Coordination in public sector innovation projects for the establishment of synergy

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ABSTRACT

One of the main premises for the development of public sector innovation through collaboration is that working together with different actors leads to more insights into the problem at hand and that different resources can be combined. This should lead to a process where the whole is greater than the sum of all individual parts; also known as synergy. As public sector innovations are increasingly developed in collaborative arrangements, it raises the question how coordinators compose the collaborative arrangement in different phases of the innovation process with the goal to establish synergy. This qualitative study examined eight different Belgian cases in which a collaborative arrangement was established to develop public sector innovations. It was found that when composing the collaborative arrangement, coordinators commonly focus on just one phase of the innovation process at a time: idea generation or implementation. Synergy for idea generation is especially established by pulling new actors with intangible resources towards the process. Contrary, synergy for implementation is especially established in collaborative arrangements in which actors with both tangible as well as intangible resources are pushed towards the process. Here, the coordinator is oftentimes to a lesser extent able to influence the composition and directs the actors towards implementation of an already chosen innovative idea.

Key words: Innovation, collaboration, synergy, coordination, metagovernance

Introduction

Developments in society have caused a growing need for governmental organizations to be innovative to solve societal problems (Hartley, 2005: 27; Walker, 2006: 311; Osborne and Brown, 2011: 1337; Arundel, Bloch and Ferguson, 2019: 793). Growing demand and expectations of citizens regarding the functioning of the public sector has placed considerable demands on government's innovative capacity (Sørensen and Torfing, 2012: 1). Moreover, increasingly complex wicked problems in a fragmented society with growing interdependencies between actors force governmental organizations to collaborate with actors outside the own organizational borders as these problems cannot be solved with standard solutions or within the own bureaucratic organization (Wegrich, 2019: 16; Torfing, 2019: 2).

Complex societal problems are commonly multi-dimensional as they extend across multiple policy areas and involve multiple actors both inside and outside the government administration. Hence, opening the innovation process to external parties is considered to be beneficial for developing innovations (Voorberg, Bekker and Tummers, 2015: 1342; Frow et al., 2015: 463; Torfing, 2019: 2). When collaborating, synergy is regarded as a driver for innovative outcomes (Lasker, Weiss and Miller, 2001: 183; Cramm, Phaff and Nieboer, 2012: 209; Bressers, 2014: 103). To the end of promoting synergy, arranging a collaborative

arrangement with the inclusion of the necessary actors and their resources is essential at different stages of the innovation process (Diamond and Vangen, 2017: 51; Lewis, Ricard and Klijn, 2018: 292; Voets and De Rynck, 2008: 466; Corbin and Mittelmark, 2008: 365; Loban et al., 2021: 1060). The generation of ideas and the consequent implementation of the chosen idea can be regarded as two main areas of interaction in the collaborative innovation process which require different types of actors (Sørensen and Torfing, 2011: 851; Meijer, 2014: 203; Keum and See, 2017: 653). Still, the way collaborative arrangements are composed in these phases for the promotion of synergy remains a relatively untouched topic in public sector innovation literature.

In this qualitative study we examine how coordinators (also called: metagovernors) compose collaborative arrangements for idea generation and implementation in order to establish synergy. The research question is: *How do coordinators compose collaborative arrangements aimed at public sector innovation to establish synergy concerning idea generation and implementation?*

This question is answered by examining eight different collaborative arrangements aimed at creating a public sector innovation. This study builds upon the metagovernance and synergy literature and examines how coordinators attempt to create synergy in different phases of the collaborative innovation process by the composition of the collaborative arrangement. Moreover, by answering this research question empirical insights are added to the still highly conceptual synergy narrative in public sector innovation literature (see e.g. Ansell and Torfing, 2014: 11).

Defining innovation

As innovation is increasingly a way for governments to tackle societal problems, public sector innovation has gained increasing attention in academic literature (De Vries, Bekkers and Tummers, 2016: 146; Arundel, Bloch and Ferguson, 2019: 793; Lopes and Farias, 2022: 114). Despite conceptual ambiguity, two main recurring elements are distinguished in commonly used definitions (De Vries, Bekkers and Tummers, 2016: 152): first, an innovation should be perceived as a novelty in the given context, and second, the innovation is the first adoption of an idea by a given organization/entity. This means that innovations can exist somewhere else already, but have to be new in the given context. For example, a city adopting existing "smart" technologies to transform itself into a "smart city" is in the context of that specific city highly innovative to the city and its citizens (Caragliu and Del Bo, 2019: 373).

Some authors emphasize the difference between innovation and optimization as innovation involves a clear break with the past and optimization is an incremental change in how things were done before (Osborne and Brown, 2011: 1338). Furthermore, one of the main differences between public and private sector innovation is that the public sector does not innovate in order to obtain a competitive market advantage over competitors. Instead, public sector innovations try to add public value (Crosby, 't Hart and Torfing, 2017: 658; Chen, Walker and Sawhney, 2020: 1677). Public value is the quality of individual and collective life for citizens shaped by the normative consensus of society, policies, and governance (Yang, 2016: 873; Geuijen et al., 2017: 624).

The complexity of today's societal problems often spans multiple policy areas and involves multiple actors. As a result, public sector organizations cannot fall back on standard solutions and are more or less forced to work together for the development of an innovation

(Cinar, Trott and Simms, 2021: 344; Torfing, 2019: 2). Collaboration can lead to a better understanding of the problem at hand because multiple perspectives are combined (Siddiki, Kim, and Leach, 2017: 864). In addition, collaboration brings together complementary resources (Diamond and Vangen, 2017: 51; Lewis, Ricard and Klijn, 2018: 292). Therefore, innovation through collaboration has been used by governments as strategy for the management of crises (Vlados and Chatzinikolaou, 2019: 58), to increase the innovativeness of public services (Mergel and Desouza, 2013: 889), and as response to societal and technological developments (Seo, Kim and Choi, 2018: 1162). In this respect, it is argued that policymakers have the opportunity to determine the direction of growth on these issues by making strategic investments when well-defined goals, or more specifically 'missions' are formulated. These investments can catalyst activities between actors that otherwise would not happen and shift the playing field to the desired societal goal (Mazzucato, Kattel, and Ryan-Collins, 2019: 422; Mazzucato and Penna, 2016: 307).

