

# **(Virtual) T05P05 / Dealing with wicked problems: Policy capacity and Policy Formulation in an Era of diminished Certainties**

**Topic :** T05 / POLICY FORMULATION, ADMINISTRATION AND POLICYMAKERS

**Chair :** Andrea Lippi (Department of Political and Social Sciences, University of Florence)

**Second Chair :** Theodore Tsekos (University of Peloponnese)

## **GENERAL OBJECTIVES, RESEARCH QUESTIONS AND SCIENTIFIC RELEVANCE**

The panel aims at discussing (a) the conditions under which policy makers are called upon to make urgent decisions on complex and insufficiently defined problems which cause disagreements among shareholders both in terms of how they are perceived and in terms of the desired solutions, and (b) the appropriate policy design permitting decision makers to deal timely and effectively with such problems.

According to Rittel and Webber (1973, p. 160) 'wicked problems', are complex issues characterized by value discrepancies and perception divergences of the relevant stakeholders, multiple interests, little or no agreement on problem definition, scientific uncertainty on complicated technical aspects, no easily identified causes, institutional complexity without a well-defined division of responsibilities between public agencies, and, finally, no clear solutions. Wicked issues typically encompass many topics at the same time and compel policy makers to reach multiple goals in parallel, such as migration, climate change, security, public health and, more precisely, tackling the pandemic, fall into the category of wicked problem.

Conventional approaches to policy making, comprising a top-down approach based on prediction, planning and control and focusing either on inputs and processes or on outcomes, and performance, seem inappropriate for dealing with wicked problems (Andersson & Törnberg, 2018, 118, Head & Alford, 2015, 716).

On the contrary, wicked problems call for innovative solutions, creative policy instruments, effective and capable design able to cope with the 'wicked nature', the multiple definition and the latent conflict under the surface. It is not only a problem of decision making and ability to mediate among different stakeholders and their points of view. It is also a matter of capacity to be innovative and flexible in formulation and coordination.

Wicked problems raise up a matter of policy capacity in formulating effective policy design and selecting suitable tools to solve them. It concerns cognitive, organizational, consensus and authority resources. According to Wu, Howlett and Ramesh (2018, 3), it can be scrutinized looking at the three dimensions of policy capacity as "the set of skills and resources—or competences and capabilities—necessary to perform policy functions".

The panel will welcome papers dealing with three different streams of debate:

1. The first one focuses on the policy capacity to cope with wicked problems at different level of government, by state or local authorities, with a special regard to the different resources and the strategy to set up design and strategies, including forms of collaborative or networked management and facilitated dialogue as a process of mutual adjustment of involved actors (Head & Alford, 2015, 727).
2. The second one concerns the geographical dimension of wicked problems, especially looking at the divide between states with high and low policy capacity around the world and the need to solve problems facing to diminished resources or poor backgrounds.
3. The third one relates to the connections between different policy issues and sectors composing the wicked problems and the approaches that policy makers are adopting in order to identify interdependencies, design interventions and select appropriate tools.

## **CALL FOR PAPERS**

The panel aims at bringing together scholars and practitioners in order to discuss the kind of policy capacity necessary when policy makers have to cope with wicked problems. The focus is both on the analysis of the

policy capacities at different level of government in terms of cognitive, economic, organizational and political resources and the specific skills to be combined in effective (or, in case of failure , detrimental) design. Analogously, policy capacity depends also on structural, cultural and institutional factors that in different parts of the world enhance (or depress) the capability to manage wicked problems and to solve them in an integrated, coordinated and successful way. The formulation under uncertainty is a matter that influences the probability to be able to make successful policy makers.

The focus of the panel is consequently on the capacity of politico–administrative systems to cope with wicked problems in an era where they are increasing while social, economic and environmental certainties are decreasing. The goal of the panel is to empower debate on policy capacity and more precisely to encourage scientific discussion on the policy capacity to tackle wicked problems.

A matter of different stock of capacity is also included in this reasoning. It concerns the institutional frame, the cultural legacy and the scarcity of resources afflicting those countries that cope with wicked problems without ‘strong policy backgrounds’. The comparative analysis between strong and weak capacities on one hand, and among countries with poor resources, on the other, is also a topic to be discusses in search for experiences and recipes to be debated and scrutinized.

