policy coherence and alignment. The graph below pertains more specifically to the definition of missions for innovation through a double-backcasting approach (Ashford and Renda 2016). The figure must be read starting from outcomes (right end) and going back to innovation and then policies.

Figure 3 – Double backcasting



2. Governing the Horizon Europe missions

Missions will be asked to follow a cycle of roadmapping, consultation, planning, experimentation, monitoring, evaluation, learning and feedback into the roadmapping exercise. This should be a constant cycle, that spins as fast as the mission allows, and should be fed by as many researchers and entrepreneurs as possible. More specifically, it is important to reflect on three aspects of the future, adaptive system for mission-oriented innovation policy: experimentation, evaluation and communication/engagement.

2.1. Experimentation

Mission-Oriented innovation policy should lead to extensive experimentations of possible solutions to the problem identified. This responds both to a logic of risk management (different solutions, with different levels of risk and reward, should be tried at the same time), and to a logic of more inclusive innovation policy (the whole EU community or researchers and innovators should potentially be involved in trying to find a solution to the problem).

Experimentation could follow two tracks:

- *Track 1: Experimenting with new technologies/business models/delivery modes, and blending funding instruments and schemes to run experiments.* This could happen on a “prize” basis, or on a more top-down selection of possible paths (e.g. technology roadmap), or both. For example, the replacement of general practitioners with online, constantly available bots could be subject to experimentation with a sample of patients, carefully selected; the same could happen for the procurement of local solutions to CO2 emissions or water draught; or the application of blockchain to electoral systems or land registries. At a more basic research stage, alternative therapies for Alzheimer could be developed and tested to have a chance to speed up scientific breakthrough (e.g. Repetitive Transcranial Magnetic Stimulation, or rTMS). The expectation is that most of these attempts will fail, and a few will lead to results. In terms of instruments, the expectation is that missions will be able to tap into various sources of funding, including research funds, EIC funds, EIB, InvestEU, structural and cohesion funds, national funds made available on a voluntary basis by Member States and even non-EU countries (in the spirit of “Open to the World”), and private funds (partnerships): the ability to blend different forms of funding shall be considered as essential to the skills and activity of the mission.
- *Track 2: experimenting with policy solutions.* Once the technology and business model landscape is clear, the mission-oriented agency (see below for governance) should be able to contribute to policy reforms by engaging in experimental policymaking, and inspiring legislative proposals that would remove obstacles to promising solutions.

- *Policy experiments* could include instruments such as randomized controlled trials, rapid prototyping, landscaping, ideation sprints, instant focus groups, scenario testing, virtual and actual sandboxes and randomized controlled trials are of utmost importance for the future of innovation-friendly policymaking, together with algorithmic approaches to regulation (Yeung 2017). The overall idea is to generate experience and data, which will later enable counterfactual evaluation of the prospective, possible impact of the new solution.
- *Input to policymaking* would take the form of a “wishlist” that would be submitted to DG RTD and later to the SecGen for inclusion in the Commission yearly work programme. For every policy idea, validated by the board of mission leaders and later by DG RTD, there should be an extensive roadmap or inception IA, which backs the need for the proposal and its possible related costs and benefits. This would enable a more structured approach to the innovation principle and to a large extent also a more satisfactory implementation of the innovation deals.

2.2. Evaluation

Evaluation should play a key role in mission-oriented innovation policy, and should be both internal to missions, and external.

- *Internal evaluation.* Missions should be managed in a way that allows for constant monitoring and evaluation, with milestones and moments in which decisions on continuation/termination of project streams will have to be made. This requires that every mission selects its own KPIs or input, output and outcome/impact indicators, and attaches them to the targets that will be specified as the core objective to be achieved (e.g. getting rid of Alzheimer). Mid-term and long-term targets should be accompanied by an adequate roster of indicators; and a precise data management plan should be put in place, so that the mission manager is able to monitor and evaluate the success of individual actions and consult its community on an ongoing basis.
- *External evaluation.* The mission’s overall effectiveness should be checked also with the help of external peer evaluations and stakeholder consultation. This type

of external pressure on the mission to deliver its results is essential for the provision strong incentives for the successful accomplishment of the mission. Annual or biannual reporting to the European Parliament would also be a good way to ensure that progress towards completion of the mission is promoted.