Composing the collaborative arrangement to establish synergy

Synergy is seen as a primary characteristic of a successful collaborative process because a collaborative arrangement can reach its full potential when synergy occurs (Corbin Mittelmark and Lie, 2006: 13; Corwin, Corbin and Mittelmark, 2012: 4; Corbin, Jones and Barry, 2018: 6). Synergy can be defined as combining the individual perspectives, resources and skills of the partners, [so that] the group creates something new and valuable together a whole that is greater than the sum of its parts (Lasker, Weiss, and Miller, 2001: 183). In this regard, synergy can be seen as the outcome of the process, such as a successful innovative outcome (Weiss, Anderson and Miller, 2003: 693) or as a process in itself as well, including feelings of excitement and progress, and resource complementarity (Jones and Barry, 2011). Studies on partnership effectiveness (such as Wandersman, Goodman, and Butterfoss, 1997: 261), have examined how partnerships turn resources into products. The milestone study of Lasker and colleagues (2001: 183) mentions different determinants for synergy. These include partner and partnership characteristics, relationships among partners, the external environment and resources. Recent research has shed more light on these determinants. For example, concerning the partner and partnership characteristics and the relationships among partners, synergy is spurred by equity between partners, and clarity and consensus on governance and decision-making processes (Raftery, Hossain and Palmer, 2022: 330).

Next, effective leadership is found to be an enabler for synergy as it facilitates interactions among actors by facilitating open dialogue, connecting actors with each other, and revealing and challenging assumptions that limit thinking and action (Loban et al., 2021: 1060). These activities are also referred to as 'metagovernance'. Metagovernance is 'a practice by (mainly) public authorities that entails the coordination of one or more governance modes by using different instruments, methods, and strategies to overcome governance failures.' (Gjaltema, Biesbroek and Termeer, 2020: 1760). The metagovernor can apply different management styles and activities to coordinate the collaborative arrangement towards the end goal. For example, strategies concerning the arrangement of the collaboration by inviting critical actors, introducing process rules such as entrance and exit rules, connecting actors with each other, and exploring content (Klijn, Steijn and Edelenbos, 2010: 1080).

Effective metagovernance for synergy is strongly associated with being able to mobilize the necessary resources in the collaborative arrangement. The sufficiency of both

tangible resources (such as financial means) and intangible, nonfinancial resources (such as knowledge) have been linked to synergy (Weiss, Anderson and Miller, 2003: 693; Corbin and Mittelmark, 2008: 365; Loban et al., 2021: 1060). Sufficiency of nonfinancial resources is particularly important in innovation projects as innovative ideas can emerge when different points of view are combined, and by pooling resources, it also improves the collaborative arrangement's capacity to implement the innovation (Waldorff and Kristensen, 2014: 102; Stevens and Verhoest, 2016: 8; Torfing, 2019: 7). An effective metagovernor is therefore someone who includes the necessary resources and facilitates an adequate way of bringing these resources together. Hence for the reason of gathering complementary resources, diversity of partners is mentioned as an important condition for collaborative innovation as it brings together different resources (Siddiki, Kim, and Leach, 2017: 863). This study focuses on the selection and exclusion of actors and the activities that bring actors together to establish synergy.

Collaboration in different phases of the innovation process

Governments increasingly shift from single innovation projects to broad 'missions', which require all stakeholders' ownership to succeed (Mazzucato, Kattel, and Ryan-Collins, 2019: 422). Hence, the establishment of synergy throughout the entire innovation process has become more important. The establishment of synergy relates to at least two key phases in the innovation cycle: 1) the generation of ideas and selection of ideas, and 2) the implementation of the chosen idea (Sørensen and Torfing, 2011: 851; Meijer, 2014: 203; Keum and See, 2017: 653). These two phases can be regarded as at least two different arenas of interaction and both have a clear outcome: a selected innovative idea and an implemented innovation (Koppenjan and Klijn, 2004: 178; Hartley, Sørensen and Torfing, 2013: 822). A vital enabling process for synergy is therefore a metagovernor that sets up a collaborative arrangement that includes partners that bring the necessary resources to the table in both of the phases (Cramm, Phaff and Nieboer, 2012: 209). However, research that differentiates between these two phases concerning enabling synergy is scarce. Concerning enabling synergy for idea generation - we will refer to projects in this phase as 'idea-oriented' -, collaboration is required to fully understand the problem and to arrive at a solution that is both effective and can count on sufficient support (Torfing, 2019: 5). In this first phase of the innovation cycle, synergy is mainly based on non-financial resources, such as insights, opinions and knowledge (Bovaird and Loeffler, 2016: 164; Weiss, Anderson and Miller, 2003: 693; Corbin and Mittelmark, 2008: 365). By exchanging these, the collaborative arrangement can develop innovative ideas that one could not develop on their own (Go Jefferies, Bishop and Hibbert, 2021: 73; Paulus, Baruah and Kenworthy, 2018: 3; Davis and Thomas, 1993: 1340; Siddiki, Kim, and Leach 2017: 863). Thus, literature suggests that the synergy of innovative idea generation is likely to be focused on pulling actors to the process for the convergence of different ideas to arrive at an innovative solution (Ansell, 2016: 42). Moreover, ensuring the participation of relevant decision-making actors is seen as a success factor so that the innovations can be carried forward (Grotenbreg and Van Buuren, 2018: 54; Touati and Maillet, 2018: 480). It can thus be expected that coordinators especially aim to include actors who possess intangible resources such as insights, expertise and decision power, and arrangements are made aiming to circulate as much ideas as possible.

