Organizing external stakeholder engagement in inter-organizational

projects: Opening the black box

**Abstract** 

External stakeholder engagement is crucial for delivering value to diverse stakeholders in inter-

organizational projects, however, it is not straightforward to organize this in a way that adds value. The

intra-organizational focus of previous research offers limited insights into the relevant roles,

responsibilities, arrangements and activities in inter-organizational contexts, and comprehensive

empirical studies are rare. This study explicates how internal stakeholders organize external stakeholder

engagement in inter-organizational projects. Our multiple-case study of two infrastructure projects in

Northern Europe identified three organizing solutions based on governance, values and dynamism.

While governance-based solutions provide an overall structure for organizing external stakeholder

engagement, value-based solutions ensure genuine cooperation and dynamism-based solutions facilitate

timely organizing. The study develops propositions that constitute a model of how external stakeholder

engagement can be organized in inter-organizational projects. The findings have implications for project

stakeholder management and mainstream stakeholder research.

Keywords: external stakeholders; organizing; stakeholder engagement; management for stakeholders;

inter-organizational projects

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### 1. Introduction

Engaging external stakeholders, such as regulatory agencies and local communities that have no official or contractual link to the project organization but may influence or be influenced by the project (Winch, 2004), is important for the success and value creation of inter-organizational projects (Bayiley and Teklu, 2016; Oppong et al., 2017). External stakeholder engagement can be defined as the means, including organizational activities and arrangements, used to involve external stakeholders in the project's operations and decision-making (Greenwood, 2007). However, engaging external stakeholders in a way that adds value has proved highly challenging both in theory and in practice (Eskerod and Huemann, 2014), especially in inter-organizational projects, where stakeholder conflicts are common (Derakhshan et al., 2019; Jepsen and Eskerod, 2009). Research has shown that internal stakeholders with a formal, official or contractual relationship to the project organization (Winch, 2017) struggle to organize external stakeholder engagement in inter-organizational projects where multiple autonomous internal stakeholders work jointly toward a shared project goal for a limited period of time (Jones and Lichtenstein, 2008) but respond very differently to external stakeholders' requirements because of competing priorities (Aaltonen et al., 2015).

Mainstream stakeholder research has adopted an intra-organizational focus on how a single organization organizes its engagement activities (Fassin, 2009). This research is largely conceptual and commonly describes the organizing in terms of ongoing problem-solving process to incorporate external stakeholders' interests, establish objective standards, measure organizational performance, verify and disclose the results, and continuously improve the process and performance (Hummels, 1998). However, there are very few empirical studies of this problem-solving process (Kolk and Pinkse, 2010), particularly in inter-organizational contexts where internal stakeholders jointly organize external stakeholder engagement.

In addressing the issue of organizing external stakeholder engagement, project stakeholder management research has tended to assume that project managers play the most central role (Di Maddaloni and Davis, 2018; Gil, 2010). While some attention has been paid to the roles and activities of project owners (Aaltonen et al., 2008) and clients (Winch, 2017) in this regard, comprehensive empirical studies of how

to organize external stakeholder engagement, especially in inter-organizational contexts have been largely missing. Any available insights into the associated roles, responsibilities and activities are generally acquired from empirical studies of other aspects of project stakeholder management. The identifiable roles, responsibilities and activities tend to be simplified and confined to single organizations, largely overlooking how internal stakeholders jointly organize external stakeholder engagement in inter-organizational project contexts (Aaltonen and Sivonen, 2009).

Against this backdrop, we contend that organizing external stakeholder engagement in interorganizational projects remains a "black box," and that opening this black box may help to elucidate the organizing solutions that underpin value-adding external stakeholder engagement. To that end, we formulated the following research question: *How do internal stakeholders organize external stakeholder engagement in inter-organizational projects?* 

We approached organizing as a problem-solving process encompassing four universal challenges: task division, task allocation, provision of reward, and provision of information (Puranam et al., 2014). In combination with a micro-structural approach to organizational design that views large and complex organizations as collections of recurring smaller and simpler organizations (Puranam, 2018, p. 3), this provides a theoretical framework for exploring how internal stakeholders jointly organize external stakeholder engagement in an inter-organizational context. On that basis, the organizing can be said to encompass the roles, responsibilities, activities, arrangements and events involved in meeting the four universal challenges.

To address the research question, we employed a multiple-case study design (Eisenhardt, 1989). Based on theoretical sampling and literal replication (Yin, 2015) we selected two alliance infrastructure projects in Northern Europe as appropriate research settings: Project Railroad and Project Road Tunnel. The goal of Project Railroad was to improve a 90-km section of a 155-km railroad; the goal of Project Road Tunnel was to realign a 4-km section of highway in an urban area that included the country's longest tunnel (2.3 km). The empirical data were collected from public documentation and semi-structured interviews, and conventional content analysis (Hsieh and Shannon, 2005) was used to explore

the roles, responsibilities, activities, arrangements, and events involved in organizing external stakeholder engagement.

The study identified three organizing solutions: governance-based, value-based and dynamism-based. Governance-based solutions include engagement activities (e.g., information events and workshops), organizational structures (e.g., a dedicated stakeholder communication team) and engagement indicators (e.g., engagement measures tied to project objectives). These form a foundation for organizing external stakeholder engagement in inter-organizational projects by addressing task division and allocation, and provision of reward. Value-based solutions include engagement and collaboration values (e.g., best-for-project principle: working together toward a common goal) and practices for internalizing values (e.g., co-locational working spaces, including small group working). These solutions provide the desired cooperative content for organizing external stakeholder engagement in inter-organizational projects by addressing provision of reward. Dynamism-based solutions ensure flexibility in day-to-day operations (e.g., flexible roles and responsibilities), timely focus on relevant activities (e.g., focus on working rather than arguing with external stakeholders) and appropriate communication systems (e.g., systems for external feedback). These support timely organizing of external stakeholder engagement by addressing task allocation and provision of information.

The rest of the paper is organized as follows. First, to position the present study in the context of existing research, we review the mainstream and project stakeholder literature, and literature on organizing as a problem solving process. We go on to describe the research process and data analysis. After analyzing the cases, we discuss our findings and the implications for research and managerial practice. We conclude by outlining the study's limitations and a future research agenda.

### 2. Background literature

# 2.1 Mainstream research on organizing external stakeholder engagement

Originating in general stakeholder and strategic management theory, the concept of stakeholder engagement refers to management *for* stakeholders (Freeman et al., 2010). This approach is theoretically grounded in the normative core of stakeholder theory (Freeman et al., 2007), which postulates that an

organization's raison d'être is to create value for all stakeholders beyond the internal stakeholder circle (Noland and Phillips, 2010). Based on business ethics, this view contends that an organization owes a fiduciary duty to all of its stakeholders (Burton and Dunn, 1996). Morally, then, an organization should take account of all stakeholders in its activities and decision-making, and its ethical responsibilities to them (Gibson, 2000). As this "management for stakeholders" approach gains momentum, recent research has become more holistic in its view of stakeholder management, in contrast to the traditional strategic approach to management of stakeholders, which is rooted in instrumental stakeholder theory and a neo-classical view of the firm (Donaldson and Preston, 1995). The management of stakeholders approach focuses primarily on the utility of stakeholder management for the organization in question that is, on the instrumental benefits of managing stakeholders, treating them as objects and as means to desired organizational ends (Jones, 1995). The main difference between the two approaches relates to value creation; while the holistic approach insists that an organization must create as much value as possible for all stakeholders, the traditional approach is concerned only to create value for the organization itself, often at the expense of other stakeholders (Freeman et al., 2007). In short, the management for stakeholders approach views the organization as an inclusive "forum for stakeholder interaction" (Evan and Freeman, 1993, p. 82).

Previous stakeholder research has acknowledged the importance of an orientation to external stakeholders in the organization's business operations, daily practices, routines and processes that transforms "stakeholder talk" into "stakeholder walk" (Yuan et al., 2011). Hummels (1998) characterized stakeholder orientation as an ongoing process of organizing values and interests, including organizational debate on how to engage external stakeholders and integrate them in organizational decision-making processes. On this early view, organizing external stakeholder engagement is an ongoing problem-solving process, in which internal stakeholders establish objective standards for engagement, take account of external stakeholders' interests, measure performance in relation to objectives, verify and disclose the results of engagement and strive continuously to improve engagement activities (Hummels, 1998). Yet although the stakeholder literature has identified this as an ongoing

process of problem solving, it has not received much research attention, leaving the implications for research and practice unclear (Kolk and Pinkse, 2010).

As earlier research approached the issue of organizing external stakeholder engagement primarily from an intra-organizational perspective of a single organization (Fassin, 2009), little is known about the joint organization of external stakeholder engagement activities by internal stakeholders in inter-organizational contexts. In such contexts, a shared understanding of coordination trajectories among internal stakeholders working toward a common goal is essential to ensure that external stakeholder engagement activities are organized in a coherent and appropriate way (Gable and Shireman, 2005). Rowley's (1997) network perspective was pioneering in that it highlighted the need to understand interorganizational networks, but this approach still assumed a single firm at the core of the network rather than a collective of organizations. Building on the network perspective, Frooman (2010) introduced the concept of the *issue network*, in which an issue rather than a single organization is at the center of the network. This issue-driven perspective enables placing internal stakeholders' joint organizing activities at the center of the inter-organizational network. However, for reasons unknown, this kind of analysis is extremely rare in mainstream stakeholder research, limiting our understanding of how internal stakeholders jointly organize external stakeholder engagement in inter-organizational contexts.

# 2.2 Project stakeholder management research on organizing external stakeholder engagement

In project stakeholder management research, organizing external stakeholder engagement is seen to include the proactive planning and management of associated roles, responsibilities and activities (Eskerod et al., 2015; Oppong et al., 2017). However, while acknowledging the importance of the issue, this literature has taken more or less for granted the nuances and actual practice of distributing roles, responsibilities and activities among internal stakeholders. While some insights can be gleaned from empirical studies of other aspects of project stakeholder management, the matter of organizing external stakeholder engagement has rarely looked beyond the role of the project manager, who is typically assumed to be responsible for developing stakeholder engagement processes and plans (Olander and Landin, 2005), interpreting the stakeholder environment (Aaltonen, 2011) and handling relationships and interfaces with external stakeholders (Gil, 2010).