2.3. Communication/public engagement

Mission leaders and managers will have to raise awareness of the mission with the general public and the community of relevant researchers and innovators in the EU and beyond. This will be another way to strengthen the external pressure towards mission accomplishment, as well as public perception of the relevance of EU action for citizens and overall sustainable development.

Possibilities for communications include:

- The appointment of known public figures as champion of a specific mission. These could be former politicians, but also well-known and highly reputed figures from the world of sports, media, art, culture, etc.
- Public engagement through “texturing” of the content of the mission (see previous ESIR and RISE contributions on this, and the upcoming TRIGGER H2020 project for an implementation).
- Partnerships with media outlets in all Member States to provide constant updates on the possible breakthroughs of the mission at hand.

3. Missions, governance and the policy process

It is still unclear whether missions will be run by stand-alone agencies or bodies, or anyway set up as independent entities (like JTIs or KICs). Transparency and accountability reasons would lead to the conclusion that this should be the case. The ESIR group has to discuss this explicitly. Below, I assume there will be a stand-alone body in charge of the mission.

Governance aspects are essential for the effectiveness of the missions. They include:

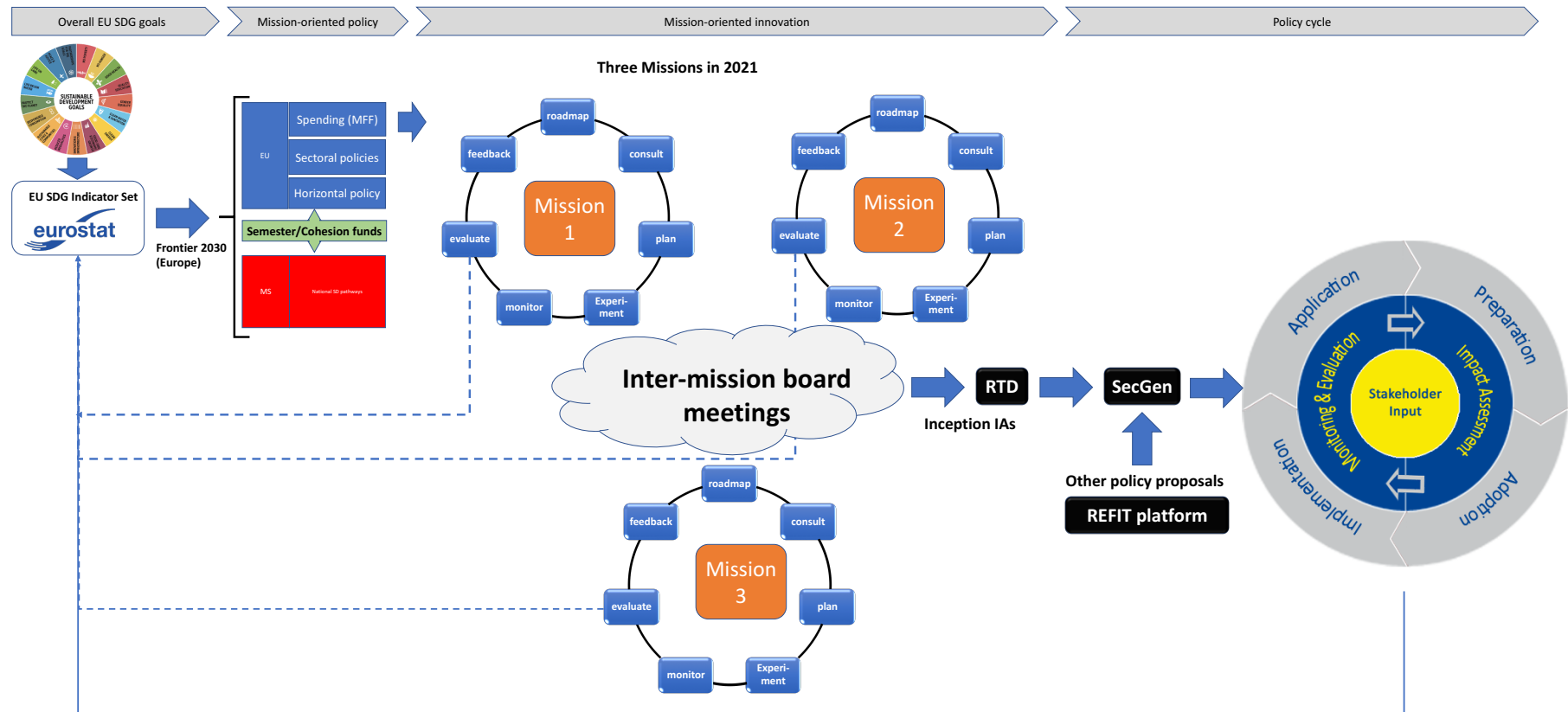
- *Leadership*. Should a known academic or an academic institution be appointed as leader of the mission?