Furthermore, growing interdependencies in today's society mean that government organizations no longer possess all the resources at their disposal to actually implement the innovation (Diamond and Vangen, 2017: 51; Torfing, 2019: 5). Collective implementation requires actors to work together to collectively gather resources in order to realize the innovation (Cinar, Trott and Simms, 2021: 34). Therefore, in addition to synergy regarding ideas, synergy regarding the resources to implement the innovation is associated with

enabling synergy (Bommert, 2010: 21; Loban et al., 2021: 1060; Cramm, Phaff and Nieboer, 2012: 209). For implementation, sufficient resources to implement the innovation should be brought together (Damanpour and Schneider, 2009: 497; Cinar, Trott and Simms, 2021: 34). These include mainly tangible resources such as financial means and production resources (Piening 2011: 127). It can thus be expected that network coordinators especially aim to include actors who possess tangible resources that facilitate implementation. Here, synergy occurs in the implementation phase; we will refer to these projects as 'implementation-oriented'. Innovation projects sometimes start in this phase. In that case, literature suggest that agreement for implementation is generally reached in an early phase, but actors still have to discover ways of working to come to synergy and complement each other in different aspects (Ansell, 2016: 42).

Following from these insights the following hypotheses are formulated:

Table 1: Hypothesized Coordinator's Focus to Establish Synergy in Innovation Projects

Idea generation/selection phase	Implementation phase	
Coordinators arrange the collaborative arrangement	Coordinators arrange collaborative arrangement	
based on:	based on:	
Pulling actors to the process for combining	Pulling actors to the process for their	
intangible resources, such as insights,	tangible resources, such as financial means	
opinions, decision power, and knowledge	and production resources	

Methodology

Eight cases with the aim of innovating through collaboration were examined. The cases (and the case episodes) were selected based on various criteria for inclusion and variation: (1) the cases entail arrangements involving public actors, and to the extent possible, also private actors and citizens; (2) all cases being situated in Belgium and initiated by the federal government or at least with the inclusion of a federal actor, and to the extent possible also other levels of government. (3) to avoid pro-innovation bias, we also included cases that did not materialize in innovations, or in which innovation processes were particularly difficult to manage; (4) other important criteria included comparability, originality, and accessibility of the cases. Table 2 shows the main characteristics of the cases. The cases were all medium-sized collaborative arrangements consisting of approximately 12 actors each, which were formed for the creation of a public sector innovation. One of the main differences in the projects was whether the innovative idea still needed to be developed by generating different ideas or whether the coordinators already had a clear idea as to what needed to be implemented. This provided us with the possibility of obtaining a clear view of the strategies in the two types of projects: idea-oriented and implementation-oriented. In idea-oriented projects, the collaborative arrangement was set up in order to get to know the problem at hand and to select an innovative solution and thus, the collaborative process started in an earlier stage of the innovation process. Projects starting the collaborative innovation process in the implementation phase are referred to as implementation-oriented projects. An innovative idea was chosen already in these projects and collaboration started with the goal to jointly implement the chosen idea. Two cases, Mothers in Poverty and NISP, were a mix of the two phases. In the Mothers in Poverty case local actors joined the project, shortly discussed ideas, then implemented useful ideas coming from these meetings in their own organization, and gathered every month to share experience after which new ideas were

gathered and so on. In NISP, the implementation of a new IT-tool was already decided, but attention was paid to the process of idea generation occurred to determine what the functionalities of this tool should be. A project was regarded a success when the project ended with actual implementation of the chosen innovative idea.

Table 2: Cases studied

	Type of innovation	Description	Idea / Implementtation- oriented	Resulted in innovation?
CareLab	Policy innovation	Project concerning the simplification of rules and bureaucracy for parents with a disabled child.	Idea oriented	No
Sustainability program	Policy innovation	Development of a set of actions federal administration should implement in order to reach international and national sustainability objectives.	Idea oriented	No
Connecting healthcare	Technological innovation	Development of online tool that ensures (among other things) that hospitals, general practitioners and pharmacies have easy online access to information about their patient's social rights.	Idea oriented	Yes
Mothers in poverty	Process innovation	Developing and executing a procedure for the intense guidance of groups of 15 single mothers in poverty during one year.	Mixture	Yes
National Information sharing platform (NISP)	Technological innovation	Implementation of ICT tool to unify and professionalize crisis management and emergency planning practices throughout Belgium	Mixture, but focus on implementation	Yes
Invasive species	Process innovation	Implementation of a new institutional arrangement at the federal level that organize and formalize information exchange between institutions dealing with invasive species policies across regions and communities.	Implementation- oriented	Yes
City on scheme	Process innovation	Implementation of an innovative campaign for awareness of a medication scheme	Implementation- oriented	Yes
Radicalization	Process innovation	Implementation of a plan to streamline communication between government services to detect signs of radicalization in an early phase	Implementation oriented	Yes

Source: Author

In this study, the choice was always made to examine an episode in which the actors came together to develop the specific innovation and ended with an end product; either being an innovative idea and/or the implementation of the innovation. The aim was to interview all relevant actors in the collaborative arrangement, including the network coordinator(s). In this study a coordinator is the person who is directly involved in the interactions in the collaboration and is responsible for the coordination of the 'day-to-day' management. When we selected a case and episode, we determined together with the coordinator who the relevant actors in the collaborative arrangement were. To minimize memory errors, we only included actors that were actively involved and present at the majority of meetings. The data was triangulated by comparing interview responses to each other and to compare answers with formal documents provided by the coordinator. We followed-up on respondents when we ran into inconsistencies. As the interview data was collected in the scope of an inter-university

research project with multiple researchers, we were able to examine eight cases and to conduct 84 one-hour long semi-structured interviews. For this particular study, the interviews with the coordinators were especially important as they revealed why and what strategies were used to come to a synergetic process. The interviews with the other respondents allowed us to examine what resources they brought to the process, why they participated in the process and how they experienced it.

In order to conduct the interviews a questionnaire (see Appendix 1) and a standardized data collection protocol were developed. For this study the questionnaire included questions concerning the (a) applied metagovernance strategies and (b) questions on synergy and network interactions. We rather looked at synergy as a process, than to look at the established synergy as an outcome only (Jones and Barry, 2011: 412). Therefore projects did not have to be successful in order to be synergetic. This way it was possible to get a rich understanding on the strategies that were applied during the process, how and with what aim actors were involved, and how this contributed to a synergetic process.