After allocating roles and responsibilities, the project manager or project management team is typically assumed to devise activities and arrangements for engaging external stakeholders in project activities and decision-making (Di Maddaloni and Davis, 2018). This includes identifying and classifying external stakeholders and analyzing their environment (Aaltonen and Kujala, 2016) based on best practice guidelines, frameworks and tools such as the power-interest matrix (Johnson and Scholes, 1999; Olander and Landin, 2005). Engagement strategies are then devised, such as influencing strategy, which ensures that information is shared transparently in order to build relationships with external stakeholders (Aaltonen and Sivonen, 2009). These strategies are assumed to reduce to concrete engagement activities and organizational arrangements to be implemented by the responsible personnel (Yang et al., 2011); they may include active dialogue, workshops, working groups, face-to-face and phone meetings and various forms of seminar and roundtable discussion to develop recurring and one-off organizational practices (Lehtinen et al., 2019). In addition to the project manager, some research notes the role of a separate PR and communications team in implementing such practices (Gil, 2010).

In inter-organizational project contexts such as infrastructure projects, the project owner is typically assumed to be responsible for allocating resources to external stakeholder engagement activities (El-Sawalhi and Hammad, 2015). Additionally, empirical accounts have stressed the central role of the project owner in managing relationships with authorities and local communities (Aaltonen et al., 2008). To that extent, stakeholder engagement is typically understood as client's capability and responsibility (Winch, 2017) while the role of suppliers is largely dismissed. However, some empirical studies dispute the idea that the client is the only active agent in this regard, noting the need and potential for joint organizing of external stakeholder engagement by clients and suppliers, especially on encountering unexpected stakeholder events (Aaltonen et al., 2010).

Although the previous research is valuable, it offers a limited view to address the organizing of external stakeholder engagement in inter-organizational projects by assigning agency and responsibility to who does what primarily to the project manager. In other words, the roles, responsibilities and activities associated with organizing external stakeholder engagement are treated in isolation, and, looked at primarily through the lens of stakeholder analysis rather than comprehending the diverse organizing

solutions that facilitate external stakeholder engagement. Additionally, the existing research largely neglects issues of inter-organizational context and how internal stakeholders jointly coordinate activities (Aaltonen and Sivonen, 2009), which can be considered central in such contexts (Lehtinen et al., 2019).

# 2.3 A problem-solving approach to organizing external stakeholder engagement in interorganizational contexts

The present study adopts Hummel's (1998) suggestion that organizing external stakeholder engagement should be viewed as a problem-solving process. Particularly, this study approaches the organizing of external stakeholder engagement as a problem-solving process (Weick, 1974) to address four universal challenges in any problem of organizing that ultimately define an organization's existence: task division, task allocation, provision of reward, and provision of information (Puranam et al., 2014). This approach acknowledges that organizations are defined by the following five features. (1) They vary in longevity and (2) can generally be understood as multi-agent systems with (3) identifiable boundaries and (4) a clear purpose, toward which (5) each agent's efforts are expected to contribute (Puranam, 2018, p. 4). In inter-organizational project context, the project organization can be understood as (1) a temporary organizational system that (2) involves multiple internal stakeholders (i.e., agents) that are usually (3) predetermined and (4) unified by the common purpose of delivering the project within a certain schedule, budget and scope, (5) to which achievement their activities contribute (Burke and Morley, 2016; Gulati et al., 2012). It follows that the approach outlined above is also applicable in the present inter-organizational project context and for the respective project organization.

Adopting a micro-structural approach, in which large and complex organizations can be viewed as collections of recurring smaller and simpler organizational structures (Puranam, 2017), helps to understand the micro-patterns that explain the macro-phenomenon of organizing. On this view, organizing external stakeholder engagement can be understood as a task (i.e., a micro-pattern of roles, responsibilities, events, activities and arrangements) of the project organization and as part of the broader problem of project organizing (i.e., the macro-phenomenon). If we accept the above notion and combine it with the above-addressed problem-solving approach, it seems axiomatic that the task is to identify a set of organizing solutions to address the four universal challenges outlined above. For at least

three reasons, this combined micro-structural/problem-solving approach provides a theoretically sound framework for qualitative explication of how external stakeholder engagement is organized in inter-organizational projects. First, the framework is tolerant in its ontoepistemological interpretation of organizations and organizing (Puranam et al., 2014), providing leeway yet also direction for qualitative analysis, which offers a fertile opportunity for developing novel understanding. Second, the framework's focus on the detail of roles, responsibilities, activities, events and arrangements (Puranam, 2017) facilitates a nuanced understanding of the organizing process in inter-organizational projects. Finally, as the four challenges are by now ubiquitous (Lawrence and Lorsch, 1967; March and Simon, 1993), it is relevant to take full account of these challenges to develop a more comprehensive and theoretically general account of organizing external stakeholder engagement in inter-organizational projects.

Task division means setting goals and breaking them down into separate tasks, and task allocation means assigning individuals to roles and tasks (March and Simon, 1993). In the present context, meeting these two challenges means reducing external stakeholder engagement to goals, objectives and tasks and then allocating these as specialized roles and responsibilities among internal stakeholders (Puranam, 2018). The challenge in provision of reward (monetary and non-monetary) is to motivate agents to collaborate and execute their respective tasks (Lawrence and Lorsch, 1967). The challenge in provision of information is to ensure that agents have the information they need in order to execute their tasks in timely fashion (Puranam, 2017). In the present context, rewards may include bonuses, promotions, social reputation and identity benefits, and information provision may include communication through interaction and knowledge transparency supported by appropriate standards, procedures and information systems (Puranam et al., 2014). In general, these organizing solutions can be understood as choices of organizational means, encompassing roles, responsibilities, activities, events and arrangements that help to address the four challenges of organizing external stakeholder engagement.

### 3. Research methods and analysis

Figure 1 summarizes the research process, which is detailed in the subsections that follow (3.1–3.4).

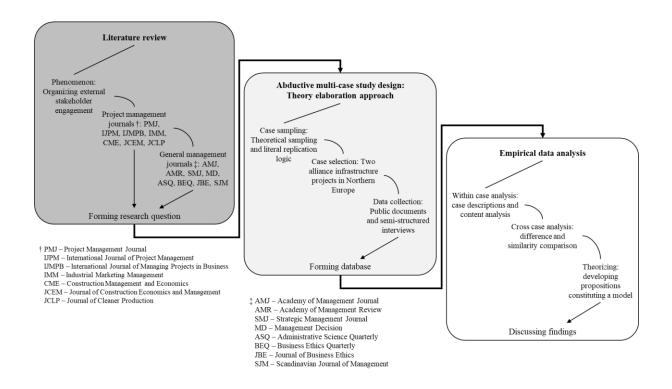


Figure 1. Main phases and activities of the research process.

### 3.1 Research design

In light of the limited previous research, we employed a multiple-case study design (Eisenhardt, 1989). Based on Ketokivi and Choi's (2014) theory elaboration approach, our logic of reasoning was abductive with a view to elaborate theoretical understanding of external stakeholder engagement. The derived theoretical framework reconciled our empirical findings with previous theoretical arguments, unraveling contextual idiosyncrasies to develop a mid-range theory, which ultimately elaborates theoretical understanding of external stakeholder engagement. A mid-range theory combines empirical and theoretical elements to arrive at causal claims (Bourgeois, 1979); here, cross-case comparison and replication logic within a multiple-case study design enabled us to develop an accurate, parsimonious and analytically generalizable mid-range theory suitable for theory elaboration approach (Ketokivi and Choi, 2014; Yin, 2015).

Using theoretical sampling (Eisenhardt, 1989), we identified alliance projects as an appropriate research setting. The project alliance approach is a relational delivery model, involving a multiparty contract between two or more entities collaborating on the basis of shared risks and rewards, agreed outcomes, and key result areas (Halman and Braks, 1999). Alliance partners work together as a collaborative team

that acts with integrity, committing to open-book, "no disputes" and best-for-project decision-making processes based on unanimity and joint management to create value for money for stakeholders (Lahdenperä, 2012). For these reasons, alliance projects can be assumed to have particular collaborative and organizational characteristics that serve to illuminate how internal stakeholders jointly organize external stakeholder engagement.

In selecting relevant alliance projects, we focused on Northern Europe's infrastructure development sector, where alliance models have become more common. Infrastructure projects involve both private and public sector stakeholders, both internal and external, that interact regularly and in depth. External stakeholders' public and social concerns and demands complicate the task of organizing external stakeholder engagement, requiring joint coordination by internal stakeholders. For these reasons, infrastructure projects were considered well-suited to the purposes of the present research.

Case selection was based on literal replication logic (Yin, 2015)—that is, the selected cases were expected to yield similar findings. This ensures greater accuracy and richness of mid-range theory, as multiple cases serve as a series of experiments to confirm inferences drawn from previous cases. Located in a Northern European country, we selected two alliance projects (referred to here as Project Railroad and Project Road Tunnel) that formed part of the National Transport Agency's (pseudonym) development program, which explores new project delivery models to promote efficiency in public sector transportation and infrastructure development.

### 3.2 Case contexts

# 3.2.1 Project Railroad

The goal of Project Railroad was to improve a 90-km section of a 155-km railroad between two cities. The project's scope encompassed renovation works, soil works and other improvements, such as widening the railroad embankment and improving technical and functional systems. The project was scheduled to last 4.5 years (January 2011–June 2015) but finished 3.5 months ahead of schedule in February 2015. The project's original budget was 106.4 million euro; it finished under budget at 104.8 million. Despite decisions to extend its scope during implementation, the project succeeded in meeting

all requirements. This success gained significant national recognition, and in 2012, Project Railroad won the national Construction Site of the Year award for efficient project management and operations. In 2014, the project won the national Transparency in Communication award for its pioneering approach to external stakeholder engagement. In the same year, the project's safety personnel also won a national Occupational Safety award. Figure 2 specifies the key stakeholders (as pseudonyms) and their roles in Project Railroad. The key stakeholders were identified based on public documentation (e.g., news articles, project plans) and further verified during data collection interviews. The alliance partnership was formed by the client ("National Transport Agency") and the principal contractor ("Track Contractor"). Together with subcontractors, the alliance partners formed the project organization and are the internal stakeholders; other actors can be regarded as external stakeholders. Figure 3 describes Project Railroad's timeline, including the main phases, events and activities.

