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Reconfiguring the governance of inter-organizational projects: Micro-level analysis of the
UK Grand Challenges

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Abstract

The governance of networks that deliver inter-organizational projects is composed of agents (e.g., programme managers) and structures (e.g., Integrated Project teams (IPTs), governance boards). While extant research investigated networks characterized by a stable governance form, we consider the impact of an adapting governance form across the network lifecycle to make governance more efficient (in terms of duplication of outputs) and effective (in terms of resolution for action). This study uncovers the reconfiguration process of network governance and explains why and how the network governance is adapted into a new form. Building on practice theory and leveraging a longitudinal ethnographic research design, we study the dynamics of agents and structures at the network level. We find that reconfiguration is an exceptional, ad-hoc practice, mobilized to ensure that network governance is adapted to remain fit for purpose. First, our findings trace governance reconfiguration to changes in board effectiveness and IPTs task performance. Second, we report on the dynamics among agents and organizational structures in a bidirectional model that leads to the enactment of reconfiguration. Third, reconfiguration ends when frequent changes in board effectiveness and IPTs task performance are realigned, resulting in adapting the network governance form. We derive three propositions to elaborate theory that explains how organizational structures and human interactions interact during reconfiguration to adapt the governance of networks that deliver inter-organizational projects.

1 Introduction

Inter-organizational projects (IOPs) are long-lived, innovative, and multi-phased, requiring transactions with a complex and evolutionary network of stakeholders (Mishra, Chandrasekaran and MacCormack, 2015) that are designed to deliver grand challenges (Ika and Munro, 2022). In operations management, IOPs relationships are described in terms of how they are *designed*. Gil & Fu (2022) explain how the network governance is continuously subject to incremental changes affecting its components, e.g., resources, structures, and governance mechanisms. Such incremental changes occur due to the dynamic nature of the IOPs (Ramasesh and Browning, 2014) and their large and changing network of stakeholders.

Mishra et al.(2015) showcased how governance works in normative terms, e.g., on the *design* of collaborative processes and supply chains. The design of evolving governance affords incremental changes that are *ordinary and continuous* and can be anticipated and included in the design of IOPs. Instead, few studies, e.g., (Fernandes, Spring and Tarafdar, 2018), examine how activities are carried out within these designs, i.e., how things get done using on-the-spot judgement at the micro-level (Okhuysen and Bechky, 2009).

IOPs performance issues emerge if the governance is not *reconfigured* when needed (Oliveira and Lumineau, 2017). Such was the case in our study, where, two years after its initiation, the UK Grand Challenges (UKGC) network governance had grown across several branches of the UK government, and new layers of governance were being added, resulting in inefficiencies triggering a need for reconfiguration that resulted in the governance reaching a new baseline. Gil & Fu (2022) showed the importance of unanticipated governance adaptations and traced cost escalation to fundamental changes in project governance structure and renegotiations of the value to be created and later distributed. However, it is unclear: (A) what triggers the reconfiguration of the network governance and what terminates it; (B) the extent to which components of the network governance, such as agents (e.g., programme managers) and structures (e.g., boards, IPTs) (Williamson, 1993) are subject to change; and, (C) how the change in these components impacts the network governance system and affects delivering IOPs.

Against this backdrop, we derived our research question: “*How do network governance components such as agents (programme managers) and structures (boards, integrated project teams) interact during reconfiguration?*” Our research is grounded on a particular network setting: the UKGC. We have examined the governance reconfiguration through an ethnographic field study at the start, during, and end of reconfiguration. The unit of analysis is the reconfiguration process of the network governance.

The main contribution of this study is: reconfiguration may be an exceptional, ad-hoc practice mobilized to ensure the network governance - which evolved over time – is reconfigured to be fit for purpose. This finding is of importance to the network governance literature and contributes to our understanding of how the network governance evolves beyond its initial design specification. Recent evidence in the literature documents that the evolution of the governance is subject to an ever increase bringing stakeholder groups “in” and inviting them to create value jointly (Gil and Fu, 2022). Despite the evidence mentioned, we still not know the governance dynamics involved to reconfigure the governance into a new baseline. Specifically, we identify that the network governance is reconfigured into a new baseline because of changes in terms of board effectiveness and IPTs task performance. By employing a temporal bracketing strategy (Langley, 1999) to analyse the reconfiguration process at the start, during, and end of reconfiguration, we were able to derive a process model of network

governance reconfiguration. The model explains the actions of programme managers to reconstitute structures of the governance system – boards and IPTs. This allowed us to showcase how actions of one period lead to changes in the network governance that will affect both action and structures in the subsequent periods. Finally, we develop three propositions to advance the literature of network governance.