Four researchers conducted these interviews (the author interviewed actors from three cases, two researchers interviewed the actors from two cases, and one researcher conducted the interviews for one case). These researchers worked together on the same research project and organized weekly meetings to jointly prepare the case selection, questionnaire and data collection. Hence, they got a large mutual understanding of the subjects at hand. At the start of the data collection, some interviews were conducted by two researchers to align the interview styles and to make sure that questions were posed in the correct way and that respondents were given the same milieu in which to answer. Lastly, the research team stayed in close contact with each other during the data collection and analyzing phase to reflect on the process and to ask for clarification if needed.

Interviews were transcribed and analyzed on the main topics of this study. Metagovernance strategies were analyzed using the framework of Klijn and colleagues (Klijn, Steijn and Edelenbos, 2010: 1080) that differentiates between strategies regarding arranging the collaborative arrangement, introduction of process rules, strategies to connect actors, and strategies to explore content. Synergy was analyzed as being both a process and an outcome (Jones and Barry, 2011: 412). Hence, answers were analyzed by looking at the perception of having an effective outcome, but also at complementarity of resources, actor relationships, shared problem understanding et cetera.

Results

Two arenas of interaction were examined. Firstly, the one related to the *network* formation for synergy concerning idea generation, and secondly network formation for synergy for implementation.

Composing the collaborative arrangement for idea generation

Five projects that still (partly) had to develop the final innovative idea were studied-referred to as 'idea-oriented projects' as their process was still very open-ended and no final innovative idea was selected. Concerning network formation in these projects, coordinators usually created the collaborative arrangement from scratch based on the actors who could have different insights at the problem at hand. In four of these projects, -Carelab, Connecting Healthcare, Mothers in Poverty and NISP- coordinators composed a collaborative

arrangement (partly) from scratch based on the expertise of the actors/end-users, and whose insights into the problems at hand needed to be taken into account. For example, in the Connecting Healthcare case, it was necessary to search for hospitals and to include them because of their expertise in the matter, whereas in the CareLab case, parents were involved for including insights of the innovation's target audience. The starting point of the composition of the network in all four of these projects was the coordinator's own professional network. Coordinators asked their own professional network who they thought needed to be included in the process to capture all the different views towards the issue at hand and to come to innovative ideas. Sometimes actors from this own professional network were included in the process, other times only the suggested actors were invited. From there, a snowballing-effect happened in which participating actors proposed and invited other actors to the project.

In the idea-oriented projects almost everyone who was interested in the innovation project was allowed to join, especially when the innovation affected actors outside the governmental environment in the case of policy and process innovations. In those projects end-users were very much welcomed to join and coordinators actively reached out to actors who had to deal with the problem at hand, for example by a call to participate in newsletters or by asking already involved actors whether they knew other potentially interested actors. However, coordinators were not willing to impose any rules on the actors for exiting the project as it could deter actors to join the process. To help generate ideas, coordinators hardly imposed process rules on the actors in these networks.

Coordinators were generally pleased if actors wanted to invest their time in the process and to share their ideas and perspectives. This was especially the case in projects in which end users/citizens of the eventual innovation were included. In two of these idea-oriented projects, these were citizens who were present at the meetings because they were confronted with the problem at hand in their daily lives and invested their spare time in the project. Coordinators said they valued the input of these actors and did not want to impose any rules on them. For example, CareLab was characterized by including many different actors to generate ideas. The coordinators started the process as a thinking exercise to find an innovation solution for a problem and stimulated local actors to contribute as much as possible. Every actor who wanted to contribute was invited to join the process, and they could not be forced to stay in the process.

In the stage of idea generation, rules to join and exit the process were only imposed by the coordinator in policy or process innovations concerning internal government affairs (such as the sustainability program project and NISP). The coordinator had little influence on the composition of those collaborative arrangements as idea generation happened in either an already fixed network that used to collaborate in the past for other projects and/or participation in the project was based on the legal objective of the actors as they were responsible for the policy issue at hand. Rules for joining and exiting the process were not imposed by the coordinator, but followed from the institutional context in which the actors operated. Some actors just needed to be there because of their organizational task. Additionally, the NISP project included a private IT developer in the project as specialist knowledge was required. The coordinator had little influence on the inclusion of this actor as the developer was selected through a public procurement procedure.

As expected, collaborative arrangements in idea-oriented projects were mainly created for the purpose of idea generation and actors were thus selected on the basis of their

knowledge, insights and expertise (the in-tangible resources). Large plenary meetings were organized to generate as much ideas as possible. Coordinators hardly paid attention to the actual implementation phase that would follow later. Hence, practical resources such as production resources was not (yet) a reason to include actors. Moreover, little attention was paid to including actors that could block the process, leading to failure to implement the chosen innovative ideas in the Sustainability Programme, as the selected innovative ideas did not acquire broad support of politicians and was not implemented. Hence, coordinators generally did not anticipate on later stages of the innovation process, except in the 'mixed' projects which were goal-seeking and implementation oriented at the same time.

Table 3. Network Formation for Idea Generation

	Idea/ implementation oriented	Network formation for idea generation
CareLab	Idea-oriented	Network formation from scratch. Personal network coordinator and "snowballing" in local community
Sustainability program	Idea-oriented	Existing network based on legal statute/organizational task
Connecting healthcare	Idea-oriented	Network formation from scratch based on personal network coordinator and "snowballing"
Mothers in poverty	Mix	Network formation from scratch. Interested actors could apply to join
NISP	Mix Network formation from scratch, public procurement procedure for IT developer, ide generation open to anyone who needed to w with the new IT tool. Some actors worked to already in the past	
Invasive species	Implementation-oriented	No joint idea generation
City on scheme	Implementation-oriented	No joint idea generation
Radicalization	Implementation-oriented	No joint idea generation

Source: Author

Composing the collaborative arrangement for implementation

The transition from idea generation to implementation opens up a new arena of interaction and thus actors leave and join the process (Koppenjan and Klijn, 2010). First, the way the "idea-oriented" projects coped with this transition is discussed. One of the largest bottlenecks in cases that were idea-oriented occurred in the transition from idea generation and selection to implementation. Moving beyond this phase turned out to be hard for some projects, because shifting from generating ideas to actual implementation required actors to take on different roles. Actors were not only there to think along once in a while, but were now expected to invest practical, tangible resources, such as financial means or organizational staff. In other words, synergy based on different insights and other intangible resources had to change to synergy based on implementation.