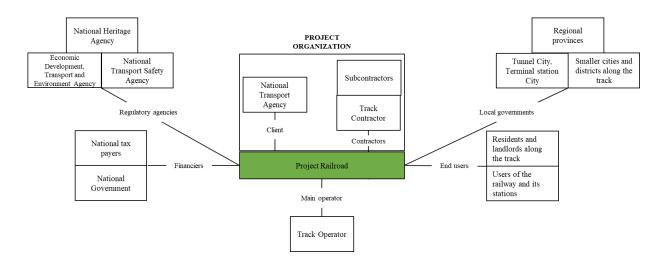


Figure 2. Key stakeholders and their roles in Project Railroad.

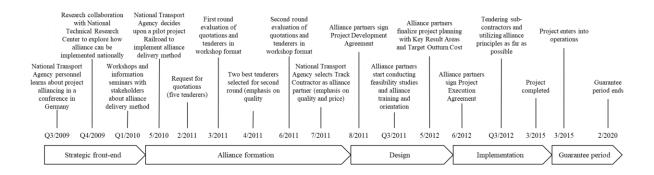


Figure 3. Main phases, events and activities of Project Railroad.

### 3.2.2 Project Road Tunnel

The goal of Project Road Tunnel was to realign a 4-km section of a highway in "Tunnel City" by implementing the country's new longest road tunnel (2.3 km). The project's scope included new cloverleaf and interchange arrangements to link the tunnel seamlessly to the surrounding infrastructure. The project's was originally scheduled to take 3.5 years (October 2013–May 2017), but it finished six months ahead of schedule in November 2016. The project's original budget was 180.3 million euro; it came in under budget at 176.5 million. In 2018, the project was awarded first prize in the Mega-sized Projects category of the International Project Management Association (IPMA). The IPMA Global Project Excellence Award is granted to projects that have achieved outstanding project management results. Project Road Tunnel also won the National Project Management Association's Project of the Year award as the year's most successful project. Figure 4 specifies the key stakeholders (pseudonyms) and their roles in Project Road Tunnel. The key stakeholders were identified based on public documentation (e.g., news articles, project plans) and further verified during data collection interviews. The clients (National Transport Agency and Tunnel City) formed the alliance partnership with the principal contractor (Infra Contractor) and designers (Infra Designer and Infra Engineer). The alliance partners formed the project organization along with subcontractors; they are the internal stakeholders while the rest are considered external stakeholders. Figure 5 shows Project Road Tunnel's timeline, including main phases, events and activities.

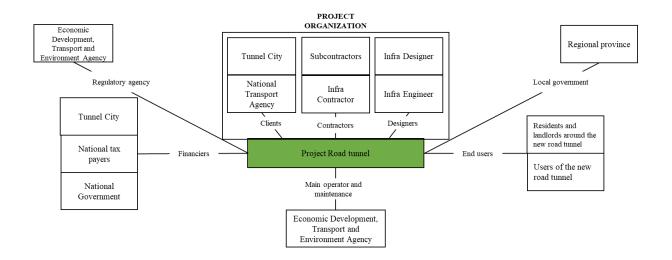


Figure 4. Key stakeholders and their roles in Project Road Tunnel.

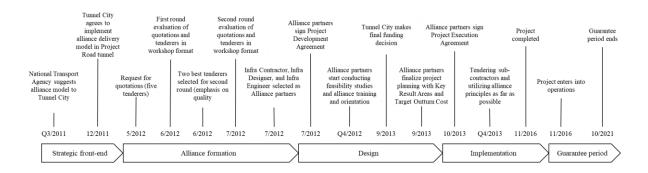


Figure 5. Main phases, events and activities of Project Road Tunnel.

# 3.3 Data collection

We employed two methods of data collection. First, we gathered publicly available electronic documents; second, we conducted semi-structured interviews. These two data collection methods are typical and appropriate for qualitative case-based research (Yin, 2015).

To acquire sufficient background understanding of the case contexts and to prepare for the interviews, we systematically gathered publicly available electronic documents related to the projects, including original plans, project reports and news articles from national and international webpages. For instance, the National Transport Agency openly shares all original project plans and value-for-money reports on their webpages. Additionally, in collaboration with the National Transport Agency, the National Technical Research Centre publishes open-access electronic reports on the implementation of alliance

projects nationally. As the first national alliance projects, these two case projects received extensive coverage on online news platforms.

As well as searching the websites of the largest regional and national media and news companies (*Helsingin Sanomat, Yle* and *Aamulehti*) for relevant documents from the last 10 years, we also conducted searches of relevant national trade journals (e.g., *Rakennuslehti*, *Tekniikka & Talous*). We also searched the client's (National Transport Agency) webpages, using the projects' official titles as keywords. All of the identified documents were screened and assessed for their relevance to the projects and to organizing and management issues. We excluded irrelevant documents, such as news articles that mentioned the project by name but were actually about something else (e.g., Tunnel City's other infrastructure projects or other social issues in the vicinity of the case project). Additionally, some excluded articles mentioned the case projects as national exemplars of alliance contracting but did not discuss them in any depth or detail. Ultimately, we identified 59 documents for further analysis and data triangulation.

The primary data collection process involved 17 semi-structured interviews in total: 6 related to Project Railroad and 11 related to Project Road Tunnel. Interviews lasted between 60 and 120 minutes, and all were audio-recorded and transcribed verbatim for further analysis. To encompass a wide range of viewpoints, we interviewed several (mainly internal) stakeholders and personnel in different roles. Informants were selected using purposive sampling (Yin, 2015) to identify those best placed to address how external stakeholder engagement was organized in each of the case projects.

Each interview began by asking about the interviewee's background and their role in the case project. This was followed by a series of questions about how the project was organized and about external stakeholder engagement over the project lifecycle. The questions dealt with challenges, successes, required abilities, risks, opportunities, collaboration, relationships, organizational arrangements and key events and activities; the responses helped us to interpret how internal stakeholders organized external stakeholder engagement. We also posed direct questions about stakeholders, their interactions and their engagement in the project in order to understand the process in greater detail. Whenever an interviewee mentioned external stakeholders or stakeholder engagement without being prompted, we asked follow-

up questions to acquire richer and more detailed descriptions. The interviews were typical and appropriate for a qualitative case study; questions were open-ended and focused on the interviewee's own narrative and interpretation of roles, responsibilities, events, arrangements and activities (Yin, 2015). Table 1 provides more detailed information about the data.

Table 1. Data sources: interviews and publicly available electronic documents

	Project Railroad			Project Road tunnel		
Interviews (N = 17)	No.	Interviewee title (and parent organization)	Interview date	No.	Interviewee title (and parent organization)	Interview date
	1.	Assistant Project Manager (National Transport Agency)	27 Nov. 2014	7.	Project Manager (Infra Contractor)	16 Feb. 2015
	2.	Manager (National Transport Agency)	27 Nov. 2014	8.	Health, Safety and Environment Coordinator (Infra Contractor)	16 Feb. 2015
	3.	Alliance Project Manager (Track Contractor)	5 Dec. 2014	9.	Assistant Project Manager (National Transport Agency)	9 Mar. 2015
	4.	Project Engineer (Track Contractor)	5 Dec. 2014	10.	Procurement Manager (Tunnel City)	9 Mar. 2015
	5.	Design Manager (Track Contractor)	10 Dec. 2014	11.	Chairman of the Alliance Executive Team (National Transport Agency)	17 Mar. 2015
	6.	External consultant, expert and evaluator (Track Consultant)	11 Dec. 2014	12.	Planning Manager (Infra Contractor)	17 Mar. 2015
				13.	Public Relations Manager (Infra Designer)	17 Mar. 2015
				14.	Technical Project Director (Tunnel Subcontractor)	23 Mar. 2015
				15.	Chief Structural Designer (Tunnel Subcontractor)	23 Mar. 2015
				16.	Project Cost Engineer (Infra Contractor)	24 Mar. 2015
				17.	Procurement Manager (Infra Contractor)	24 Mar. 2015
Documents	N	Document type (subject/identifier)		N	Document type (subject/identifier)	
(N = 59)	4	Project reports (internal)		4	Project and city plans (internal)	
	2	Project brochures (internal)		6	Project reports (internal)	
	3	Project news articles and releases (internal)		2	Project brochures (internal)	
	11	Selected national and regional news articles		1	Research report (National Technical	
		and releases			Research Center)	
				1	International news article (IPMA award)	
				25	Selected national and regional news articles and releases	

# 3.4 Data analysis

There were two main stages of data analysis: within-case and cross-case analyses. The unit of analysis was the project, from the strategic front-end phase to completion of the implementation phase.

Conducted at organizational level, the analysis sought to understand the roles, responsibilities,

arrangements, events and activities of the various internal stakeholders and their personnel in organizing external stakeholder engagement.

### 3.4.1 Within-case analyses

Within-case analysis followed six steps that are typical of qualitative data analyses: familiarization with the data, generation of case description, forming initial ideas and codes and the three-step qualitative coding procedure known as conventional content analysis (Hsieh and Shannon, 2005). As little is known about how external stakeholder engagement is organized, we considered that conventional content analysis would be appropriate and help to generate new understandings (Hsieh and Shannon, 2005). The within-case analyses yielded thick case descriptions and code hierarchies that conveyed concept development about the organizing solutions for external stakeholder engagement in each case.

In the first step, we sought to familiarize ourselves with the data by carefully reading and re-reading the interview transcripts and public documentation (project reports and plans, supported by relevant news articles describing the project). Second, we generated thick case descriptions, using MS Office tools to gain an overall understanding of each project in terms of main events, activities, phases and stakeholders. Although purely descriptive, this was a necessary step in generating insights and becoming familiar with both cases as standalone units. Third, we prepared for the conventional content analysis by formulating initial ideas and codes to capture how external stakeholder engagement was organized.

The conventional content analysis (steps four, five and six) drew on the interview transcripts, climbing the ladder of abstraction from the empirical data to conceptualize organizing solutions. Using Atlas.ti software, we analyzed how internal stakeholders' roles, responsibilities, activities, arrangements and events facilitated organizing external stakeholder engagement. Based on descriptive phrases from the data, we developed empirical-level codes that related to the research phenomenon ( $N_{Road\ Tunnel} = 54$ ;  $N_{Railroad} = 66$ ), building on the initial ideas and codes formulated during the previous (third) step. In Project Road Tunnel, for example, one such code was *Project's Key Results Area: Positive Public Image*, indicating that one of the internal stakeholders' objectives related to positive publicity. In the fifth step, we began to compare the empirical-level codes to identify any differences and similarities.