2 A practice view of the network governance

We conceptualize the network governance from a practice perspective (Feldman and Orlikowski, 2011; Sandberg and Tsoukas, 2011) and consider three central components before describing the governance system comprised of all three.

Programme managers activities. In reconfiguration, programme managers engage in *upward influence* and *downward influence activities*. In upward influence activities, programme managers engage in sensemaking and sense-giving, selling the benefits of reconfiguration to the top management (Rouleau and Balogun, 2011; Balogun and Rouleau, 2017). In downward influence activities, programme managers promote reconfiguration to operational managers and staff (Wooldridge, Schmid and Floyd, 2008). We observed the frequency (high, moderate, low) and the degree of formality of the activities enacted upwards or downwards.

Board effectiveness. Board effectiveness includes *control* (McGrath and Whitty, 2019) and *communication* (Kloppenborg, Tesch and Manolis, 2014). Control refers to the role of boards in monitoring project progress and performance (Krause, Semadeni and Cannella, 2013) and the role of boards in solving problems and providing directions when dealing with emerging issues (Loch, Mähring and Sommer, 2017). Communication refers to providing advice and guidance to management (Krause, Semadeni and Cannella, 2013). It provides an appropriate network and necessary data to all key actors in the project implementation (Somers and Nelson, 2004).

IPTs task performance. We measure three dimensions: *coordination* (Fernandes, Spring and Tarafdar, 2018), *mutual knowledge* (Caldwell, Roehrich and George, 2017), and *tool-purpose alignment* (Aysolmaz and Reijers, 2021). For coordination, we measure changes in both formal and informal coordination. Formal coordination includes plans, hierarchy, procedures, manuals, and routines, and are usually planned and institutionalized throughout an organization. Informal coordination emerges from individuals and are usually non-planned and non-institutionalized. They include creative solutions, mutual adjustments, informal means of interaction (Fernandes, Spring and Tarafdar, 2018). Mutual knowledge refers to the knowledge the IPTs share and knows they share (Kotha, George and Srikanth, 2013). Tool-purpose alignment affords us to examine a tool's appropriate use for a particular purpose.

In summary, the practice perspective explains that the three components of the network governance are interdependent, and this dependence is subject to change. We studied the dynamics between agents and structures during reconfiguration to understand movements in one component and system-wide (Figure 1).

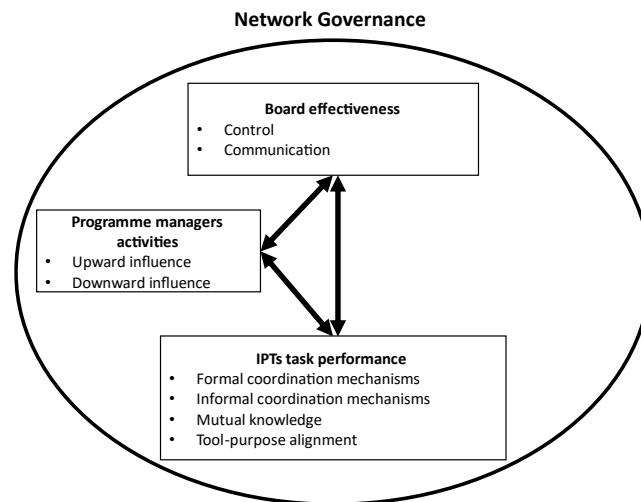


Figure 1. Conceptual model of network governance

3 Methodology

This study leverages an longitudinal ethnographic approach (Creswell, 2007) and our reasoning is abductive (Locke, Golden-Biddle and Feldman, 2008). The study's theoretically exemplar case is the UK Grand Challenges (UKGC). The UKGC was set out in the UK government's Industrial Strategy white paper (HM Government, 2017) (Table 1). The industry-led programme funded by January 2021 includes 1,613 projects with an overall budget of \$7.78 billion (National Audit Office, 2021). Multiple organizations (from the public, private, industrial, for-profit, and non-profit domains) worked jointly to support on four challenges (Ageing Society, Future of Mobility, Artificial Intelligence and data, and Clean Growth), ensuring that the UK takes advantage of major global changes, improving people's lives and the country's productivity. This setting offers a unique opportunity to study the reconfiguration of an evolving network governance.