As a consequence, the panel welcomes papers that at theoretical and empirical level, through case studies or comparative approaches, look at transnational wicked issues at social, economic, environmental and health policy areas.

The panel aims at offering the opportunity to share contributions on the above mentioned topic with respect to three sets of scientific questions:

1. The first concerns how policy makers combine resources to plan and coordinate interventions, as well as the overall policy capacity showed by governments at central and local levels to cope with similar wicked problems occurring at the same time in different countries. This specifically affects the problem of the capability to design effective and successful strategies as well as detrimental experience and big failures emerging in different parts of the world.
2. The second focuses on actors and dynamics by which wicked problems are collectively debated and defined, through confrontation and the synthesis of alternatives under the influence of important stakeholders, like experts, academics, agencies and advisors.
3. The third regards the geography of wicked problems, their different relevance in the agenda and the following weight on policy making under pressure of the public opinion, with a special regard to those contexts where resources are limited and certainties diminished by economic, financial, institutional and cultural boundaries jeopardizing the real and the potential of problem solving for rich and poor policy making systems globally.

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## **Session 1AFTERNOON, VIRTUAL, WICKED ENVIRONMENTAL AND SOCIAL ISSUES**

Tuesday, July 6th 16:30 to 18:30 (Virtual 12)

### **(Virtual) Mapping of social exclusion and sustainable development opportunities in the mountainous regions of southern Europe during the COVID-19 pandemic. The research example of mountainous Messenia.**

Evgenia Bitsani (University of Peloponnese)

Stavros Pantazopoulos (University of Peloponnese)

This study aims to explore the possibilities of developing social entrepreneurship projects by vulnerable groups experiencing poverty and social exclusion during the financial crisis and the COVID-19 pandemic.

The ongoing economic crisis and the health crisis brought about by the COVID-19 pandemic exacerbated the contradictions and inequalities between socially vulnerable groups and increased poverty and social exclusion. This conditions has worsened especially in the already poor areas of the mountainous southern region of Greece and Messenia.

Specifically, our goal is to explore the prospects of social entrepreneurship in mountainous areas of the Greek south, which are characterized by their uneven development, In particular, as case study has been selected the Prefecture of Messenia which are characterized by their uneven development.

The Peloponnese region, including Messenia, is the last region of the EU in terms of growth and especially the mountainous areas of its southern part. The conditions have worsened nowadays due to the pandemic which affects in particular the vulnerable populations.

The research focuses on the catalytic factors for the development of social enterprises in the Prefecture of Messenia, Greece, the needs of the local market for third sector services, the possibilities of involvement of especially vulnerable groups in the establishment and operation of these enterprises. The research aims to identify, a) the reasons of the exclusion of vulnerable social groups from employment, b) the needs and the conditions that lead to the labor inclusion of such people in the local market, c) the necessary development of social entrepreneurship and d) the economic impact of COVID-19 on social stability at local and regional level, where they act as the backbone of societies' economic activity.

In addition, the article attempts to highlight the demographic deforestation in the aforementioned region, as an impact of the economic crisis that Greece is facing in recent years. At the same time, efforts are being made to demonstrate the prospects of social entrepreneurship in this area, as a response and dynamic perspective in the post COVID-19 era by presenting a new model of sustainable social development in rural disadvantaged areas.

### **(Virtual) Planning in the face of wicked problems. Comparative evidence from Latin American**

Sabrina Kirschke (Museum für Naturkunde – Leibniz Institute for Evolution and Biodiversity Science)

Angela Hahn

Claudia Beatriz Giraldo (United Nations University - Flores)