The aim was to group the empirical-level codes into meaningful clusters (code categories) reflecting the organizing solutions for external stakeholder engagement at an empirical level ( $N_{Road\ Tunnel} = 11$ ,  $N_{Railroad} = 13$ ). For instance, Project Railroad yielded the code category *Engagement Measurements*, which referred to internal stakeholders' tools for measuring external stakeholder engagement. Finally, in the sixth step, we compared the code categories in order to develop concepts addressing the organizing solutions for external stakeholder engagement at a theoretical level. After several iterations, we agreed on a number of distinct concepts ( $N_{Road\ Tunnel} = 3$ ,  $N_{Railroad} = 3$ ) and their code categories that we could distinguish clearly from each other. For instance, in Project Road Tunnel, the concept of *Management Structures* captures the distinct organizational structures needed to establish external stakeholder engagement activities.

### 3.4.2 Cross-case analysis

The cross-case analysis involved two main phases. First, a cross-case comparison produced a final code hierarchy and a unified set of concepts. Second, we theorized the relationships among the final concepts to develop propositions that constituted a model of how external stakeholder engagement is organized in inter-organizational projects.

In the first phase, the aim was to unify the two within-case code hierarchies and associated concepts into a single robust code hierarchy and set of concepts by exploring their similarities and differences. We first compared the similarities and differences of the empirical-level codes, code categories and concepts developed for the two cases to identify tentative relationships between them. These relationships were then refined by replication logic (Yin, 2015), revisiting each coding level and verifying similar theoretical logic between the two cases. Where we encountered significant differences—that is, unilateral findings not verified by the other case—we eliminated these from the final code hierarchy on the basis of insufficient evidence (as suggested by replication logic) (Yin, 2015). The result was a final code hierarchy that underpinned three concepts about organizing solutions.

In the second phase, we moved beyond descriptive analysis and sought to develop a mid-range theory about the organizing solutions and how they relate to the four challenges of organizing external stakeholder engagement in inter-organizational projects. As the derived concepts provided only a general description of the organizing solutions, we attempted to interpret and theorize how those solutions facilitated organizing external stakeholder engagement. In the interests of theory elaboration (Ketokivi and Choi, 2014), we utilized the derived theoretical framework (combining the problem-solving process view of organizing with the micro-structural approach to organizations) to understand its contextualized logic when organizing external stakeholder engagement in inter-organizational projects. Specifically, we sought to understand how the observed organizing solutions contributed to task division, task allocation, provision of reward and provision of information. Focusing on the dyadic relationship between the challenges and each organizing solution in turn, we derived four propositions that constitute a model of these relationships addressing the research question.

### 4. Findings from the cross-case analysis

In this section, we describe the final code hierarchy and concepts related to the organizing solutions (Figure 6), and derive the propositions that underpin the model. To enhance transparency and credibility, the data structure in Appendix A1 provides supplementary empirical evidence from both case projects to ground our findings in the data.

#### Governance-based solutions

### Value-based solutions

### **Dynamism-based solutions**

#### **Engagement activities**

- Information distribution via websites, value-for-money reporting, leaflets and bulletin
- Information events, such as 'Communication campaign' and big media events
- Dialogue events to interact with external stakeholders, such as workshops
- Invited visits to construction site and Big Room

#### Organizational structures

- Communication team, its purpose, roles and responsibilities for external stakeholder engagement
- Forming project organization with partners who understand Value-for-money principles and objectives
   Project organization kept as unchanged as possible
- (key personnel bound to project)
   Neutral experts (observers) participate in meetings to
- report outwards and promote transparency to external

### Engagement indicators

- Objectives related to external stakeholders
- Value-for-money objectives emphasize external stakeholders' values
- Industry-level objectives related to more transparent and trustful modus operandi in construction sector

### Engagement and collaboration values

- Community spirit encouraging cooperation, transparency and trust with external stakeholders
- A committed attitude to implement new alliance delivery model together with external stakeholders
- Best-for-project principle: working together toward a common goal, also shared by external stakeholders
- Sub-contractors want to participate to project due to desirable community spirit

#### Practices for internalizing engagement and collaboration values

- Workshops, orientation, and training sessions to assimilate engagement, and collaboration values
- Co-locational working space: free-form and informal small group working to internalize engagement and collaboration values
- Managers implement engagement and collaboration values by leading by own example
- Creating own project logo and identity: working for project and its common goal, also shared by external stakeholders
- Preparing and doing research about how to work in alliance projects and adopt its engagement and collaboration values

### Flexibility in day-to-day operations

- Flexible roles and responsibilities for external stakeholder engagement
- Adaptive meeting, communication, and reporting protocols toward external stakeholders

#### Timely focus on the relevant activities

- Focus on working rather than arguing with external stakeholders
- Swift and efficient problem-solving together with external stakeholders

### Communication systems

- Systems for collecting feedback from external stakeholders
- Gathering learning regarding experiences with external stakeholders
- Centralized electronic project document bank to share information regarding external stakeholders

Figure 6. Code hierarchy and concepts developed from the cross-case analysis.

The cross-case analysis suggests that internal stakeholders employed three organizing solutions – governance-based solutions, value-based solutions and dynamism-based solutions – to overcome the four challenges of organizing external stakeholder engagement in the context of inter-organizational projects. The top row in Figure 6 (bolded rectangles) specifies the three derived organizing solutions, with associated code categories (N = 8) below. Within each code category, the bullet points (N = 27) refer to empirical-level codes. On that basis, we foremost propose:

**Proposition 1.** In inter-organizational projects, internal stakeholders organize external stakeholder engagement through solutions based on governance, values and dynamism.

### 4.1 Governance-based solutions

We identified three code categories that relate to governance solutions: engagement activities, organizational structures and engagement indicators. Referring to the organizing principles that provide the basic overall structure for organizing external stakeholder engagement, governance-based solutions address task division by formulating engagement activities, task allocation by establishing organizational structures and reward provision through the development of engagement indicators.

Engagement activities are the concrete tasks that internal stakeholders utilize to engage external stakeholders in project activities. In both case projects, internal stakeholders divided these engagement activities into four types of task to fulfil the goal of engaging external stakeholders: information distribution, information events; dialogue-based events to interact with external stakeholders; and invited visits. The four types of task manifest how internal stakeholders utilized the different levels and depth of involvement in their engagement activities. One manager from Project Road Tunnel described the information distribution process as follows: "I think that general information provision has been exceptional in this project. We send out press releases and other bulletins and weekly handouts, and one can follow the project's progress from the webpages and so on."

The original plan for Project Road Tunnel (published on the National Transport Agency's website) described the use of information events to engage external stakeholders: "A few big media events are arranged in the start-up of the site work, which aim to communicate and disseminate information about the project and the traffic arrangements during construction. In the first events of this kind, a representative group of experts were present to answer any questions and to give different perspectives on the project. Information events are arranged once a month throughout the project. The same stakeholders are always invited, e.g. property owners, house managers, traders, officials, media and other key stakeholders." In the case of Project Railroad, one manager described the dialogue events with external stakeholders: "...there are workshops where we seek to [engage] broadly with [external] stakeholders. About 15 to 20 persons from the client side participate in these workshops."

A manager from Project Road Tunnel described the invited visits in detail: "We have plenty of these tours, where visitors come, and we introduce the project and alliance delivery method in detail, and they ask a lot of questions. We also hold these open resident events at our offices. We have told [external stakeholders] that they are more than welcome to visit the construction site, and every once in a while, someone actually physically visits our construction site to ask something. People who live next to the construction site and within its sphere of influence also visit us here at our office, and we engage in conversation."

Organizational structures are the established physical and contractual bodies that implement external stakeholder engagement activities. They are the necessary inter-organizational roles for organizing interaction with external stakeholders. In the case of Project Railroad, the National Transport Agency and the Track Contractor established dedicated cross-organizational teams to organize interaction with external stakeholders, based on specific individual roles and responsibilities. As one consultant described it, "We communicated with external stakeholders through these small groups." According to one manager, "We divide tasks [in teams], and responsibility for contacting external stakeholders is assigned to our dedicated spokesperson." In similar fashion, Project Road Tunnel's Infra Contractor, Tunnel City, the National Transport Agency and Infra Designer and Engineer established a cross-organizational working group (the "communication team") that was responsible for organizing external stakeholder interactions, again based on individual roles and responsibilities. According to one manager, "Conversations with [external stakeholders] have been very efficiently confined to a few persons and [the communication team]."

Engagement indicators are dedicated instruments for setting goals for and measuring external stakeholder engagement. Jointly formulated and agreed by internal stakeholders, these indicators help internal stakeholders to track the quality of relationships with external stakeholders and to design and implement engagement activities. Bonuses and sanctions for internal stakeholders are based on the instruments' output, motivating desirable interaction with external stakeholders. That is, internal stakeholders execute their external stakeholder engagement activities as well as possible. For instance, acknowledging the importance for key results areas of interaction with external stakeholders, internal stakeholders in Project Road Tunnel set an ambitious objective in relation to positive publicity. This objective was tied to the alliance's shared risk and reward regime, confirming its role in organizing external stakeholder engagement. Internal stakeholders constantly monitored this indicator and implemented activities accordingly with external stakeholders. According to one manager, "We have placed particular emphasis on public image; whenever we do something, however small, we inform people about it well in advance in an attempt to minimize any negative image." Another manager shared this view:

...the pressure created by the positive publicity indicator—on which we base bonuses and sanctions—influences day-to-day operations. This delivery model and [publicity indicator] are good because the contractor is very sensitive to what they [publicists] write in the newspapers and journals, and so this influences our operations.

Similarly, internal stakeholders in Project Railroad agreed technical objectives in relation to external stakeholders that were tied to the shared risk and reward regime. For instance, according to the value-for-money report published by the National Transport Agency, one objective was to "increase the attractiveness of railroad traffic to passengers by improving the service quality of passenger stations and platforms in terms of mobility and safety." This objective required internal stakeholders to interact and communicate proactively with external stakeholders to find out what kinds of services would improve service quality.