Table 1. Case summary information

Case	UK Grand Challenges
UKGC	Artificial intelligence and data; Clean Growth; The Future of Mobility; Ageing Society
Estimated budget	\$7.78 billion
Main organizations involved	Ministerial, government departments, for-profit and non-profit organizations
No. of governance boards observed	Initially, 8 growing to 33 at the time of investigation

3.1 Data collection

Our study benefited from a combination of evidence sources. The lead author was based in the UKGC programme from February to September 2019 and conducted ethnographic fieldwork to observe the actors' daily operations. Primary data consisted of: Interviews: #33,

Workshops: #3 (40, 12 and 40 participants, respectively) to test and verify findings, Meeting minutes #36, Email exchange: #86. Archival data #57.

Interviews. Since our interest was at the network governance level, 33 individuals working at the UKGC were interviewed. The director of the UKGC was the sponsor of this project and granted the team access to the initial interviewees. We also used snowballing sampling to identify additional interviewees. The selected interviewees represented all three layers (top, middle, operational level management staff), e.g., we interviewed Directors, Deputy Directors, Programme managers, Project managers, Policy advisers, Policy analysts, and Programme officers (See Appendix 1).

Workshops. Three workshops took place throughout the study's duration. The purpose of the first workshop (February 2019) was to discuss thoughts on individual Grand Challenges and cross-Grand Challenges work. IPTs and programme managers representatives across the four Grand Challenges attended the workshop. The purpose of the second workshop (April 2019) was to report on the initial findings regarding the existing state of the governance and change recommendations. Programme managers and programme officers attended this workshop and provided feedback. The purpose of the third workshop (May 2019) was to review and verify the study's findings and accept proposed changes to the governance. Again, IPTs and programme managers representatives across the four Grand Challenges attended the workshop and provided feedback.

Meeting minutes. The research team was granted access to participate in 36 meetings where reconfiguration was part of the agenda. Participants of these meetings were deputy directors, middle managers, and IPTs members across the four Grand Challenges.

Email exchange. Email exchange (86) was a valuable source of data and provided complementary insights. This source helped establish how project participants made sense of key events during the reconfiguration process and improved the study's validity via triangulation.

Archival data. We had access to confidential archival data (57) relevant to the governance of the UKGC such as numerous previous versions of the UKGC governance, PowerPoint presentations related to the IOPs, draft policy papers, organograms of IPTs, Terms of Reference for most boards, progress reports of the IPTs, and programme packs.

3.2 Data analysis

For the analysis we operationalized a systematic combining approach (Dubois and Gadde, 2002). The *analytical framework* (Dubois and Gadde, 2002, p. 558) was highly iterative and emergent, involving several rounds of coding and frequent reference to the literature to sensemake the vast available data (Miles and Huberman, 1994).

We organized our longitudinal study using three 'temporal brackets', namely, we studied reconfiguration of network governance in real-time as it evolved: start-reconfiguration, reconfiguration, end-reconfiguration (Langley, 1999). In addition, emergent specification of components (programme managers, boards, IPTs) helped shape the design of our theory-building research (Eisenhardt, 1989). Temporal bracketing (start-reconfiguration, reconfiguration, end-reconfiguration) helped address our research question regarding the recurrence of the three investigated components over time. Therefore, we can show for each of the three components its transition longitudinally across the three brackets, and collectively, their impact on the network governance.

Data analysis was operationalized in two phases. The first phase provided a longitudinal analysis of the three components. In the second phase, we analyzed the relationships among the three components. For both phases, we used content analysis and text-mining techniques. The detailed analysis of our codings is shown in Table 2, and the results of our framework are in Table 3-Table 5.

Table 2. Data coding structure

Components	Dimension	Definition
Programme managers activities	Upward influence	Activities in terms of sensemaking and sensegiving
	Downward influence	Activities that promote restructuring to operational managers and staff; activities of strategy implementation.
Board effectiveness	Control	Monitoring project progress and performance and guiding managers' decisions
	Communication	Providing advice and guidance to management
IPTs task performance	Formal coordination	Examples include plans, hierarchy, procedures, manuals, and routines
	Informal coordination	Examples include creative solutions, mutual adjustments, informal means of interaction
	Mutual knowledge	Knowledge that the IPTs share and know they share
	Tool-purpose alignment	Examines a tool's appropriate use for a particular purpose

3.3 Research setting

Two years since its initiation, the UKGC governance had grown across several branches of the UK government, and new layers of governance were being added (Figure 2) resulting in inefficiencies as reflected in a report by the Comptroller and Auditor General:

“While stakeholders we interviewed were positive about many aspects of the challenge process a number raised concerns about the time taken to ultimately approve projects. A number suggested that an elongated timetable for approvals is not aligned with supporting innovative projects and has had a negative impact on a project’s ability to start.” (National Audit Office, 2021).