Coordinators experienced difficulties as actors who were mainly included in the process to think along were now expected to help with implementation. Current actors did either not have the resources to implement the innovation (for example, citizens in CareLab who only wanted to think along and could not invest money or more time into the project) or actors who blocked the process were not included in this phase (Sustainability Program). In sum, actors for idea generation were hardly selected with eventual implementation of the

innovative idea in mind. Coordinators either had to include new actors in the process or needed to strengthen the commitment towards the innovation, so actors would be willing to invest practical resources for implementation into the project.

Table 4. Network Formation for Implementation

	Idea/ implementation oriented	Network formation implementation	
CareLab	Idea-oriented	Trying to add actors with practical resources. Implementation failed	
Sustainability program	Idea-oriented	No implementation occurred	
Connecting healthcare	Idea-oriented	Trying to add actors with practical resources	
Mothers in poverty	Mix	Same actors	
NISP	Mix	Same actors	
Invasive species	Implementation-oriented	Existing network based on legal statute	
City on scheme	Implementation-oriented	Small core group knew each other. Surrounding local network was created for this innovation. Actors only allowed to join when they wanted to invest resources	
Radicalization	Implementation-oriented	Existing network based on legal statute	

Source: Author

Implementation-oriented projects almost did not have to cope with the transition from idea generation to implementation. Coordinators of these implementation-oriented project hardly created a network based on complementary insights for idea generation. Coordinators led the collaborative arrangement towards an already known end product, that was developed by a ministry (Radicalization), the coordinator herself (City on Scheme) or politicians (Invasive Species). Hence, it can be argued that these projects skipped the collective idea generation phase to determine the end product and had a different starting point. The coordinator's role in enabling synergy for implementation is more modest when it comes to composing the network. In the majority of cases existing networks were used to develop the innovation, the legal statute of the organization required that the organization was involved, or some public organizations had to cooperate because the innovation belonged to the portfolio of their political superior. Thus, coordinators hardly formed networks from scratch with the goal to combine different resources. In three cases of the implementation-oriented projects it was already largely determined who was going to work together, simply because the innovation was part of the policy domain of the involved actors and actors had to participate because of their (legal or political) responsibility towards the problem at hand. Hence, the innovation project did not start by a coordinator selecting actors based on their different perceptions and resources, but collaboration was based on the formal task of the organization. The composition was the collaborative arrangement was a matter of hands-off institutional design with little influence of the day-to-day hands-on coordinator. However, the coordinator did include other actors in all cases that reached the implementation phase. These actors were selected whether they could block the process and if were absolutely necessary

for implementing the idea that was already known up front and not one developed in collaboration with other actors. Therefore, these projects contained the actors who could implement the innovation quickly and were from the start of the process aware that they had to invest resources in the project. Hence, to create synergy for implementation, actors were selected on a less open-ended basis. Actors participating in this process had to actually contribute something to the implementation, otherwise they were not admitted to the process. On the one hand, this was because they had to be there from their statute, but in one case (City on Scheme) it was a rule set by the coordinator.

Complementarity of resources was based on both intangible and tangible resources. Synergy of financial resources was not necessary to create because a predefined (legal) allocation key had often already been agreed upon and was either based on the legal task of the organization or the (home organization of the) coordinator ensured sufficient financial means. Actors who voluntarily joined the process were never asked to provide financial resources. Recombining resources was less of a group process that included all actors. Instead, subgroups were regularly created by the coordinator to combine resources. Instead of bringing together a diverse set of actors to explore ideas in a plenary meeting, subgroups were characterized by sort-like actors with a same background (for example legal advisors from different organizations in the Invasive Species cases) to make a plan to implement the chosen idea and to share specialist knowledge. Hence, the coordinator applied connecting strategies to connect actors with complementary resources to each other, and did not focus on large plenary meetings to explore all possible ideas.

Discussion

Synergy is often described as a crucial part for successful network outcomes and is enabled through an interplay of various different determinants, such as the combination of resources (Weiss, Anderson and Miller, 2003: 693; Ansell and Torfing, 2014:11). For that reason, this study examined network formation for the combination of resources with the goal of increasing the power of these resources by combining them (Gray and Ren, 2014: 127). More specific, how coordinators compose collaborative arrangements aimed at public sector innovation to establish synergy concerning idea generation and implementation.

It was hypothesized that coordinators of idea-oriented projects try to establish a synergetic process by composing the collaborative arrangement by pulling actors to the process to combine intangible resources, such as insights, opinions, and knowledge (Hartley, Sørensen and Torfing, 2013: 822). This hypothesis can be partly confirmed and is in line with the prevailing idea in the literature that collaboration with a diverse set of actors is an important enabler for both synergy and innovation (Corbin, Jones and Barry, 2018: 6; Siddiki, Kim, and Leach 2017: 863; Ansell and Torfing, 2014). However, it was found that actors who could block the process or help the process forward were not included.

Next, it was hypothesized that coordinators of implementation-oriented projects try to establish a synergetic process by arranging the collaborative arrangement based on pulling actors to the process for their tangible resources, such as financial means and production resources. This second hypothesis can also only partly be confirmed. We found that coordinators in implementation-oriented projects had limited influence on the composition of the collaborative arrangement. Although they could adjust the composition of the network, the composition of the collaborative arrangement was not entirely driven by the desire to

create a synergetic process among all actors, but rather "to get things done" for example, by having frequent one-on-one contact with certain actors. It was found that actors were indeed attracted for their tangible resources in the implementation-oriented projects, but also to some extent intangible resources. Interestingly, collaborating to combine financial means was never a main goal to invite actors because sufficient financial means were already available before the collaboration started.