In sum, governance-based solutions provide the foundation for organizing external stakeholder engagement. These solutions address task division by devising engagement activities that are the tasks that fulfil the goal of engaging external stakeholders. They address task allocation by establishing organizational structures such as inter-organizational roles and bodies to implement the engagement activities. Finally, governance-based solutions address provision of reward by establishing engagement indicators that motivate internal stakeholders to execute engagement activities in return for bonuses. Therefore, we propose:

**Proposition 2.** Governance-based solutions, including engagement activities, organizational structures and engagement indicators, facilitate interaction with external stakeholders in inter-organizational projects through task division and allocation and provision of reward. Dividing external stakeholder engagement into different tasks, allocating these to established inter-organizational bodies and motivating desirable interaction with external stakeholders based on indicators that determine bonuses and sanctions form a foundation for organizing external stakeholder engagement.

### 4.2 Value-based solutions

The second type of organizing solution is based on values that make external stakeholder engagement activities meaningful and important for internal stakeholders. These solutions address the provision of reward by motivating individuals to collaborate in and execute their external stakeholder engagement activities. Two code categories were found to relate to value-based solutions: engagement and collaboration values and practices for internalizing engagement and collaboration values.

Engagement and collaboration values refer to the community spirit that promotes trust and collaboration among internal and external stakeholders. This community spirit helps internal stakeholders respect the interests of external stakeholders and produce collaborative content for engaging them. One notable example is the "best-for-project" principle utilized by internal stakeholders in both case projects, prompting every stakeholder and every individual to strive for what is best for the project in their everyday decisions and activities. This means that everyone works toward the common goal of achieving project outcomes and objectives (e.g., a positive project image) rather than focusing sub-optimally on their parent organization's goals. It also means that decisions and activities strive for outcomes that are valuable for external as well as internal stakeholders; as one Project Railroad manager noted, "It was evident that this different commercial [alliance] model required a different mindset for stakeholder collaboration." The best-for-project principle reminded internal stakeholders that external stakeholders are essential for effective project delivery and must be respected as such. Rather than viewing them as a negative or a threat, external stakeholders become a source of ideas and innovation and a valuable partner in collaborative implementation of the project. As one Project Road Tunnel manager put it, "...the collaboration that is formed [between internal and external stakeholders] is important because it enables the development of ideas that can be incorporated into the project." This thinking reflects a commitment to genuine and transparent engagement with external stakeholders. As a consultant from Project Railroad said, "... these [best-for-project principle] vibes encourage us to think positively about all kinds of issues in trying to achieve the best end result for everyone." An engineer from Project Road Tunnel shared this view: "...[the best-for-project principle] brings many advantages, especially for stakeholders who attend all kinds of meetings. The flow of information and communication [with external stakeholders] is somehow easier, and we have invested a lot in this."

Practices for internalizing engagement and collaboration values include events and activities such as a co-locational working space referred to as Big Room. In both cases, internal stakeholders utilized this "Big Room" to facilitate the development of a collaboration culture and trust among stakeholders that helped internalizing the engagement and collaboration values. In the Big Room, internal stakeholders' representatives came together to complete project work in the same space, either physically or via remote audiovisual link. Working closely together in this way helped to develop the community spirit that promotes trust and collaboration among internal and external stakeholders. The internal stakeholders' strong collaborative project culture was in turn reflected in how they approached external stakeholders. One manager from Project Railroad described this as follows: "I have utilized it [co-locational working space] as much as possible. Like I said, it [co-locational working space] enables collaboration among all [stakeholders]." Another manager developed this point: "Collaborating there [in the co-locational working space] enabled us to get to know each other and helped us to understand these values." A Project Road Tunnel manager shared this view:

...problem solving is easier; because we are tightly integrated, and information travels fast, we can achieve solutions quickly. There is no problem with collaboration and activities [with external stakeholders] because all [internal stakeholders] have internalized this [mindset and values], so the collaboration works well.

In both case projects, internal stakeholders also implemented engagement and collaboration values through managerial agency—in other words, leading by example to develop an inclusive community spirit. As one Project Railroad manager reported, "I don't think we have imprinted it [community spirit] systematically through tools but through leading by example." A Project Road Tunnel manager supported this view: "Here, it is really about leading by example—it's just the modern way. It shows that we, the management team, are also committed to this [community spirit], and that we appreciate these values [collaboration values]."

In sum, value-based solutions provide the desired cooperative content for internal stakeholders' activities in engaging external stakeholders. They address the provision of reward by motivating individuals to collaborate and execute external stakeholder engagement tasks for non-monetary rewards

such as social reputation and identification, based on internalized values of engagement and collaboration that are important and meaningful for both internal and external stakeholders. These values ensure respect for external stakeholders, and transparent engagement and internalization is facilitated by practices that include workshopping, training sessions, a co-locational working space, leading by example, creating a project logo and identity and building a systematic understanding of the value of engagement and collaboration. Thus, we propose:

**Proposition 3.** Value-based solutions, including engagement and collaboration values and practices for internalizing those values, ensure respect for external stakeholders' interests and their transparent engagement in inter-organizational projects through provision of reward. Motivating internal stakeholders to collaborate in and execute external stakeholder engagement activities based on non-monetary rewards of social reputation and identification provides the desired cooperative content for organizing external stakeholder engagement.

The third organizing solution provides a temporal perspective for organizing external stakeholder

### 4.3 Dynamism-based solutions

engagement. Dynamism-based solutions address task allocation by assigning internal stakeholder personnel to flexible roles and tasks with proactive attitude to external stakeholder engagement. These solutions also address provision of information by supporting the acquisition of information that enables execution of external stakeholder engagement tasks. We identified three relevant code categories: flexibility in day-to-day operations, timely focus on the relevant activities, and communication systems. Flexibility in day-to-day operations means that internal stakeholders ensure that their personnel have sufficiently flexible roles and responsibilities to ensure the effective use of resources for external stakeholder engagement. This also ensures a rapid response to any change in external stakeholders' concerns and resistance, helping internal stakeholders to deploy appropriate engagement activities in timely fashion. In practice, any individual could propose ideas for interacting and communicating with external stakeholders, even if this was not part of their original responsibilities, and these would be taken seriously and followed up. As one Project Road Tunnel designer said,

In general, if a [person] has an epiphany regarding an issue that is not part of that person's [original responsibilities]; this person can [still] suggest ideas about it. Then we would consider how to react to this idea and who might have the expertise to do it.

A manager from Project Railroad offered the following example: "We address all phone calls from [external stakeholders]. We divide tasks and roles flexibly to deal with [their] issues, and it has worked well." Another Project Railroad manager supported this view: "I would argue that the biggest benefit for society as a whole is that we [internal stakeholders] can do things extremely well, but much more flexibly, with a smaller number of people."

Timely focus on the relevant activities means that, rather than arguing with external stakeholders, internal stakeholders focus actively on working together with external stakeholders to resolve issues related to external stakeholders swiftly and efficiently in day-to-day activities. This ensures that internal stakeholder personnel proactively select the most appropriate and timely form of interaction with external stakeholders to resolve their issues rather than blaming them. The following excerpt from the value-for-money report published on the National Transport Agency's website illustrates how the National Transport Agency and the Project Railroad Track Contractor worked with external stakeholders to resolve their issues:

[Internal stakeholders] and [the National Transport Safety Agency] were able to define solutions together and follow through an exceptional permit process in a measured way. When designing railroad work patterns, optimal shifts were scheduled [together] with [the Track Operator], which aided construction and minimized disruption of railroad traffic.

A coordinator from Project Road Tunnel shared this view: "One good thing is that whenever [any kind of] change occurs, there is no need to fight about it; instead, we focus on solving and doing." A manager continued, "We have good links with authorities and [other external stakeholders]. Whenever any issues arise, everyone tries to help to resolve them as best they can, and I think it is a positive thing."

Communication systems refers to the various technical arrangements that support external stakeholder engagement activities by ensuring that internal stakeholder personnel have unimpeded access to

information that is required for engagement activities. In the case of Project Railroad, for instance, the National Transport Agency and Track Contractor implemented systems for gathering feedback regularly from external stakeholders to support the organizing of external stakeholder engagement. One manager described it as follows:

We have this feedback system [for external stakeholders] on our website, which we update constantly. We note all references from [external stakeholders]—thousands of references, all recorded—and we take action. And when an issue has been resolved, we document everything.

Project Road Tunnel's Infra Contractor, Tunnel City, National Transport Agency and Infra Designer and Engineer made similar use of feedback systems as described in this excerpt from the original project plan (published on the National Transport Agency's webpages): "The site engineer will collect [enduser] feedback in a separate folder, and all comments received from the [end-users] will be forwarded to the client's feedback system."

In sum, dynamism-based solutions essentially provide a temporal perspective for organizing external stakeholder engagement. This enables internal stakeholders to respond in timely fashion to external stakeholders' concerns and resistance, supported by ready access to the requisite information. Flexibility in day-to-day operations and timely focus on the relevant activities address the universal challenge of task allocation by assigning internal stakeholder personnel to flexible roles and tasks with a proactive attitude to external stakeholder engagement. Communication systems address the provision of information through access to the information required to execute the relevant tasks associated with external stakeholder engagement. Therefore, we propose

**Proposition 4.** Dynamism-based solutions, including flexibility in day-to-day operations, timely focus on the relevant activities and communication systems facilitate timely response to external stakeholders' concerns and resistance in inter-organizational projects through task allocation and provision of information. Flexible roles and tasks, a proactive attitude and the requisite communication systems support timely organizing of external stakeholder engagement.

Figure 7 shows how the four propositions constitute a model entailing a mid-range theory of how external stakeholder engagement is organized in inter-organizational projects and how the observed organizing solutions help in addressing the four universal challenges.

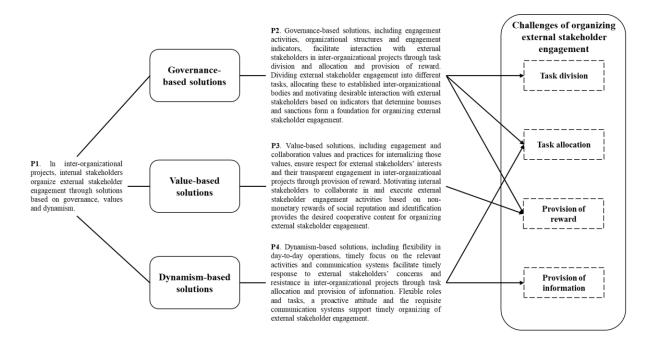


Figure 7. Four propositions constituting a model of how external stakeholder engagement is organized in inter-organizational projects.