Internally, the programme managers and IPTs wanted to optimize the overarching governance. As a result, an internal investigation was commissioned: *“To ensure we are optimizing the programme delivery, we reviewed the current governance structures and evaluated where we can make improvements to ensure we are using programme governance effectively to streamline and support decision making.”* (Internal document).

The investigation identified several challenges in the current governance structure. Overall, it found that the process for decision making and escalation routes through the various governance structures could be clearer and there was a lack of understanding of the roles and dynamics between different boards. For example, the “Grand Challenge Programme Board”

and the “Industrial Strategy Programme Board” or the “Delivery Group” and the “Industrial Strategy Implementation Taskforce board”.

To overcome the inefficiencies mentioned in the (National Audit Office, 2021) report, internally, the programme managers and IPTs sought to reconfigure the overarching governance. As a result, an internal investigation was commissioned: *“To ensure we are optimizing the programme delivery, we reviewed the current governance structures and evaluated where we can make improvements to ensure we are using programme governance effectively to streamline and support decision making.”* (Internal document).

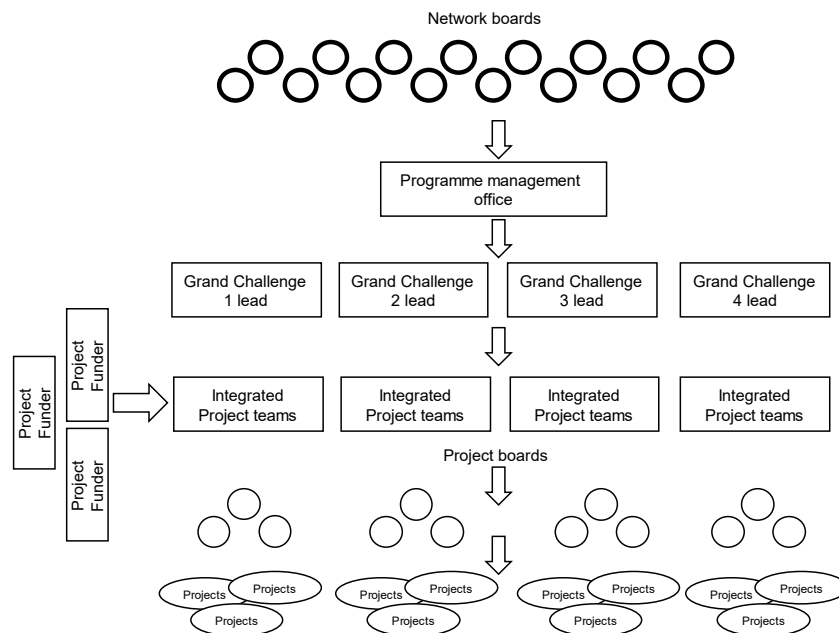


Figure 2. Network governance structure of the UKGC

Following an internal investigation, four governance issues were identified:

- Grand Challenges governance is not hierarchical, which can lead to confusion about how to escalate decisions to the right level/board;
- Requests for decision resolution were not escalated to the appropriate level of decision-making which leads to unclear resolutions or actions;
- Overload of reporting from multiple IPTs teams obscured the control for actions and duplication of reporting requests.
- Some boards have unclear remit of objectives and actions which leads to confusion about how to use them and what decisions they can make.

In Section 4 we elaborate on these points and also explain the rationale and actions taken by those involved in the programme (programme management team, IPTs) to reconfigure the governance to become more efficient and effective.

4 Findings

First, we provide a longitudinal analysis of the three components that emerged from our analytical framework: Project Managers activities, board effectiveness, IPTs task performance.

For each component we explain the transition of from one phase to the next (start-reconfiguration, reconfiguration, end-reconfiguration). In Section 4.2 we analyze the interplay among the three components and focus on the interdependencies among them and their causal relationships.

4.1 Network governance components

4.1.1 Programme managers' activities

Programme managers' activities initiated the reconfiguration. Across the three phases, programme managers enacted reconfiguration managing the process in two ways: by practising their influence upwards and downwards. Table 3 shows key features of middle managers' activities.