Table 5. Summarized Results

Idea generation/selection phase Implementation phase Focus on both tangible and intangible resources to Focus on intangible resources to create a synergetic process by combining as many insights as possible. implement the innovation. Coordinator's main strategies: Coordinator's main strategies: Minimal arranging strategies as push factors Pulling actors to the process from own network and/or "snowballing" drive actors to collaborative arrangement Limited entrance and exit rules to make (for example, because of the task of the process easy accessible (except for organization) governmental policy or process innovations) Entrance rules mostly based on legal statute Limited commitment of actors required to and (non-financial) resources make participation appealing. Less focused on collective synergetic process, more focused on one-on-one or Limited focus on actors who can block the small group interactions to "get things process or help the process forward done" and to direct actors to the end goal Focus on actors who can block the process or help the process forward

Source: Author

This study is one of the firsts to empirically apply the concept of synergy in the context of public sector innovations and that differentiates between different phases of the process (Lasker, Weiss, and Miller, 2001: 183; Corwin, Corbin and Mittelmark, 2012: 4; Cramm, Phaff and Nieboer, 2012: 209; Loban et al., 2021: 1060). It is the one of the first studies that shows by examining eight cases how a clear distinction between phases leads to a different way of arranging collaborative arrangements in public sector innovation projects and how this affects the way synergy is established. Moreover, being one of the first studies to make the distinction between idea-oriented and implementation-oriented projects, an interesting tension is uncovered (Hartley, Sørensen and Torfing, 2013: 822). The findings show that idea-oriented projects are aimed at having synergy by pulling actors to the process and combining intangible resources in the first stage of the innovation process, which is beneficial for a synergetic process in which innovative ideas can be developed (Loban et al., 2021: 1060). However, the coordinators' decision to freely add actors without expecting real obligations during idea generation turned out to be a crucial bottleneck and even led to no implemented synergetic outcomes (Weiss, Anderson and Miller, 2003: 693). This is in line with research arguing that actors who are pulled to the collaborative arrangement to search for synergy are more likely to enjoy early agreement on general goals, but can face difficulties when concrete agendas for implementation are set (Ansell, 2016: 42).

Contrary, concerning implementation-oriented projects, it was found that the coordinator often only has limited influence on the composition for the implementation of the innovations and that creation of as much synergy as possible is not always the main goal of the collaboration. One can argue whether the implemented solution is very innovative and deals with the problem at hand as we found that coordinators often have to act within a certain collaborative arrangement of fixed actors and no shared idea generation took place.

Hence, only a limited synergetic process could be established (Jones and Barry, 2011). Coordinators of these collaborative arrangements must apply other coordinating strategies in order to create as much synergy as possible within the group of fixed actors (Klijn, Van Meerkerk and Edelenbos, 2020: 151; Agger and Sørensen, 2018: 58).

These findings are therefore valuable for practitioners as they indicate that coordinators should preferably go back-and-forth between idea generation and implementation for the optimal innovative result. The projects which are referred to as "mix between idea orientation and implementation" handled this well as attention was paid to the eventual implementation phase already when generation ideas. This means that actors that are absolutely necessary for implementation should already be attracted in the idea generation phase. Contrary, the coordinator in implementation-oriented projects should not be blind to perceptions of actors who cannot actively contribute to implementation but can still provide valuable ideas for the end product. Thus, the coordinator should have the ability to divert from the initial idea. The projects which are referred to as mix between goal-seeking and implementation seem to be a good example of this strategy.

Future research could focus on the interactions in the collaborative arrangements once they have been established. With this study, light was shed on the way actors are brought together, but not how actors are ideally integrated in the collaborative arrangement and how they best interact with each other. Future research can examine how actors should ideally interact with each other (such as the type of network structure) once they have been brought together to have the most effective (innovative) outcomes and how that relates to the resources of these actors and/or the phase in the innovation process. Moreover, the findings suggest that the type of innovation (for example, policy or process innovations) might be of influence on the way coordinators are able to arrange the collaborative arrangement. Future research should differentiate more between the different types of innovation and metagovernance strategies.

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References:

Ansell, Christopher & Jacob Torfing. 2014. "Collaboration and Design: New Tools for Public Innovation." Pp. 1-19, chapter 1 in Christopher Ansell & Jacob Torfing (eds). *Public Innovation through Collaboration and Design*. New York, N.Y.: Routledge.

Ansell, Christopher. 2016. "Collaborative Governance as Creative Problem-Solving." Pp. 35-53, chapter 2 in Jacob Torfing & Peter Triantafillou (eds). *Enhancing Public Innovation by Transforming Public Governance*. Cambridge: Cambridge University Press.

Arundel, Anthony, Carter Bloch & Barry Ferguson. 2019. Advancing Innovation in the Public Sector: Aligning Innovation Measurement with Policy Goals. *Research Policy*, 48(3): 789-798.

Agger, Annika & Eva Sørensen. 2018. Managing Collaborative Innovation in Public Bureaucracies. *Planning Theory*, 17(1): 53-73.

Bommert, Ben. 2010. Collaborative Innovation in the Public Sector. *International Public Management Review*, 11(1): 15-33.

Bovaird, Tony & Elke Loeffler. 2016. "Bringing the Resources of Citizens into Public Governance: Innovation through Co-Production to Improve Public Services and Outcomes". Pp. 160-177 In *Enhancing Public Innovation by Transforming Public Governance*. Cambridge, UK: Cambridge University Press.

Bressers, Nancy. 2014. "The Impact of Collaboration on Innovative Projects: a Study of Dutch Water Management." Pp. 89-106 in Christopher Ansell & Jacob Torfing. *Public Innovation through Collaboration and Design*. New York, N.Y.: Routledge.

Caragliu, Andrea & Chiara Del Bo. 2019. Smart Innovative Cities: The Impact of Smart City Policies on Urban Innovation. *Technological Forecasting and Social Change*, 142: 373-383.

Chen, Jiyao, Richard Walker & Mohanbir Sawhney. 2020. Public Service Innovation: a Typology. *Public Management Review*, 22(11): 1674-1695.

Cinar, Emre, Paul Trott & Christopher Simms. 2021. An International Exploration of Barriers and Tactics in the Public Sector Innovation Process. *Public Management Review*, 23(3): 326-353.