Tamara Avellan

**Planning in the face of wicked problems. Comparative evidence from Latin American**

Planning for addressing wicked problems has become increasingly important in the field of environmental public policies and the wicked problem literature, more generally. Acknowledging the substantial challenges for planning in the face of wicked problems, scholars increasingly argue for a flexible and adaptive management of natural resources. However, such management approaches do not systematically consider the various requirements of different dimensions of wicked problems (goal diversity, system complexity, uncertainty) at different stages of the planning process (from investing resources into planning up to agreeing on new policies). Against this background, we aim at identifying an applicable set of indicators for good planning for addressing wicked environmental problems. To build the indicator framework, we combine two established concepts, namely the results based management approach and a three-dimensional concept of wickedness. As a result, we identify 12 indicators for good planning along four stages of planning (resources, activities, outputs, and outcomes) and three dimensions of wicked problems (goal diversity, system complexity and uncertainty). The indicator framework is applied to two planning processes to address wicked resource nexus problem in Guatemala and Mexico. Based on 12 semi-structured stakeholder interviews, we find (i) limited human and financial resources to address goal conflicts, system complexity, and uncertainty, resulting in (ii) a limited number of activities (e.g., workshops, scientific models, and reports), (iii) few outputs (e.g., increased capacity, new services), and (iv) few outcomes at the policy level (mainly soft and hard law). In addition, interviewees repeatedly mention various challenges across stages, such as lack of information, corruption, and community disinterest. Further, in regards to the dimension of wickedness, the goal conflict dimension usually provoked more detailed responses, while the complexity dimension was usually approached as particularly hard to tackle, and the uncertainty dimension tended to produce more negative answers, emphasizing a lack of inputs, activities, outputs and outcomes to address this dimension. Finally, while both cases show similar patterns, we also observe more detailed feedback from the Panajachel case, given a larger sample size as compared with the Mexican case. In sum, it is pertinent to note that in regards to the stages a chain of effects was produced, which however differs slightly with respect to dimensions of wicked problems and the two cases analysed. These results call for a more rigorous analysis and action at the level of policy capacity, as a starting point for achieving good policies to address wicked problems at the outcome level.

### **(Virtual) Tackling wicked problems: the case of Living Labs.**

Stefania Ravazzi (University of Torino)

Giorgia Nesti (SPGI - Università di Padova)

Federico Cuomo (University of Turin)

Over the last years, wicked problems have received increasing attention, fostering the search for creative ways of tackling with high uncertainty and complexity. As a consequence, new substantive and procedural policy instruments have been designed and experimented, including behavioral science-based tools and new forms of collaborative or networked policy making. Among these, so called 'Living Labs' have been spreading in many European countries to address complex problems such as sustainable growth, innovation, digitalization, IoT, aging society, food consumptions, and healthcare, also thanks to the impulse given by the European Commission from the Sixth Framework Program on.

Although several case studies and some comparative analyses exist in the literature, the nature of this new policy instrument and its characteristics in relation to more traditional instruments have not yet been properly analyzed and discussed. This paper aims at making a step forward in this direction through an extensive analysis on a medium-N sample of Living labs selected from the European Network of Living Labs (ENOLL). This highly inductive theoretical analysis will serve not only to better understand the intrinsic qualities of this new policy instrument and the peculiar mechanisms it is expected to trigger, but also its potential and its pitfalls in terms of overall capacity of politico-administrative systems to cope with wicked problems.

### **(Virtual) Transition to the post COVID-19 lifelong training policy: The opportunity to retrain and upskill the workforce to thrive in an increasingly competitive environment**

Evi Dramaloti (General Secretary for Coordination)

In policy research, "wicked problems" are defined as social issues which are hard to define, to which solutions are not clear. They are always linked to other problems and will never be fully solved by success in one single area. Social pluralism (multiple interest and different values of stakeholders), institutional complexity (linked with multilevel governance) and scientific uncertainty (fragmentation and gaps in reliable

knowledge) are associated with wicked problems. In Rittel and Weber's now famous article "Dilemmas in general theory of planning" (1973), the writers declare that solving major problems through an "engineering" approach have ended. Modern societies are not yet amenable to general top-down solutions, but to reassessment of the traditional way of working in adjustment with more innovative and collaborative approaches.

One of the urgent tasks governments are expected to undertake is reprofiling individual skills for optimal transitions, which transforms economies, societies and people's lives as never before. The general scope of the problem concerns huge technological progress, artificial intelligence and machine learning, which begin to reveal their potential, while many workers face inequalities in learning opportunities and weakness to respond to the new emerging labor needs.

The COVID-19 crisis proved an important test ground for on line training and career guidance, as in person services were not available. Equity issues emerged as a key concern, especially affecting low-skilled or low-wage workers who did not have sufficient digital skills or high-speed access to internet and therefore could not take advantage of these opportunities. Moreover, lockdowns triggered a disproportionate toll on women in the labor market. Being at the heart of care and response efforts, women make critical contributions at the fight against COVID-19, while they take a harder hit economically. At the same time, many studies highlight that closing the gender gap in STEM education can have a positive impact in employment.