Table 3. Middle managers activities

		Start-reconfiguration	During reconfiguration	End-reconfiguration
Upward influence with top management	Engagement intensity ^a	Low-intensity	Low-intensity	Low-intensity
	Type of approach ^b	Informal	Informal	Formal
	Reconfiguration practice examples	Schemas relating their experience Constructing a narrative to translate the message	Reconfiguration becomes item in regular meeting agenda	Issuing recommendation papers regarding the new governance for approval
Downward influence with IPTs	Engagement intensity ^a	High-intensity	High-intensity	Low-intensity
	Type of approach ^b	Informal	Formal	Formal
	Reconfiguration practice examples	One-to-one informal meetings Emails requesting information	Desk study Workshops Formal meetings	Formal group meetings Scenario testing activities Guideline documents

Notes: ^aEngagement intensity: degree of engagement to perform the upward or downward influence between programme managers and top management or IPTs at the start-, during, end- of reconfiguration; ^bType of approach: whether engagement approach to perform upward or downward influence was facilitated informally or via formal methods.

Downward influence. Programme managers acted as *facilitators* applying their influence downwards to the IPTs. At the start of reconfiguration, they encouraged IPTs to engage in idea generation. Programme managers used practices such as email exchange and one-to-one informal meetings, to better understand the current state of the network governance, to collect information as to what works and what does not work about the existing form of the governance:

“Hi all, I know you [one of the IPTs] shared a governance structure for the...Future of Mobility Grand Challenge ages ago but also aware it has slightly changed since then - do you have an updated version you can share? in my team is helpfully doing some mapping across the Grand Challenges to try and make everyone a little clearer, it should help us all!”. (Middle manager email exchange with IPTs).

As a result, programme managers were informed from the IPTs view, for each of the boards, what concerns and what future goals the boards could serve. During reconfiguration, the programme managers reviewed and evaluated the information available to take stock of the current governance. In doing so, they took a system view to assess the state of the governance. This enabled them to understand how the governance evolved and where bottlenecks exist in the system. At the end of reconfiguration, they engaged in formal group meetings with the IPTs to inform them of the new governance structure.

Upward influence. Programme managers acted as *synthesizers*, interpreting information and channelling it to top management. For example, at the start of reconfiguration, programme managers used schemas relating their experience to make sense of the – new to them – reconfiguration situation. A programme manager echoed: “*Compared to the Grand Challenges, in the past such projects would be run by one department, it was siloed in the confinements of the department.*” In terms of sensegiving, programme managers constructed a narrative to translate the message that the governance system is evolving.

During reconfiguration, programme managers created a sense of the governance's state from the information they collected by talking to IPTs and reviewing documentation relevant to the governance. In terms of sensegiving, they used professional codes to inscribe words and actions around the reconfiguration, when practising their influence upwards. At the end of reconfiguration, programme managers made sense of their context and provided good reasons for the top managers to gain their trust. Programme managers justified their actions by referring to the top managers' interests and desires to legitimize changes in the governance.

4.1.2 Board effectiveness

As a result of actions enacted by the programme managers, there were changes in board effectiveness (Table 4).

Table 4. Board effectiveness

		Start-reconfiguration	During reconfiguration	End-reconfiguration
Control	Monitoring ^a	Ambiguous		Defined
	Decision powers ^b	Some		Defined
Communication	Service ^c	Fragmented		Defined
	Reporting ^d	Overloaded; duplication of reporting		Report once, recycled to e.g., other boards if needed

Notes: ^aMonitoring: refers to the capacity of boards in monitoring project progress and performance; ^bDecision powers: refers to the capacity of providing directions and issuing actions to IPTs; ^cService: refers to the role boards acquire in providing advice and guidance to management. ^dReporting: refers to the information flows in and out between the boards and the IPTs.

Control. At the start of the reconfiguration, the control level varied considerably across the boards. New layers of governance were being added because new IOPs were being added to the programme or because IOPs execution was progressing. Soon, there was overlap among some of the boards' control function. For example, some boards had outdated Terms of Reference. Thus, their current control function was ambiguous, whilst other boards' control function and Terms of Reference had expanded, thus granting them greater decision-making

powers. Despite this variation, in all cases, the level of control became more explicit and more transparent during reconfiguration, allowing IPTs to understand better each board's control function and where to escalate matters regarding delivery.

During reconfiguration, control involved modifications in each board's function and decision powers. A programme support officer explained:

"We have tried to look at how we can use the governance structure more effectively. The governance is supposed to help support delivery, and is a useful tool to ensure [the boards] are continuing to engage and support the Grand Challenges."