Corbin, J. Hope, Maurice B. Mittelmark & Gro Th. Lie. 2013. Mapping Synergy and Antagony in North–South Partnerships for Health: a Case Study of the Tanzanian Women's NGO KIWAKKUKI." *Health Promotion International*, 28(1): 51-60.

Corbin, Hope, Jacky Jones & Margaret Barry. 2018. What Makes Intersectoral Partnerships for Health Promotion Work? A Review of the International Literature. *Health Promotion International*, 33(1): 4-26.

Corwin, Lise, Hope Corbin, and Maurice Mittelmark. 2012. Producing Synergy in Collaborations: A Successful Hospital Innovation. *The Innovation Journal: The Public Sector Innovation Journal*, 17(1), article 5. http://www.innovation.cc/scholarly-style/2012_17_1_5_corwin_hospital-synergy.pdf

Cramm, Jane M., Sanne Phaff & Anna P. Nieboer. 2013. The Role of Partnership Functioning and Synergy in Achieving Sustainability of Innovative Programmes in Community Care. *Health & Social Care in the Community*, 21(2): 209-215.

Crosby, Barbara C., Paul 't Hart, and Jacob Torfing. Public Value Creation through Collaborative Innovation. *Public Management Review*, 19(5): 655-669.

Damanpour, Fariborz & Marguerite Schneider. 2009. Characteristics of Innovation and Innovation Adoption in Public Organizations: Assessing the Role of Managers. *Journal of Public Administration Research and Theory*, 19(3): 495-522.

Davis, Rachel & L.G. Thomas. 1993. Direct Estimation of Synergy: A New Approach to the Diversity-Performance Debate. *Management Science*, 39(11): 1334-1346.

De Vries, Hannah, Victor Bekkers & Lars Tummers. 2016. Innovation in the Public Sector: A Systematic Review and Future Research Agenda. *Public Administration*, 94(1): 146-166.

Diamond, Janet & Siv Vangen. 2017. Coping with Austerity: Innovation via Collaboration or Retreat to the Known? *Public Money & Management*, 37(1): 47-54.

Frow, Pennie, Suvi Nenonen, Adrian Payne & Kaj Storbacka. 2015. Managing Co-creation Design: A Strategic Approach to Innovation. *British Journal of Management*, 26(3): 463-483.

Geuijen, Karin, Mark Moore, Andrea Cederquist, Rolf Ronning & Mark van Twist. 2017. Creating Public Value in Global Wicked Problems. *Public Management Review*, 19(5): 621-639.

Gjaltema, Jonna, Robbert Biesbroek & Katrien Termeer. 2020. From Government to Governance... to Meta-Governance: a Systematic Literature Review. *Public Management Review*, 22(12): 1760-1780.

Go Jefferies, Josephine, Simon Bishop & Sally Hibbert. 2021. Service Innovation Through Resource Integration: An Empirical Examination of Co-Created Value using Telehealth Services. *Public Policy and Administration*, 36(1): 69-88.

Gray, Barbara and Hong Ren. 2014. "The Importance of Joint Schemas and Brokers in Promoting Collaboration for Innovation." Pp. 125-148 in Christopher Ansell & Jacob Torfing, *Public Innovation through Collaboration and Design*. New York, N.Y.: Routledge.

Grotenbreg, Sanne, & Arwin van Buuren. 2018. Realizing Innovative Public Waterworks: Aligning Administrative Capacities in Collaborative Innovation Processes. *Journal of Cleaner Production*, 171: S45-S55.

Hartley, Jean. 2005. Innovation in Governance and Public Services: Past and Present. *Public Money and Management*, 25(1): 27-34.

Hartley, Jean, Eva Sørensen & Jacob Torfing. 2013. Collaborative Innovation: A Viable Alternative to Market Competition and Organizational Entrepreneurship. *Public Administration Review*, 73(6): 821-830.

Jones, Jacky & Margaret Barry. 2011. Exploring the Relationship between Synergy and Partnership Functioning Factors in Health Promotion Partnerships. *Health Promotion International*, 26(4): 408-420.

Keum, Dongil & Kelly See. 2017. The Influence of Hierarchy on Idea Generation and Selection in the Innovation Process. *Organization Science*, 28(4): 653-669.

Klijn, Erik Hans, Ingmar van Meerkerk & Jurian Edelenbos. 2020. How do Network Characteristics Influence Network Managers' Choice of Strategies?. *Public Money & Management*, 40(2): 149-159.

Koppenjan, Joop and Erik Hans Klijn. 2004. *Managing Uncertainties in Networks: a Network Approach to Problem Solving and Decision Making*. London, England: Psychology Press.

Lasker, Roz, Elisa Weiss, & Rebecca Miller. 2001. Partnership Synergy: a Practical Framework for Studying and Strengthening the Collaborative Advantage. *The Milbank Quarterly*, 79(2): 179-205.

Lewis, Jenny, Lykke Margot Ricard & Erik Hans Klijn. 2018. How Innovation Drivers, Networking and Leadership Shape Public Sector Innovation Capacity. *International Review of Administrative Sciences*, 84(2): 288-307.

Loban, Ekaterina, Catherine Scott, Virginia Lewis, Susan Law & Jeannie Haggerty. 2021. Activating Partnership Assets to Produce Synergy in Primary Health Care: A Mixed Methods Study. *Healthcare*, 9(8):1060-1093.

Lopes, Andre Vas & Josivania Silva Farias. 2022. How can Governance Support Collaborative Innovation in the Public Sector? A Systematic Review of the Literature. *International Review of Administrative Sciences*, 88(1): 114-130.

Mazzucato, Mariana & Caetano CR Penna. 2016. Beyond Market Failures: The Market Creating and Shaping Roles of State Investment Banks. *Journal of Economic Policy Reform*, 19(4), 305-326.

Mazzucato, Mariana, Rainer Kattel & Josh Ryan-Collins. 2020. Challenge-Driven Innovation Policy: Towards a New Policy Toolkit. *Journal of Industry, Competition and Trade*, 20(2): 421-437.

Mergel, Ines & Kevin Desouza. 2013. Implementing Open Innovation in the Public Sector: The Case of Challenge.Gov. *Public Administration Review*, 73(6), 882-890.