- *Champions.* As mentioned above, one or more public figures could be asked to act as ambassadors within and outside the EU.
- *Board.* This should be composite, open to Member States and private sector, as well as researchers and entrepreneurs. Existing entities such as JTIs, KICs and EIPs could be represented in the board if relevant. A limited number of non-EU board members could be foreseen.
- *Checks and balances.* Decision-making procedures should not be prone to capture by vested interests.
- *Staff and budget.* Should be adequate, and composed of field experts, but also experts in risk assessment, monitoring and evaluation, and governance.

Another important aspect is that of inter-mission cooperation. Regular meetings between the mission leader should be foreseen, and become also a way to contribute to the EU policy agenda. The figure below shows the logical links between SDGs, missions, and policy in a possible future EU architecture.

The policy cycle activity, as well as the experimentation activities of the missions, would then lead to feedback to the overall Agenda 2030, which underpins the whole exercise, in the name of policy alignment and coherence.

Figure 4 – Inter-mission board and overall link between the missions and EU policymaking



4. COCTEAU and Mission-oriented Research and Innovation

The European Commission launched a call for experts to join 'Mission Boards', which will advise the Commission for the identification and implementation of missions in Horizon Europe, the next EU research and innovation programme. These missions will be high-ambition, high profile initiatives, to find solutions to some of the major challenges faced by European citizens, with a clear target that captures the imagination of citizens at large.

There will be five 'Mission Boards', one for each of the following areas:

- Adaptation to climate change including societal transformation;
- Cancer;
- Healthy oceans, seas, coastal and inland waters;
- Climate-neutral and smart cities;
- Soil health and food.

The first task of the 'Mission Boards' will be to identify and design one or more specific missions for each of the mission areas, in consultation with stakeholders and citizens. The 'Mission Boards' will be comprised of high-level independent experts, who will help shape the missions including their respective objectives, indicators and timelines.

The key use of COCTEAU will not be in the selection of the missions, but rather in their co-creation. In COCTEAU, mission boards will be able to select specific actions and co-create them with large audiences at the EU, national or local level by using a variety of tools, from sentiment analysis to gamification.

In particular, COCTEAU can enable the so-called **"IKEA Effect"**⁵. There is indeed emerging evidence that the most powerful way to engage people in policy making is through participation. People feel engaged when they participate to the making of something. Although engagement of the public through co-design and co-making has already been inspiring several attempts of public engagement in

⁵ See for example Norton, Michael; Mochon, Daniel; Ariely, Dan. "The IKEA effect: When labor leads to love". *Journal of Consumer Psychology*. 22: 453–460, September 2011.

the past, we want to avoid here a classic pitfall: to ask citizens to participate by being “policy makers for a day”, with roles that goes beyond their space of expertise and capability to actually act. If this approach (as living labs) can work for simple and local systems and small numbers of people, it leads to disappointing results when moved at the level complex transnational and global policies. The IKEA effect implies that the public participate by contributing within the space they can master. In analogy with mounting an IKEA cabinet: people does not necessarily love to design and manufacture a piece of furniture themselves, and especially they do not have the capabilities, resources and time for doing it in a sustainable way. But people feel engaged by assembling (and sometimes repainting or decorating) the furniture that IKEA has manufactured. It’s a small contribution but proportional to the real capabilities and space of action of people, which is the right level for engagement.