Meeting the post COVID-19 retraining challenge gets even harder by the rapid ageing of the workforce, as by 2050, more than four in ten individuals in the world's most advanced economies are likely to be more than 50. Adapting to ongoing changes in the world of work, now accelerated by the COVID-19, presupposes an evaluation of policies and practices with an eye to age-inclusive workforce (age diversity). Fully recovering from the pandemic will also require to reskill people who have lost their jobs and to adopt new strategies in making effective use of people's skills in and out of the workplace. Public administrations should also redesign their training programs and upskill their workforce.

The main research question to be addressed is defining in which ways the wicked problem of skills adaptation in a rapidly changing environment can be confronted along with the need to prevent geographical, age, gender or other inequality by a comprehensive approach that coordinates a range of policies and actors.

OECD Skills Outlook indicates that by enabling people to acquire the necessary broad mix of skills, countries can ensure that today's technological evolution improves lives for all. Employers, industry and professional associations, education and training providers, as well as governments, all have a stake in retraining efforts to help workers transition to the post COVID-19 economy and to address ongoing skills shortages. Lessons can be learnt by good practices already applied by other countries.

### **(Virtual) The limits of participatory governance in megaprojects: the Lyon-Turin high-speed railway between structure, agency, and democratic participation**

Andrea Terlizzi (Università degli Studi di Firenze)

Andrea Felicetti (Scuola Normale Superiore)

Giovanni Esposito (Université Libre de Bruxelles)

Megaprojects are increasingly common across countries and attract substantial political attention from a variety of actors. While there is growing interest in the governance of these projects, their management and implementation remain little understood. Recent studies have highlighted the need to move from an understanding of megaprojects as linear and rational processes towards a more nuanced approach that accounts for non-linear and conflictual aspects. Participatory governance is often proposed as a valuable resource in this regard. In this paper, we investigate the setting and design of two participatory venues operating in the context of the implementation of the Lyon-Turin high-speed railway megaproject: the Italian Observatory for the Turin-Lyon Railway and the French *Enquête Publique*. Empirical evidence shows that the Italian case featured substantial structural barriers to effective democratic participation. As for the French case, while better designed and implanted in its context, it featured important agentic limitations that undermined its democratic potential. On the basis of our case studies, we therefore argue that both the Observatory for the Turin-Lyon Railway and *Enquête Publique* failed to promote democratic participation and fostered, instead, a wicked form of monitory democracy with populist rhetoric and technocratic rationality. We thus propose a deliberative approach to (the study of) the management and implementation of megaprojects. Whereas deliberative democratic ideas command growing interest across disciplines, these have found only limited application in the study of megaprojects. We contend that a deliberative democratic approach holds promise to improve the democratic and epistemic qualities of decision making on megaprojects.

## **(Virtual) On the capabilities needed in the public sector to implement innovation support policies**

Jon Mikel Zabala-Iturriagagoitia (University of Deusto)

Stephanie Grimbert (Universidad de Deusto)

Innovation is one of the main engines of economic growth and social welfare. Innovation policies are at the core of economic growth and environmental sustainability. The literature has for long discussed the instruments that can be used to define innovation policies (e.g. Edler and Georghiou, 2007) and the policy-mixes in which these instruments can be combined (Laranja et al., 2008).

For innovation policies to be effective, it is not enough to define a particular policy intervention. Governments cannot play a passive role where they just provide financial resources for firms and other relevant actors to carry out innovation activities. Governments also need to innovate, for example, in their organizational and managerial structures, making them more effective (better coordination and governance) and efficient, in their internal processes (to reach a higher audience), or stimulating the demand of new products (through public procurement). All of these activities require the availability of certain capabilities needed to carry them out.

In this regard, the literature points that one of the main factors limiting and hindering effectiveness of innovation policies is the lack of the required capabilities at the administrative level (Balland et al., 2018; Guimón, 2018), which is the level at which policies are implemented (Magro et al., 2014). The literature has for long provided knowledge and evidence about the aspects influencing the management of innovation at the corporate level (e.g. Teece et al., 1997), but we still lack knowledge on how public organizations (i.e. governments) can stimulate innovation and which are the needs in terms of capacity building. Besides, the current context, where uncertainty is the common denominator to policy making, and changes are occurring at a high velocity, makes that these capabilities need to be continuously reconsidered and rebuilt.