At the end of reconfiguration, the boards reviewed a report produced by the programme managers to verify that they approve the suggested changes of the reconfiguration. The report indicated that boards should make an informed decision: *"The Boards are asked to note the approach and flag any issues or reservations"*. In conclusion, control was ambiguous at the start of reconfiguration, but after reconfiguration board effectiveness increased because each board verified its new remit and responsibilities.

Communication. At the start of reconfiguration, the boards, the IPTs and programme managers observed that communication was fragmented, and improvements could be made to make the governance more efficient. Thus, an assessment was commissioned to identify potential challenges in terms of communication to and from the various governance boards. During reconfiguration, the internal investigation suggested that the:

"...process for decision making and escalation routes through the various governance boards could be clearer and there was a lack of understanding...of interaction between different boards."

At the end of reconfiguration, the proposed approach aimed to support delivery of the IOPs, and the approach was tested with the IPTs at an operational level. Before reconfiguration the board structure was assumed to be hierarchical when it wasn't but after reconfiguration a network structure was proposed to increase the communication efficiency by: *"adopting a flatter approach to reach boards to shorten the decision trip"* (internal report paper). This was achieved by positioning one of the boards with the closest proximity to the programme managers' control to strategically:

"Use [the XX board] to explore cross-cutting issues raised by Grand Challenges policy teams and consider what decision or direction is needed and direct this to the relevant board." [GCPB Board paper: Programme Governance].

Before reconfiguration, the boards were overloaded with reports from IPTs, which obscured the need for action and diluted the possibility for resolution. The reconfiguration focused on rectifying this issue. A programme manager recalled:

"...by streamlining reporting so that Grand Challenges are only asked to report once and this information is recycled, where possible, for any other reporting/updates required."

4.1.3 IPTs' task performance

In addition, as a result of actions enacted by the programme managers, there were changes in terms of IPTs' task performance (Table 5).

Table 5. IPTs task performance

		Start-reconfiguration	Reconfiguration	End-reconfiguration
Coordination	Formal coordination effort^a	High	High	Moderate
	Formal coordination effect^b	Low	Low	High
	Informal coordination effort^c	High	High	Low
	Informal coordination effect^d	Low	Moderate	Low
Mutual knowledge^e		Low	High	Moderate
Tool-purpose alignment^f		Low	Low	High

Notes: ^aFormal coordination effort: degree of coordination effort implemented formally by IPTs; ^bformal coordination effect: degree of coordination effect as a result of (a); ^cFormal coordination effort: degree of coordination effort implemented informally by IPTs; ^dInformal coordination effect: degree of coordination effect as a result of (c); ^eMutual knowledge: degree knowledge sharing between IPTs; ^fTool-purpose alignment: degree of fitness between the purposes for which IPTs use process models/tools to communicate domain knowledge.

Coordination. One of our first observations was that the UKGC demonstrated high partnering breadth and partnering depth. As a result, the UKGC faced a greater burden of coordinating efforts amongst IPTs with different project management styles and across different stages of a project's lifecycle (Table 5). At the start and for the duration of reconfiguration, an increased volume of formal coordination efforts was implemented by IPTs to communicate progress in the governance system. Despite these efforts, the effects were not in par with the coordination efforts and often anticipated decisions/requests for action coming out of the boards would come to a standstill, as one IPT member put it: "*Lack of decision-making ... lack of actions coming out of the boards.*" As a result, the IPTs increased their informal coordination efforts, employing intensive informal means of communication, but the effects were only moderate.

At the end of reconfiguration, the changes in the governance system meant formal coordination efforts would become moderate, thus allowing IPTs to focus on project execution and actual problem-solving. On the other hand, informal communication efforts decreased significantly and IPTs relied less on the need to find creative solutions to communicate with the boards.

Mutual knowledge. Mutual knowledge development was attained throughout reconfiguration with some variation. At the start of reconfiguration, the IPTs shared knowledge using formal-style meetings:

"...fortnightly cross-Grand Challenges meetings and ad-hoc with each other. Our Grand Challenges leads are also meant to support this cross-learning", a programme manager recalled.

In theory, these meetings served to flag areas of cross-cutting importance to IPTs and share lessons and best practices. However, before reconfiguration these meetings were solely

used to report on progress to date by the IPTs or by programme managers to issue live commissions to IPTs. As a result, mutual knowledge levels were low at the start of reconfiguration. During reconfiguration, IPTs used these meetings to discuss governance issues and brainstorm how governance could become more efficient and effective. Developing mutual knowledge was also significantly enabled by the programme managers by directly addressing task uncertainty issues:

“...That’s why we have fortnightly GC meetings and regular newsletters – to help teams navigate the many issues around GCs and facilitate/ease/support where needed.” (Programme manager).