### 5. Discussion

This empirical study revealed the intricate nature of organizing external stakeholder engagement in inter-organizational projects and demonstrated how the required organizing solutions relate to governance, values and dynamism. This section considers the study's theoretical contributions and managerial implications.

### 5.1 Theoretical contributions

### 5.1.1 Contribution to project stakeholder management research

The present findings contribute to project stakeholder management research in four ways. First, the identified organizing solutions and associated propositions enhance our understanding of how to organize external stakeholder engagement in inter-organizational projects. This issue has not been adequately addressed in prior work on project stakeholder management research, as any available

insights are generally scattered across empirical studies of other aspects of project stakeholder management, hindering in-depth understanding. Therefore, the present study contributes to project stakeholder management research by addressing this knowledge gap and providing a comprehensive account of three organizing solutions of immediate relevance.

Second, our findings regarding governance-based solutions show that the roles and responsibilities associated with organizing external stakeholder engagement can be inter-organizational, especially within an alliance contractual model. In these two empirical cases, the internal stakeholders formed cross-organizational communication teams that integrated personnel from all sides—client, contractor and designer. The primary responsibility and role of these inter-organizational teams was to organize external stakeholder engagement through distinct engagement activities that varied in depth and breadth of involvement, ranging from distribution of information to personal visits. Contrary to the earlier view that distinct roles and responsibilities for external stakeholder engagement in inter-organizational projects should be allocated to specific internal stakeholders and personnel—for example, that project managers should develop stakeholder engagement processes and plans for interfacing with external stakeholders (Gil, 2010; Olander and Landin, 2005) while the project owner manages relationships with authorities and local communities (Aaltonen et al., 2008)—the present findings contribute to extant research by suggesting that these roles and responsibilities might instead span organizational boundaries. Third, our findings regarding value-based solutions show that establishing and assimilating collaboration and engagement values through practices such as co-locational working spaces can support genuine co-operation with external stakeholders and thus the implementation of managementfor-stakeholders approach, especially in alliance contracting. In addition, our governance-based solutions show how engagement indicators can motivate internal stakeholders to adhere to management for stakeholders approach through systems of reward and punishment, and how engagement activities (ranging from distribution of information to personal visits) highlight the engagement of external stakeholders on an extended level. Previous research has reported that implementing management-forstakeholders approach is highly challenging in practice and requires a fundamental change in how external stakeholder engagement is approached (Eskerod and Huemann, 2014). Research has also

emphasized that successful and value-adding implementation of management-for-stakeholders approach requires engaging external stakeholders on an extended level (Di Maddaloni and Davis, 2018; Eskerod et al., 2015). However, earlier research has not provided empirical evidence about this fundamental change nor how to engage external stakeholders on an extended level to implement management-for-stakeholders approach. Therefore, our present findings contribute to existing research by enhancing our understanding of novel organizing solutions and organizational practices that facilitate and underpin the implementation of management-for-stakeholders approach in inter-organizational projects. Hence, our findings provide nascent evidence about a fundamental change in how external stakeholder engagement is approached and how to engage external stakeholders on an extended level.

Fourth, the identified dynamism-based solutions offer concrete means for managing the inherent stakeholder dynamics of inter-organizational projects—that is, the constantly changing interactions between internal and external stakeholders. Dynamism-based solutions enhance project resilience in the face of the uncertainty created by unexpected stakeholder issues and conflicts and ensure proper and timely responses. For instance, in the present study, flexible roles and responsibilities regarding external stakeholder engagement enabled rapid and appropriate responses to external stakeholders' resistance and changing concerns. This meant that, rather than arguing, internal stakeholders focused on resolving external stakeholders' issues in a timely manner. Although stakeholder dynamics are known to pose a range of challenges for inter-organizational project management (Aaltonen and Kujala, 2016), many studies have relied on static approaches, and while few empirical studies have addressed the stakeholder dynamics and related challenges (Aaltonen et al., 2015; Lehtinen et al., 2019), not much has been understood about the possible remedies. Therefore, our present findings contribute to earlier research by shedding light on the remedies that efficiently direct internal stakeholders' resources to actual external stakeholder challenges rather than wasting time negotiating who should take action and when.

### 5.1.2. Contribution to mainstream stakeholder research

The present study also makes two contributions to mainstream stakeholder research. First, the focus on organizing highlights the role of organizational arrangements and activities in ensuring value creation for different stakeholders and in supporting a management-for-stakeholders approach. With a few

exceptions (Hummels, 1998; Yuan et al., 2011), this organizing perspective is largely absent from the mainstream stakeholder literature. The empirically-derived organizing solutions identified here facilitate a systematic approach to stakeholder engagement in inter-organizational contexts, ensuring that the relevant objectives and practices are realized and implemented in a planned and integrated manner. Consequently, one of the important contributions of this study is to bring the organizing perspective on stakeholder engagement into the research spotlight and to encourage fresh thinking about how a management-for-stakeholders approach might be integrated into organizational arrangements and activities. By advancing a multifaceted understanding of organizing solutions that support the implementation of a management-for-stakeholders approach, the model proposed in this study contributes to previous research by extending understanding of key decisions that need to be made in organizing stakeholder engagement in inter-organizational contexts.

Secondly, our findings show that, under an alliance contractual model, internal stakeholders approached the issue of organizing external stakeholder engagement as a joint problem-solving exercise, acting collectively to achieve the relevant objectives. This required a range of provisions that included interorganizational coordination bodies (e.g., cross-organizational communication teams); joint incentives such as engagement indicators; establishing stakeholder engagement values; and organizational arrangements such as flexible roles and responsibilities for stakeholder engagement. Prior research has tended to adopt an intra-organizational perspective on organizing external stakeholder engagement, based on the single-organization hub-and-spoke model (Fassin, 2009), where a single organization organizes its external stakeholder engagement activities. Understanding about networked business environments and inter-organizational contexts where internal stakeholders jointly organize external stakeholder engagement has been long called for, yet without much scrutiny (Freeman et al., 2010; Rowley, 1997). Our findings therefore contribute to existing research by extending beyond the traditional hub-and-spoke approach into a direction more suitable for networked business environments and inter-organizational contexts.

### 5.2 Managerial implications

The present findings have two immediate practical implications for project managers. First, it seems clear that external stakeholder engagement depends on appropriate mental models and normative structures, as well as timeliness and flexibility. For managers, the mental models highlight the need to foster community spirit that promotes transparency and trust among internal and external stakeholders. Additionally, managers should, wherever possible, strive to develop a best-for-project organizational culture, in which everyone works toward a common goal shared by all stakeholders. These outcomes depend on managers who lead by example and on practices that include regular workshops and orientation, training, and meetings, with co-locational working spaces and small group working. By internalizing mental models through these practices, project personnel learn to respect external stakeholders' interests and the need for transparent engagement. Normative structures such as interorganizational working groups (e.g., a dedicated communication team managed by internal stakeholders) and engagement indicators tied to project objectives with additional bonuses and sanctions, also support systematic external stakeholder engagement. These structures should be designed in conjunction with stakeholders, possibly including external stakeholders. Finally, project personnel need flexible roles, duties and communication systems (e.g., external feedback systems that facilitate execution of engagement tasks in timely fashion). This flexibility and free flow of information engenders an active focus on doing rather than arguing, building capability to respond effectively to external stakeholder pressures.

Secondly, beyond the issue of external stakeholder engagement, managers need to understand that the solutions described above can contribute more generally to project management—for example, through normative structures that guide internal stakeholders' operations and mental models that promote collaboration and teamwork, adding meaning to day-to-day activities. Finally, timeliness and flexibility promote efficient decision-making and rapid response.

### 6. Research limitations and directions for further research

### 6.1 Research limitations

The present study has four main limitations. First, conventional content analysis is of limited use for theory generation, as it hinders inference of theoretical relationships between concepts (Hsieh and Shannon, 2005). To mitigate this limitation, we focused first on concept development and model building as suggested by Hsieh and Shannon (2005) and then employed abductive reasoning to theorize and develop four propositions about the posited conceptual relationships. A second limitation is that, in constructing the model, we did not take account of the role of time or of the relationships among organizing solutions. In practice, the observed organizing solutions are interrelated and entail some kind of temporal order, inviting a process description, but this was beyond the scope of the present study. Third, a majority of the interviewees were internal stakeholders, which might bias the findings. However, for triangulation purposes, we also collected and utilized secondary data (i.e., public documentation such as news articles and project reports and plans), which we believe helped to mitigate this limitation. Additionally, although the adopted organizing framework (combined microstructural/problem-solving approach) provides a robust theoretical framework, this is only one possible approach and may constrain the analysis and findings. Fourth, the case studies involved an alliance contractual model, which may have influenced the findings. In particular, as compared to more transaction-oriented project delivery forms, the alliance model and the collaborative commercial setting may favor organizing solutions that require intensive collaboration. For that reason, caution must be applied in generalizing the present findings to non-alliancing inter-organizational projects.

To enhance the study's validity and reliability, we applied the following best practices for case study research as proposed by Yin (2013, 2015). To ensure the construct validity of the identified organizing solutions, we employed multiple data sources (i.e., interviews and public documentation) for triangulation. We also established a chain of evidence (supported by Appendix A1) to demonstrate how our findings emerged from the raw data. To ensure internal validity, we focused on explanation building in our findings narrative to stipulate the links between the identified organizing solutions and the four challenges of organizing external stakeholder engagement. Additionally, our cross-case analysis applied literal replication logic for pattern matching of links between the two cases. In the interests of external validity, we used abductive reasoning and theory elaboration approach by applying a general theory of

organizing as a problem solving process to help explain our inferences. This use of theory supports the analytical generalization of our findings to other situations and to theory about external stakeholder engagement in inter-organizational contexts. To ensure reliability, we adopted the case study protocol, which is carefully documented here. The original case descriptions, Atlas.ti files (including within-case analyses) and MS Office files (including cross-case analysis) are available on request.