The aim of this paper is to identify the capabilities that are needed in the public side to effectively implement innovation policies. In particular, the paper emphasizes the capabilities required to implement public procurement, which is one of the demand-side innovation policies with the largest potential to promote innovation (Edquist and Zabala-Iturriagagoitia, 2021).

To identify these capabilities, a survey was circulated to the public procurement agencies in 15 European countries. To complement the results from this survey, interviews and focus groups were developed with policy makers and civil servants in charge of the definition and implementation of procurement policies in the previous 15 countries. These interviews and focus groups were developed in the context of a Mutual Learning Exercise coordinated by the European Commission, which started in January 2017 and concluded in March 2018. Overall, 33 individuals were interviewed, and more than 30 focus groups were developed.

The paper identifies the key capabilities and constituent elements that are necessary within the public sector to deliver innovation support procurement policies. These capabilities can also be useful for ministries and procurement agencies to execute training and capacity building initiatives among civil servants, which will lead to the professionalization of civil servants in procurement. The identification of these capabilities is also needed for public agencies and ministries to be able to respond to a high velocity context which is increasingly plagued by uncertainty.

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## **Session 2AFTERNOON, VIRTUAL, POLICY DESIGN METHODS FOR SOLVING WICKED PROBLEMS**

Thursday, July 8th 14:00 to 16:00 (Virtual 12)

### **(Virtual) Policy Process for Municipal Woody Biomass Power Generation Projects after the Fukushima Nuclear Accident**

Takashi Tsuji (National Institute for Environmental Studies, Japan)

The Fukushima Nuclear Accident (March 2011) has continued to present problems for forest management because of contamination near the nuclear plant. Utilization of woody biomass resources has gained attention as a key for solving these problems. However, utilization of contaminated woody biomass resources involves assessing risk and communicating this among various stakeholders. Several areas in Fukushima planned woody biomass power generation projects (WPPs), but conflicts among stakeholders have been common, and residents anxious about the effects of radioactivity have protested.

This study explores what factors accelerate agenda setting and policy implementation of WPPs, targeting three municipalities in Fukushima. In one municipality, the plan for the WPP was announced to the public without problems. In the others, WPPs have been withdrawn or have stagnated. By using qualitative research methods, data were gathered from local documents (newspaper articles, council minutes, and municipalities' PR publications) issued in the ten-year period from March 11, 2011 to March 31, 2021 were collected as materials from after the nuclear accident. In addition, interviews were conducted with municipal administrations in charge of WPPs post the accident.

Our analysis showed that institutional factors (central government policies related to forest resource utilization and radioactive material countermeasures), social factors (coordination of interests among multiple stakeholders, e.g., parliament, residents, and citizen groups), and technical factors (e.g., a stable supply of wood as fuel) may affect progress of municipal WPPs. The combination of these factors should accelerate agenda setting and policy implementation of WPPs. Experts dispatched to municipalities played an important mediating role as they were responsible for coordinating with various stakeholders, including the central government. Nearly 10 years after the Fukushima accident, the actuality of radioactive contamination is clearer and scientific uncertainty regarding using contaminated woody biomass resources is ebbing. Therefore, local governments should be required to recontextualize the use of woody biomass resources through policy.

### **(Virtual) APOCALYPSE LATER. Conflict and deliberation in the choice of nuclear-waste repository sites in Italy, France and Germany**

Giulio Citroni (Università della Calabria)

The paper analyses the strategies and capacity of governments in designing policy for the disposal of radioactive waste, and in granting public information and participation for the siting of geological disposal facilities in particular.

As existing nuclear power plants come to the end of their life cycle, and as several European countries are planning to reduce their reliance on nuclear energy, the issue of waste disposal is raised strongly by EURATOM and the European Commission, who operate a complex system of regulation and overview. According to Council Directive 2011/70/EURATOM, Member States must develop a strategy to dispose of radioactive waste on their territory ensuring public information and participation.