Tool-purpose alignment. At the start of reconfiguration, the degree of tool-purpose alignment was low. Even though IPTs and programme managers worked on Office 365, information and tasks became asynchronised throughout the programme. For example, the IPTs complained that there was a great deal of overlapping in terms of the number of commissions they received as well as the number of outputs they were requested to produce:

“We’ve had a few issues of late with [IPTs] being commissioned for multiple pieces of ‘urgent’ work from us/related to Grand Challenges. We all know it’s busy and there’s loads going on ...” (Email exchange between programme manager and IPTs)

To increase the degree of tool-purpose alignment, during reconfiguration, the programme managers developed a single, rich model to consolidate all of the information about the work done in the programme. A programme manager recalled:

“We’ve created this new summary of live commissions for the fortnightly GC meetings to ensure there is a clear forward look which enables GC teams to plan their time and resources. It’s vital this is kept up to date with all things [IPTs] teams are being commissioned on relating to the GCs (even if it comes from elsewhere in IS/analysis or other directorates/departments).”

4.2 Interplay of programme managers, boards, and IPTs during reconfiguration

This section analyzes the interplay among the three components of the network governance and moves from description to explanation. We provide propositions that elaborate on the links among the three components and network governance at the start, during, and end of reconfiguration.

The governance increased in size like an evolving and growing living organism. This evolution led to an inefficient (e.g., duplication of outputs) and ineffective governance (e.g., in terms of no resolution for action), triggering an internal investigation. This reconfiguration led to changes to board effectiveness and IPTs’ task performance. Eventually, the programme managers initiated the reconfiguration after projects could not be delivered as they progressed. For example, programme managers as gatekeepers of the governance system observed that IPTs escalated requests for resolution through the governance. Yet, the governance system

communicated these requests to the wrong boards or did not escalate requests at all. Hence, our first proposition is as follows:

P1: Changes in board effectiveness and IPTs' task performance in the network will trigger the need for reconfiguration of the network governance (by the programme managers).

P1a: Changes in board effectiveness – determined by ambiguous, outdated functions and limited decision powers that account for board control, overloaded reporting and limited possibility for action that account for board communication – will trigger the need for reconfiguration of the network governance.

P1b: Changes in IPTs' task performance – determined by low coordination effects, mutual knowledge, and task synchronization – will trigger the need for reconfiguration of the Network governance.

During reconfiguration, interactions across the three components were observed. The goal of reconfiguration was to restore board effectiveness and IPTs' task performance. Our findings shed light on the dual role of programme managers in enacting reconfiguration. When using their influence upwards to the top management, programme managers acted as synthesizers. Downward influence started with intensive engagement and became less intense at the end of reconfiguration.

In contrast, the upward influence was moderate throughout the reconfiguration. Both upward influence and downward influence employed formal and informal engagement practices when engaging with top management and IPTs, respectively. Interactions with boards and IPTs are neither unidirectional nor sequential. Thus our second proposition:

P2: Interactions among programme managers, network boards, and IPTs in a bidirectional model - neither top-down nor bottom-up - will lead to the enactment of network governance reconfiguration.

At the end of reconfiguration, the board effectiveness's control and communication levels increased. IPTs' task performance also improved. The degrees of coordination, mutual knowledge and tool-purpose alignment gradually increased during reconfiguration. However, changes in board effectiveness and IPTs' task performance changed the governance system. As a result of this realignment between boards and IPTs, a new governance baseline emerged after reconfiguration (Figure 3). Hence, our final proposition is as follows:

P3: An adapted network governance will be reached when recurring changes of board effectiveness – in terms of control and communication - and IPTs task performance - in terms of coordination, mutual knowledge and tool-purpose alignment - are realigned.