### 6.2 Future research agenda

This attempt to look inside the black box of organizing external stakeholder engagement in interorganizational projects provides only preliminary insights, and there are two clear avenues for further
research. First, for the purposes of theory development and project management practice, these findings
should be empirically validated in other contexts, using qualitative, quantitative and mixed methods.
Building on these findings, other possible organizing solutions and the interrelationships among
organizing solutions should be investigated in pursuit of a more generalizable and perhaps simpler
theory, based on other theoretical perspectives and, perhaps, grounded theory. Secondly, to generate
more accurate theory, future research should explicitly address the role of time, perhaps using qualitative
process studies to further clarify the nature, role and relationships of organizing solutions in this context.

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Organizing solutions	Code categories	Empirical codes	Sample quotes of empirical evidence
		Information distribution via websites, value- for-money reporting, leaflets and bulletin	"Information was disseminated and shared regularly and openly to local residents, stakeholders and decision-makers throughout the project by means of a range of different channels, public events, negotiations, meetings, presentations, social media and conventional media. All feedback from local residents and citizens was responded to and action was taken as required." (Value-for-money report, project Road Tunnel)
			"I think that general information provision has been exceptional in this project. We send out press releases and other bulletins and weekly handouts, and one can follow the project's progress from the webpages and so on." (Manager, project Road Tunnel)
			"We have invested in informing stakeholders more than in our other projects." (Manager, project Road Tunnel)
	Engagement activities		"About this weekly bulletin we have been delivering a similar report to operator [Track Operator] for the past years. We have also delivered a lot of material to [National Transport Safety Agency]." (Manager, project Railroad)
			"Of course, we have very typical webpages for the project [to share information]. We also use it [the webpages] in stakeholder collaboration." (Manager, project Railroad)
Governance- based solutions		Information events, such as 'Communication campaign' and big media events	"A few big media events are arranged in the start-up of the site work, which aim to communicate and disseminate information about the project and the traffic arrangements during construction. In the first events of this kind, a representative group of experts were present to answer any questions and to give different perspectives on the project. Information events are arranged once a month throughout the project. The same stakeholders are always invited, e.g. property owners, house managers, traders, officials, media and other key stakeholders." (Project plan, project Road Tunnel)
			"We have had several meetings and information events with municipalities and with [Economic, Development, Transport and Environment Agency]." (Manager, project Railroad)
			"During the implementation, we have considered the environment better than usually by taking into account the residents in the area who are influenced by the project. We organize these information events regularly and we have put a lot of effort in this as we have seen it necessary." (Manager, project Road Tunnel)
			"In the second phase, information events are arranged for the residents a few weeks before they can feel the effects of the excavation in their building. The residents are told how long the excavations will last and other details. By previous experience, these events often change the uncertain perception of the residents into an interest in the excavations." (Project plan, project Road Tunnel)
		Dialogue events to interact with external stakeholders, such as workshops	"there are workshops where we seek to [engage] broadly with [external] stakeholders. About 15 to 20 persons from the client side participate in these workshops." (Manager, project Railroad)
			"Workshop work was also applied to [external] stakeholder cooperation, such as in connection with line relocations, tunnel safety, and maintenance and traffic control." (Value-for-money report, project Road Tunnel)

	Invited visits to construction site and Big Room	"We have plenty of these tours, where visitors come, and we introduce the project and alliance delivery method in detail, and they ask a lot of questions. We also hold these open resident events at our offices. We have told [external stakeholders] that they are more than welcome to visit the construction site, and every once in a while, someone actually physically visits our construction site to ask something. People who live next to the construction site and within its sphere of influence also visit us here at our office, and we engage in conversation." (Manager, project Road Tunnel)  "We have this railroad site meeting practice, where we invite other contractors and maintenance actors [external stakeholders] who work on different projects but on the same track area, to discuss about how to schedule work and logistics together to fit every actors' needs. We also inform those [external stakeholders] about our works." (Engineer, project Railroad)  "This is an interesting project because we have a lot of visitors from many different actors in a weekly basis." (Manager, project Railroad)
Organization		"We communicated with external stakeholders through these small groups." (Consultant, project Railroad)  "We divide tasks [in teams], and responsibility for contacting external stakeholders is assigned to our dedicated spokesperson." (Manager, project Railroad)  "It [responsibility to communicate with external stakeholders] belongs to this group [communication team]. And in this group [communication team] we have specific personnel designated for communication." (Manager, project Railroad)  "We have this separate communication team, where I am the chair, but we also have publicists from others [internal stakeholders]. We have prepared a communications plan, which we implement and follow-up constantly, and we try to identify ways how the communications can help the construction site from [communications] overload." (Manager, project Railroad)  "Conversations with [external stakeholders] have been very efficiently confined to a few persons and [the communication team]." (Manager, project Road Tunnel)  "I have a bit of a special purpose in this project. I do not design, I do not build, but I communicate and I am the link outwards (to external stakeholders) and also inwards to core to project and assistant project managers." (Manager, project Road Tunnel)  "The task of the Communications Team is to direct, plan and coordinate the communications of the Alliance and its stakeholders so that the project communications objectives defined in the development phase are met as well as possible. The CT updates the communications plan devised in the DP phase as well as adding more detailed instructions (disturbances and other communications)." (Project plan, project Road Tunnel)  "The requirements and discussions and workshops in different phases of tendering ensured that bidders had understanding, correct attitude and capability to work in alliance and the ability to produce value for money." (Value-for-money report, project Railroad)  "With regard to alliance capability and management, the following were evaluated [in tend

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		"None of us really had any experience in working in alliance project. So we hired an external coach to prepare us for working in alliance and understand the principles and values." (Manager, project Road Tunnel)
		"Procedures that increased efficiency in the project focused mainly on the benefits of stakeholder collaboration enabled by alliance delivery model." (Value-for-money report, project Railroad)
	<ul> <li>Project organization kept as unchanged as possible (key personnel bound to project)</li> </ul>	"The composition of the Alliance in the development phase will be kept unchanged as far as possible in the implementation phase, to ensure that the Alliance ethos, cooperation and approved practices created in the development phase are transferred to the implementation phase." (Project plan, project Road Tunnel)
		"Yes, in principle yes. In long projects, there are unavoidable personnel changes, but in this case, we try to bind [key] personnel. It is not for the benefit of the parent company either, if we change the entire personnel and the new personnel would be at a loss regarding the alliance model." (Manager, Project Railroad)
	Neutral experts (observers) participate in meetings to report outwards and	"Independent observer is a necessity to ensure neutrality of this process [project]. This person [independent observer] is present in all evaluation meetings and reports outwards." (Manager, project Railroad)
	promote transparency to external stakeholders	"The owner had hired an impartial observer to ensure that the procurement negotiations were fair and non-discriminatory. The impartial observer found no issues with the tendering process. A procurement consultant, financial expert, cost expert, neutral observer, management expert and alliance facilitator took part as experts commissioned by the owners." (Value-for-money report, project Road Tunnel)
	Objectives related to external stakeholders	"the pressure created by the positive publicity indicator—on which we base bonuses and sanctions—influences day-to-day operations. This delivery model and [publicity indicator] are good because the contractor is very sensitive to what they [publicists] write in the newspapers and journals, and so this influences our operations." (Manager, project Road Tunnel)
		"Key result area: Public Image – The public image of the project is improved and the project gains demonstrable, general public approval. The public image of the project must be positive. The public image of the project improves and the acceptance of the project can be clearly ascertained." (Project plan, project Road Tunnel)
Engagement indicators		"increase the attractiveness of railroad traffic to passengers by improving the service quality of passenger stations and platforms in terms of mobility and safety. Increase safety by removing railroad crossings with crossing at different levels. Expanding and improving parking and environment for passenger vehicles and bicycles." (Value-for-money report, project Railroad)
		"We have been successful with the press and informing. At least we have now received an award for informing [external stakeholders] successfully." (Manager, project Railroad)
		"We have placed particular emphasis on public image; whenever we do something, however small, we inform people about it well in advance in an attempt to minimize any negative image." (Manager, project Road Tunnel)
		"One of the key results areas is public image. The objective is to achieve at least 85% neutral or positive publicity regarding the project, and currently we stand at 82%." (Manager, project Road Tunnel)
		"The objectives of project communications and dialogue are: To offer key stakeholders (inhabitants, decision makers, authorities, housing associations etc.) sufficient and timely

information about project, its progress and effects. Improve the public image of the project so that [project Road Tunnel] is a good example of an Alliance contract. Support the progress of the project through communications. Be prepared for communications regarding disturbances. Gather and disseminate information regarding the environmental changes (effects on people and landscape) and involve people." (Project plan, project Road Tunnel) "The goal of implementing alliance model is to create more Value-for-money objectives value with the society's investments compared to regular emphasize project procurement models. Value for money means the balance of benefits (quality, technical requirements, societal external stakeholders' and environmental requirements) compared to price and risks to achieve such benefits." (Value-for-money report, project values "The value for money -approach focuses not just on the lowest possible cost and a fast or predictable turnaround but also on other factors that generate value to the owner and users. These include, among others, taking users', the owner's and other stakeholders' views and requirements into account, striving for high standards, promoting innovation and giving attention to social and environmental considerations. The alliance model makes use of cooperation between the parties, promotes innovation and reduces needless waste and unnecessary work. The alliance model seeks to realise the project in a manner that, compared to more traditional forms of procurement, will deliver more benefits and value to society and the money it has invested in the project." (Value-formoney report, project Road Tunnel) • Industry-level "Construction productivity impact target: Lessons learnt from objectives related alliance contracting and the visibility of the projects have made several building contractors and the entire construction to more industry keener to promote the alliance contracting model and transparent and trustful modus also to develop other contracting models." (Value-for-money report, project Road Tunnel) operandi in construction "National Transport Agency chose to pilot alliance model, sector because it wanted achieve the following strategic objectives in procurement: ...Transform the operations culture of construction sector towards a more transparent and trustful modus operandi." (Value-for-money report, project Railroad) "In my opinion, the [National Transport Agency] has succeeded in promoting the development of the field by utilising previous experience and by sharing this information". (Manager, project Road Tunnel)