The siting of nuclear-waste repositories is under several respects a wicked policy problem:

- it entails values and interests which are perceived by actors as non-negotiable (health, safety, well-being, intergenerational ethics, all very strongly emotionally and symbolically charged);
- it is the object of perceived technical uncertainties and hazards which are widespread and intense, and hence socially and politically relevant;
- it crosses policy fields with contradictory constraints, logics, arenas and institutions (energy, environment, territorial planning and development);
- it covers multiple levels of local, regional and national/federal government, potentially creating very intense conflicts between centre and periphery as well as between peripheries.

In summary, it may be described as a “super-NIMBY”, where the perceived stakes, the perceived risk/uncertainty, and the complexity of intertwining policy fields and government levels, challenge to the extreme the capacity of government to design effective, timely, and politically viable policies.

Within this framework, the paper will focus on the siting process of geological disposal facilities in Italy, Germany and France. The three countries are very diverse in 1) amount of present and prospected high-level radioactive waste; 2) stage of development of a strategy and plan for disposal and siting; 3) political and administrative structure in centre-periphery relations; 4) approaches to public participation and deliberation. However, they share significant difficulties and delays in the definition of their waste disposal strategies, exhibiting significant conflict.

The paper will reconstruct the strategies, the conflicts, and the outcomes in the three countries in order to 1) analytically frame the wicked problem at stake (multi-level and geographical conflicts; competing definitions of the problem and its possible solutions), 2) typify strategies (involving more or less dialogue and policy co-design with relevant stakeholders), and 3) identify factors which influence the capacity to design effective fora where wicked problems may become tractable.

### **(Virtual) Policy-making and institutional responses to the coronavirus pandemic: The Greek case**

Manto Lampropoulou (University of Athens)

The proposed paper aims at contributing to the debate regarding policy and institutional responses to the ongoing coronavirus pandemic. Since the outbreak of the pandemic and its rapid global expansion, governments around the world were forced to revise and adjust their policy-making patterns and instruments. The covid-19 pandemic has been characterized by high complexity and uncertainty that called into question the policy capacity of governments to tackle the subsequent health crisis problems and its implications.

Given the scale and the volume of the pandemic, an in-depth reconsideration of existing policy-making and institutional arrangements was needed and new tools and solutions were introduced in response to the unprecedented and rapidly spreading crisis, whose impact went far beyond the health sector. This adjustment entailed the transformation of existing structures and instruments and the initiation of new tools and approaches to the policy process. At the same time, existing social and economic policies were reconsidered, while new priorities were set out within a context of complex and often conflicting goals.

Focusing on the Greek case, the paper seeks to identify (i) the perception of the pandemic as a policy problem, (ii) the changing nature of policy formulation and implementation patterns and (iii) the impact of the covid-19 crisis on public administration. Against this background, a central question concerns the capacity of the domestic politico-administrative system to cope with the pandemic in a timely and effective way. The analysis considers the structural and institutional factors behind policy responses to the coronavirus pandemic and points out some path-breaking aspects of the domestic political-administrative system. Special emphasis is placed on the role of the involved experts and external advisors in policy-making and the growing influence of epistemic communities in the shaping of policy agendas.

### **(Virtual) Designed for Different Times: the Institutional Shortcomings of International Organizations Driving Their Inertia in the Face of New and Harder Problems**

Kari Otteburn (KU Leuven - Leuven Centre for Global Governance Studies)

Axel Marx

Greater and more complex challenges seem to be facing all policymakers at all levels in recent years. At the global level, an apparent “gridlock” is underscored by increasing polarization, contestation and tension between states, which have only intensified with the outbreak of COVID-19. Emblematic of this gridlock is



the increasing perception that treaty-based intergovernmental organizations (IOs) – as the traditional and most formal forms of inter-state cooperation – are stagnating, ceding authority to other actors, or are ill-equipped to fulfill their own mandates. Though global governance is conducted through a variety of formal and informal institutions and processes at multiple levels, IOs retain an important role as orchestrators, norm-setters or producers and synthesizers of knowledge. However, it seems that, more than ever, IOs suffer from increasingly diminished capacity to achieve policy and governance goals.