Meijer, Albert Jacob. 2014. From Hero-Innovators to Distributed Heroism: An In-Depth Analysis of the Role of Individuals in Public Sector Innovation. *Public Management Review*, 16(2): 199-216.

Osborne, Stephan & Louise Brown. 2011. Innovation, Public Policy and Public Services Delivery in the UK. The Word that would be King? *Public Administration*, 89(4): 1335-1350.

Paulus, Paul, Jonali Baruah & Jared Kenworthy. 2018. Enhancing Collaborative Ideation in Organizations. *Frontiers in Psychology*, 9: 1-12.

Piening, Erk. 2011. Insights into the Process Dynamics of Innovation Implementation: The Case of Public Hospitals in Germany. *Public Management Review*, 13(1): 127-157.

Raftery, Philomena, Mazeda Hossain & Jennifer Palmer. 2022. A Conceptual Framework for Analysing Partnership and Synergy in a Global Health Alliance: Case of the UK Public Health Rapid Support Team. *Health Policy and Planning*, 37(3): 322-336.

Scharpf, Fritz. 1978. "Interorganizational policy studies: Issues, Concepts and Perspectives." Pp. 345-370. In Kenneth Hanf & Fritz Scharpf (Eds.), *Interorganizational Policy Making*. London, UK: SAGE.

Seo, Inhee, Yonghee Kim & Jeongil Choi. 2018. Assessment of Efficiency in Public Service—Focused on Government 3.0 Case in Korea. *Total Quality Management & Business Excellence*, 29(9-10): 1161-1184.

Siddiki, Saba, Jangmin Kim & William Leach. 2017. Diversity, Trust, and Social Learning in Collaborative Governance. *Public Administration Review*, 77(6): 863-874.

Skelcher, Christopher & Jacob Torfing. 2010. Improving Democratic Governance through Institutional Design: Civic Participation and Democratic Ownership in Europe. *Regulation & Governance*, 4(1): 71–91.

Sørensen, Eva, & Jacob Torfing. 2011. Enhancing Collaborative Innovation in the Public Sector. *Administration & Society*, 43(8): 842-868.

Sørensen, Eva & Jacob Torfing. 2017. Metagoverning Collaborative Innovation in Governance Networks. *The American Review of Public Administration*, 47(7): 826-839.

Stevens, Vidar & Koen Verhoest. 2016. How to Metagovern Collaborative Networks for the Promotion of Policy Innovations in a Dualistic Federal System? *The Innovation Journal: The Public Sector Innovation Journal*, 21(2), article 2. https://innovation.cc/scholarly-style/2016 21 2 2 stevens-verhoest metagovern-network.pdf

Torfing, Jacob. (2019). Collaborative Innovation in the Public Sector: The Argument. *Public Management Review*, 21(1): 1-11.

Touati, Nassera, & Lara Maillet. 2018. Co-Creation within Hybrid Networks: What can be Learnt from the Difficulties Encountered? The Example of the Fight Against Blood-and Sexually-Transmitted Infections. *International Review of Administrative Sciences*, 84(3): 469-485.

Voets, Joris & Filip De Rynck. 2008. Contextualising City-Regional issues, Strategies and their Use: The Flemish Story. *Local Government Studies*, 34(4): 453-470.

Voorberg, William, Victor Bekkers & Lars Tummers. 2015. A Systematic Review of Co-Creation and Co-Production: Embarking on the Social Innovation Journey. *Public Management Review*, 17(9): 1333-1357.

Vlados, Charis & Dimos Chatzinikolaou. 2019. Crisis, Institutional Innovation and Change Management: Thoughts from the Greek case. *Journal of Economics and Political Economy*, 6(1): 58-77.

Walker, Richard. 2006. Innovation Type and Diffusion: An Empirical Analysis of Local Government. *Public Administration*, 84(2): 311-335.

Waldorff, Susanne Boch, & Kristensen, Lone. 2014. "The Complexity of Governance: Challenges for Public Sector Innovation." Pp. 88-106 In Christopher Ansell & Jacob Torfing (eds). *Public Innovation through Collaboration and Design*. New York, N.Y.: Routledge.

Wandersman, Abraham, Robert M. Goodman & Frances D. Butterfoss. 1997. Understanding Coalitions and How they Operate. Pp. 261-277 in Meredith Minkler (Ed.), *Community Organizing and Community Building for Health*. New Brunswick, NJ: Rutgers University Press.

Wegrich, Kai. 2019. The Blind Spots of Collaborative Innovation. *Public Management Review*, 21(1): 12-20.

Weiss, Elisa S., Rebecca Miller Anderson & Roz D. Lasker. 2002. Making the Most of Collaboration: Exploring the Relationship between Partnership Synergy and Partnership Functioning. *Health Education & Behavior*, 29(6): 683-698.

Yang, Kaifeng. 2016. Creating Public Value and Institutional Innovations across Boundaries: An Integrative Process of Participation, Legitimation, and Implementation. *Public Administration Review*, 76(6): 873-885.

Appendix 1 Interview protocol

Introduction

- 1. Can you briefly introduce yourself?
- 2. What was your role in the project?
- 3. What is your job within your own organization?

Network and synergy

- 4. Did you have any expectations regarding the innovation? Have your expectations been met? Why (not)?
- 5. To what extent do you support the outcome of the collaborative process?
- 6. How and why were you involved in the collaborative process?
- 7. Next to information, which resources did you share with which actor to support the process in the collaborative arrangement? (think of financial resources, staff time, working time, support in terms of communication platforms or access to service delivery platforms, research and analytical tools)
- 8. With which actors have you worked before?
- 9. With whom did you interact most frequently? Why?
- 10. Who were the most important actors? Why were they the most important actors?

Metagovernance strategies

- 11. Have some measures been taken to create a process to come to successful collaboration between actors? Which ones?
- 12. Do you feel that they contributed to a better relationship with the other actors?
- 13. Do you feel that they contributed to a more effective process in terms of developing new ideas, selecting ideas, implementation, or diffusion?
- 14. In what way? (e.g. better communication, more trust, shared problems understanding)