	Engagement and collaboration values	Community spirit encouraging cooperation, transparency and trust with external stakeholders	"It was evident that this different commercial [alliance] model required a different mindset for stakeholder collaboration." (Manager, project Railroad)
			"What does alliance spirit mean to me? It is, indeed, a brilliant way of working. To collaborate with stakeholders for the best of the project." (Manager, project Railroad)
			"Cooperation and trust: The [project Road Tunnel] alliance managed to create a positive team spirit between all the key parties involved in the project. The [project Road Tunnel] alliance engaged in extensive preliminary planning and dialogue with various authorities [external stakeholders]." (Value-for-money report, project Road Tunnel)
			"the collaboration that is formed [between internal and external stakeholders] is important because it enables the development of ideas that can be incorporated into the project." (Manager, project Road Tunnel)
		A committed attitude to implement new	"But it [alliance model] requires that everyone is committed to it and working together with everyone." (Engineer, project Railroad)
		alliance delivery model together with external stakeholders	"Yes, they [stakeholders] are active and solve problems. There is no need to be against each other like in normal projects we really try to find the best possible solution together." (Manager, project Road Tunnel)
Value-based			"Collaboration, meaning that we do things together. Whether it is about communication, managing risks or creation of possibilities, it is collaboration. And the spirit that we make decisions together. This collaboration gives birth to everything in every area of this project. Also, transparency is of course one thing, meaning that we have no secrets, but all information is available, even though we are still learning this transparency." (Manager, project Road Tunnel)
solutions		Best-for-project principle: working together toward a common goal, also shared by external stakeholders	" these [best-for-project principle] vibes encourage us to think positively about all kinds of issues in trying to achieve the best end result for everyone." (Consultant, project Railroad)
			"[the best-for-project principle] brings many advantages, especially for stakeholders who attend all kinds of meetings. The flow of information and communication [with external stakeholders] is somehow easier, and we have invested a lot in this." (Engineer, project Road Tunnel)
	Practices for internalizing engagement and collaboration values	Workshops, orientation, and training sessions to assimilate engagement and collaboration values	"We take [two psychologists] with us for two days, and we all go to a cabin in the woods for project training to raise everyone's spirits, which has been spectacular." (Manager, project Railroad)
			"These psychologists are experienced in facilitating and evaluating team working [and collaboration]." (Manager, project Railroad)
			"Organised workshops and other such processes to create the right Alliance culture and ethos, striving for maximum performance." (Project plan, project Road Tunnel)
			"We have a lot of workshops, in very informal way that support understanding the collaboration." (Manager, project Railroad)
		Co-locational working space: free-form and informal small group working to internalize engagement and collaboration values	"[The Big Room] serves us well; because we have representatives from the [Tunnel City], [National Transport Agency] and designers, one can easily go to a designer, for instance, to ask about certain issues, which means that one is not dependent on emails and phone calls or [affected by] delays. We can just go and ask one another, which really supports everyone and the collaboration [among stakeholders]." (Manager, project Road Tunnel)
1			"I have utilized it [co-locational working space] as much as possible. Like I said, it [co-locational working space] enables

			collaboration among all [stakeholders]." (Manager, project Railroad)
			"problem solving is easier; because we are tightly integrated, and information travels fast, we can achieve solutions quickly. There is no problem with collaboration and activities [with external stakeholders] because all [internal stakeholders] have internalized this [mindset and values], so the collaboration works well." (Manager, project Road Tunnel)
			"Collaborating there [in the co-locational working space] enabled us to get to know each other and helped us to understand these values." (Manager, project Railroad)
		Managers implement engagement and	"I don't think we have imprinted it [community spirit] systematically through tools but through leading by example." (Manager, project Railroad)
		collaboration values by leading by own example	"Here, it is really about leading by example—it's just the modern way. It shows that we, the management team, are also committed to this [community spirit], and that we appreciate these values [collaboration values]." (Manager, project Road Tunnel)
		Creating own project logo and identity: working for project and its	"We have these all kinds of stickers that people attach to their laptops, which then shows who work in this project. We also have these bags that we distributed with our own project logo and identity." (Manager, project Railroad)
		common goal, also shared by external stakeholders	"First comes in to my mind is that we had to show outward that we have a shared symbol, shared identity and values and the idea came up pretty quickly that we want to achieve some signs of community spirit among everyone that can be seen everywhere." (Manager, project Road Tunnel)
			"Of course, they [symbols and signs] have a positive influence in creating community spirit." (Manager, project Railroad)
		Preparing and doing research about how to work in alliance projects and	"It is true that some of them [alliance partners] had clearly prepared themselves regarding how to work in group and organize accordingly [according to alliance and value-formoney principles]." (Manager, project Road Tunnel)
	projects and adopt its engagement and collaboration values	"When we heard that project Railroad will be an alliance project, we were very excited to participate. My superior at that time flew to America to study alliances and their principles for few weeks and then came back to teach the rest of us. This was half a year before the tendering began. We had alliance books written in English, which we divided among ourselves and everyone read different parts, prepared summaries, and then taught others their section. Working in alliance did not really require any new knowledge per se, but it required a new way of thinking about. It is important to understand the central idea, the entire model and its values." (Manager, project Railroad)	
		Flexible roles and responsibilities for external stakeholder engagement	"In general, if a [person] has an epiphany regarding an issue that is not part of that person's [original responsibilities]; this person can [still] suggest ideas about it. Then we would consider how to react to this idea and who might have the expertise to do it." (Designer, project Road Tunnel)
Dynamism- based solutions	Flexibility in day-to-day operations		"We address all phone calls from [external stakeholders]. We divide tasks and roles flexibly to deal with [their] issues, and it has worked well." (Manager, project Railroad)
			"At first it was a bit challenging to find my own role. No one really knew his or her role, because the role definition came from the alliance organization and it was very flexible. You learned your role by working and doing and trying." (Manager, project Railroad)
			"I would argue that the biggest benefit for society as a whole is that we [internal stakeholders] can do things extremely well, but much more flexibly, with a smaller number of people." (Manager, project Railroad)

		Adaptive meeting, communication, and reporting protocols toward external stakeholders	"Communication has been adaptive through this organization and through the working groups. Dedicated persons have been responsible that the right information goes to right people the right way, and there has not been any problems." (Consultant, project Railroad)  "I think the greatest benefit has been the swiftness and easiness. I mean, you can summon a meeting anytime with any stakeholders to look into any kinds of issues." (Engineer, project Road Tunnel)
	Timely focus on the relevant activities	Focus on working rather than arguing with external stakeholders	"[Internal stakeholders] and [the National Transport Safety Agency] were able to define solutions together and follow through an exceptional permit process in a measured way. When designing railroad work patterns, optimal shifts were scheduled [together] with [the Track Operator], which aided construction and minimized disruption of railroad traffic." (Value-for-money report, project Railroad)  "Today, we had this issue [regarding external stakeholders] that cost 10 000. But we do not focus on whose fault it is, but we focus on solving the issue. We do not focus on fighting with them [external stakeholders]. This is an unconditional example of the transparency." (Manager, project Railroad)  "One good thing is that whenever [any kind of] change occurs, there is no need to fight about it; instead, we focus on solving and doing." (Coordinator, project Road Tunnel)  "Everyone has seen through this that we have quickly left out all unnecessary squabble which is not part of this transparency." (Manager, project Road Tunnel)  "We have good links with authorities and [other external stakeholders]. Whenever any issues arise, everyone tries to help to resolve them as best they can, and I think it is a positive thing." (Manager, project Road Tunnel)  "This model [alliance model] means that we hardly fight about issues, but we need to make decisions together. Everyone knows that we do not want to go to the court with any stakeholder, meaning that we need to settle all issues, which drives us to this collaboration and joint decision-making." (Manager, project Road Tunnel)
		Swift and efficient problem-solving together with external stakeholders	"The time of hearing was delayed for some reasons and there were many complaints [from external stakeholders] and other things. However, we were able to consider swiftly their concerns in the implementation. Flexibility is good in this model." (Manager, project Railroad)  "Dealing with change efficiently is part of the alliance methodology, where the focus is on solving problems together instead of solving who caused the problem." (Value-for-money report, project Railroad)  "I think that the biggest offering of this alliance model is that we can concretely see that when something unexpected occurs, we can deal with it and solve it very quickly. Dealing with exceptions has been very fast and we have solved problems with incredible speed." (Manager, project Road Tunnel)  "Working has been nice in the sense that if we consider all the challenges that we had [with external stakeholders], we have focused our efforts in dealing with the issues as efficiently as possible. If we had a different procurement model, we would be arguing all the time. We have used our energy to deal with issues." (Manager, project Road Tunnel)  "Collaboration is what has been working well, because there has been no boundaries with stakeholders. We can noticeably faster deal with issues." (Designer, project Road Tunnel)

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		"Problem solving is so much easier when we are all integrated tightly and information flows quickly, so we can solve problems together very quickly." (Manager, project Road Tunnel)
	Systems for collecting feedback from external stakeholders	"We have this feedback system [for external stakeholders] on our website, which we update constantly. We note all references from [external stakeholders]—thousands of references, all recorded—and we take action. And when an issue has been resolved, we document everything." (Manager, project Railroad)
		"The site engineer will collect [end-user] feedback in a separate folder, and all comments received from the [end-users] will be forwarded to the client's feedback system." (Project plan, project Road Tunnel)
	Gathering learning regarding experiences with external	"At the end of January we will organize this workshop where we have this kind of lessons learned sparring session facilitated by [psychologist]." (Manager, project Railroad)
	stakeholders	"We have this exceptional reporting protocol, which is one of the best tools from learning perspective. We report all exceptions [with stakeholders] systematically and learn from them." (Manager, project Railroad)
Commun		"Value for money reporting gives alliances an opportunity to demonstrate: What the alliance learned from the project." (Value-for-money report, project Road Tunnel)
	Centralized     electronic project     document bank to	"it is easier to acquire information from this [project] organization for communicating with [external stakeholders]." (Manager, Project Road Tunnel)
	share information regarding external stakeholders	"All the information has been centralized in cloud services, and personnel can access information from everywhere and they know how to do it. Our publicists knows how to use this outwards for informing [external stakeholders]." (Manager, project Railroad)
		"An electronic project bank is used in document management and distribution. All materials from the project are saved in the project bank in an electronic format which also functions as a hand-over material bank as the project is implemented – no paper based materials are used." (Project plan, project Road Tunnel)
		"We have this project document bank, where we store everything. Its use has improved constantly." (Coordinator, project Road Tunnel)