Although existing literature presents a variety of explanations for why IOs appear to be under pressure, most explanations put forth in recent years emphasize external dynamics that relate to, but are ultimately beyond the control of, IOs and their member states, such as the rise of multipolarity and recent manifestations of nationalism and populism in domestic politics or the emergence and proliferation of other global governance institutions that provide alternatives to pursue international affairs. However, we maintain that these external pressures have an amplified effect on IO's capacity to reach its governance goals because its mandates, internal governance processes and resources are not sufficient to accommodate the changes in the external environment. Much of classical organizational sociological research shows that organizations can only perform if they 'fit' with their external environment. Many IOs were established in a very different world order, with which their design, procedures and *modus operandi* were aligned. These organizations face difficulties in adjusting to a changed external environment. This misalignment is likely one of the reasons why we observe a growing lack of capacity to respond to new challenges for IOs across policy areas.

To assess this, we drew on existing literature to take stock of the primary institutional shortcomings (i.e. structural deficiencies which inhibit IOs to reach global governance objectives or address global challenges) facing the leading IOs for five issue areas – trade, development, security, finance and climate change. We identified three primary institutional shortcomings common to all five issue areas: (1) IOs face difficulties balancing the needs of a more diverse set of stakeholders and members with different interests and perceptions due to inflexible governance structures and decision-making rules; (2) IOs' mandate hampers action and policy autonomy to respond to new challenges; (3) IOs lack sufficient resources to fulfil their functions, primarily due to growing lack of support from member states pursue different aims. Combined in various ways that we explore in the paper using concrete examples from each issue area, these shortcomings create inertia within IOs, limiting their capacity to facilitate cooperation and to deal with "wicked problems".

### **(Virtual) How does learning turn into innovative solutions to wicked problems? Evidence from eight Belgian collaborative networks**

Nadège Carlier (Université Catholique de Louvain)

Sarah Verriest (UCLouvain)

Justine Dehon (UCLouvain FUCaM Mons)

Stéphane Moyson (Université Catholique de Louvain)

Dealing with wicked problems, such as climate change, security or public health requires policymakers to come up with public-sector innovation, understood as « the introduction of new elements into a public service [...] that represents discontinuity with the past » (Osbourne & Brown, 2005). To do so, new governance structures such as collaborative networks are necessary, because wicked problems most often involve multiple stakeholders with different points of view (Head & Alford, 2005; Klijn & Koppenjan, 2016). Collaborative networks gather multiple organizations to solve problems that are difficult or impossible to solve by a unique organization (Agranoff, 2006; Agranoff & McGuire, 2001). Collaborative networks are generally assumed to generate regular interactions between multiple stakeholders with potentially conflicting interests and different resources, which would create a space for ideas circulation (Koebele, 2019). In turn, collaborative networks are supposed to foster knowledge acquisition and opinion changes among participants (i.e., individual learning), as well as goal convergence and consensus building (i.e., collective learning) about innovative processes, products or concepts (Riche, 2020). In a nutshell, collaborative networks would facilitate learning which, in turn, would foster innovative solutions to wicked problems. While the factors of learning in collaborative networks have been thoroughly investigated in the literature (Riche et al., 2020), not much has been said about whether and how learning actually turns into innovation.

***How does learning amongst the participants to a collaborative network turn into innovative solutions to wicked problems?*** To answer this research question, 78 semi-structured interviews were conducted with the participants to eight Belgian collaborative networks dealing with wicked problems in four policy sectors: social services, environment, health and home affairs. A thematic analysis (Braun & Clarke, 2006; Miles & Huberman, 1994) of interview transcripts using NVivo was performed. Different types of learning – instrumental, relational, and political – were distinguished and the following conditions of their

influence on public-sector innovation emerged: exogenous conditions (political and economic context) (Heikkilä & Gerlak, 2013), collective conditions (diversity of the participants, trust, social relations) (Koebele, 2019), and conditions related to the structure of the network itself (formal and informal rules, procedural fairness) (Riche et al., 2020).

*The overall finding of this paper is that learning in collaborative networks does not trigger innovation solutions to wicked problems per se, nor in all conditions.* On the one hand, not all types of learning lead to innovation and some types of learning lead to some types of innovations. On the other hand, learning leads to innovation under certain conditions. These findings have theoretical and practical implications related to the conditions of public-sector innovation in collaborative settings through learning (Riche et al., 2020), about the successes and 'failures' of policy learning (Dunlop & Radaelli, 2017), as well as about the metagovernance of collaborative networks (Sørensen & Torfing, 2007) and the ability of the latter to lead to innovative outcomes (Dowding, 1995; Oh & Bush, 2016). We discuss these implications and conclude with an agenda for future research.