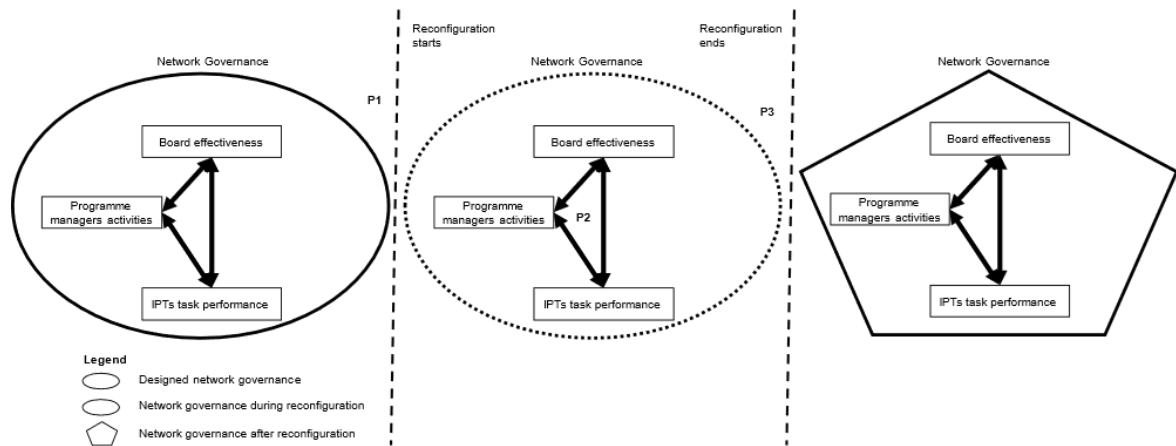


Figure 3. Reconfiguration of network governance into a new baseline

5 Discussion

Why does the network governance need to be reconfigured? Is it possible to attribute this phenomenon to changes in terms of board effectiveness and IPTs task performance? Our ethnographic fieldwork suggests that it is. Governance structures must be able to adapt to disruptions if IOPs can meet their goals. This is especially true when disruptions arise that are not anticipated in the initial designs of the network governance. In this article we have provided a process model that explains network governance reconfiguration leading to a new governance baseline. Our model builds on the practice perspective for understanding the interconnectedness of structural components of the network governance during reconfiguration. To answer our research question, we studied the dynamics between structures (governance boards, and IPTs), and agents (programme managers). Building on network governance literature (Roehrich *et al.*, 2020), we discussed three components: Programme managers activities, Board effectiveness, and IPTs task performance.

The practice perspective explains that the three components of the network governance are interdependent, and this dependence is subject to change. Therefore, we studied the dynamics between agents and structures during reconfiguration to understand changes in one component and system-wide changes. We described a process model and provided three propositions that elaborate on the links among the three components and network governance at the start, during and end of reconfiguration.

5.1 Theoretical implications

The emphasis in operations management studies of network governance has been on the *design* of processes and supply chain rather than examining how operations are carried out within these designs and most importantly, how on the spot actions are performed that bring major changes to ex ante processes such as governance (Fernandes, Spring and Tarafdar, 2018; Martinsuo *et al.*, 2020). Our analysis showcases how programme managers' on-the-spot judgement helped them navigate the reconfiguration of the network governance.

Importantly, we found that reconfiguration is an ad-hoc practice mobilized to ensure the network governance - which evolved over time – is reconfigured to be fit for purpose. We explain that reconfiguration falls outside of the spectrum of processes that are *designed from the outset to govern IOPs*. We find that reconfiguration is a demanding and hectic activity for those involved in IOPs, because it requires improvisation and on-the-spot judgement; but a necessity in order to restore governance fitness.

Subsequently, we advanced a conceptual governance model of practice perspective for understanding the interconnectedness of structural components of the network governance during reconfiguration. We used a practice perspective to propose that reconfiguration is triggered due to changes in terms of board effectiveness and IPTs task performance. We found that during reconfiguration, programme managers and structures (boards, IPTs) interact in a bidirectional model (Floyd and Lane, 2000) that leads to the enactment of reconfiguration. Finally, our model proposes that reconfiguration ends when recurring changes of board effectiveness and IPTs task performance realigned, resulting in a new governance baseline.

6 Conclusion

This study advances our understanding regarding the reconfiguration practice in governing IOPs for the delivery of inter-organizational projects and programmes. We provide a novel attempt to explain how middle managers deal with the challenge of reconfiguring the network governance in real time. Previous research has established how an evolving network governance works in normative terms, e.g., on the design of collaborative processes and supply chains. However, this paper challenges this assumption. Instead, we offered a practice-based model that helps middle managers navigate the challenging process of reconfiguration. We show that reconfiguration is an exceptional, ad-hoc practice which requires on the spot judgement and improvisation. Our findings are important for the governance of multi-stakeholder partners to avoid collaborative inertia and maintain their value and relevance over time for the delivery of IOPs.

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