Leveraging on the IKEA effect mentioned above, the idea is to engage citizens in **texturing activities**: i.e. to have them add layers of details and actions to a foresight scenario and policy put forward to the public. This works as a platform sketch, where the individual stakeholder or citizen can add texture, within her/his own space of expertise and action. The process of texturing, that starts from a platform sketch, has the power of supporting a convergent texturing, especially if reinforced by foresight techniques such as Dynamic Delphi which will be crafted in WP5)

To address the complexity of transnational mission-oriented policies in a viable way, the approach is to work on **imagination** (see Ann M. Pendleton-Jullian, John Seely Brown, Pragmatic Imagination, Blurb, 2016 or Scharmer, Otto C. (2008). *Theory U: Leading from the future as it emerges*. Berlin: Berrett-Koehler Publishers). Indeed, one of the most powerful way to build engagement is the co-creation of shared meaningful **images** of future directions. The texturing exercise will therefore be executed on visual images of the foresight scenarios developed with the support of WP5. The approach will work both on actual visual images of the scenarios, and **metaphorical images** which act at a deeper cognitive level (see also George Lakoff and Mark Johnson, *Metaphors We Live By*, Chicago:

University of Chicago Press, 1980). The power of building shared meaningful images is also to enable the assimilation, on people's emotional mind, of **"Memories of the Future"** (David H. Ingvar, "Memory of the Future: an essay on the temporal organization of conscious awareness", Human Neurobiology, 4: 127-136, 1985). Which implies that the brain uses images, plans and ideas just like real memories and experiences in order to filter information and guide decisions. Therefore imagining potential future policies opens people's mind so that they are ready to see the signs relevant to those policies if and when they will occur. These memories of the future are therefore deep emotional factors, connected to aspirations and desires, to spur public engagement.

Although the concepts introduced above (IKEA effect, texturing, pragmatic imagination) can (and will initially be) put in practice through physical experiences, COCTEAU will leverage the power of digital technologies to scale up the engagement to the large public. In addition, digital technologies enable careful tracking of how people produce texturing on images. For example, they enable to capture the emotional inclination of people towards policies, the specific details they modify, add, subtract in their specific sphere of influence. The data harvesting on how the public will add texture on shared images will enable detailed comparison of different orientations according to social groups and words, e.g. according to countries, social role, demographics.

5. How we plan to proceed

The TRIGGER consortium will get in touch with Mission Board members once they will be appointed, to select possible actions on which co-design can be envisaged through COCTEAU. We plan to do this by selecting areas in which there is an overlap between TRIGGER Deep Dives (SDGs, Climate policy, Migration and internet Governance); and the five Missions that are being launched: adaptation to climate change including societal transformation; cancer; healthy oceans, seas, coastal and inland waters; climate-neutral and smart cities; soil health and food.

COCTEAU – Policy Makers User Input

Deep dives	SDGs	Climate	Migration	Internet Governance
Missions				
<i>Adaptation to climate change including societal transformation</i>	X	X		
<i>Cancer</i>				
<i>Healthy Oceans</i>	X			
<i>Climate neutral and smart cities</i>	X	X		
<i>Soil health and food</i>	X			

As emerges from the table above, the areas where missions could be tested through COCTEAU are mostly the climate-related ones: however, given the intimate link between the agrifood chain, climate and biodiversity, and the importance of user interaction for the testing of COCTEAU, we consider the “soil health and food” Mission as an optimal testbed for COCTEAU.

Accordingly, as soon as the Mission Boards will be appointed, the TRIGGER project leader will contact the new Board, together with the leadership of Horizon Europe in the European Commission, DG RTD, in order to set up a meeting and see how TRIGGER, and in particular COCTEAU, could become most relevant for the future missions.



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