

2010

Governance networks and stakeholders: engaging through salience

Sandra Beach

Queensland University of Technology

Robyn L. Keast

Queensland University of Technology

Publication details

Beach, S & Keast, RL 2010, 'Governance networks and stakeholders: engaging through salience', *14th Annual Conference of the International Research Society for Public Management (IRSPMXIV)*, University of Bern, Bern, Switzerland, 7-9 April, IRSPM.

ePublications@SCU is an electronic repository administered by Southern Cross University Library. Its goal is to capture and preserve the intellectual output of Southern Cross University authors and researchers, and to increase visibility and impact through open access to researchers around the world. For further information please contact epubs@scu.edu.au.

International Research Society for Public Management Conference

7-9 April 2010, Berne University, Berne, Switzerland

**Stakeholder Engagement by Infrastructure Governance Networks:
The Link with Network Management and Managers**

**Sandra Beach, Queensland University of Technology, Australia
Dr Robyn Keast, Queensland University of Technology, Australia**

This paper was developed within the CRC for Integrated Engineering Asset Management (CIEAM), established and supported under the Australian Government's Cooperative Research Centres Programme.

Abstract

Across Australia, construction and redevelopment of public infrastructure, continues to be a key factor in economic development. Within this context, road transport has been identified as key building block of Queensland's future prosperity. However, since the late twentieth century, there has been a shift away from delivery of large infrastructure, including road networks, exclusively by the state.

Subsequently, a range of alternative models, have emerged in infrastructure project delivery. Among these, governance networks have become a widespread mechanism for planning and delivering infrastructure. However, despite substantial public investments in road infrastructure that are made through governance networks, little is known about how these networks engage with stakeholders who are potentially affected by road infrastructure projects. Although governance networks undertake management functions, it is unclear what drives stakeholder engagement within this networked environment and how stakeholder relationship management is operationalised.

This paper proposes that network management functions undertaken by governance networks incorporate stakeholder engagement and that network managers play a key role in creating and sustaining connections between governance networks and their stakeholders. Drawing on stakeholder theory and governance network theory, this paper contributes to the literature by showing that stakeholder engagement is embedded within network management and identifying the critical role of network managers in establishing and maintaining stakeholder engagement.

INTRODUCTION

It has long been considered that investment in public infrastructure can have a significant positive impact on economic growth (Munnell, 1992) and has been used as a nation-building strategy in an effort to mitigate the impacts of the recent global financial crisis. In Australia, the construction and renewal of infrastructure including roads, transport, water and energy has recently been the subject of massive funding injections at both federal and state levels (Commonwealth of Australia, 2009). In 2008/2009 the Australian government invested forty two billion dollars in the delivery of infrastructure through its Nation Building Economic Stimulus Plan (Commonwealth of Australia, 2009). This investment was matched and extended by the Queensland government which committed over one hundred billion dollars between 2009-2026 for infrastructure delivery (Queensland Government, 2009).

Public awareness of these infrastructure programs is high because they represent massive public investment, may involve multiple and conflicting stakeholders and have potentially significant environmental impacts (Lim & Yang, 2008). Furthermore, provision of this infrastructure is also likely to have a considerable bearing on local economies and the quality-of-life of individuals and communities (Yang & Yuan, 2009, p. 1) through factors including: job creation, access to social services and noise levels (Rodrigue, Comtois, & Slack, 2006). Therefore to produce positive outcomes from infrastructure delivery it is imperative that stakeholder “buy in” be obtained particularly about the scale and location of infrastructure. However, given the likelihood that stakeholders will have different levels of interest and investment in project outcomes (Newcombe, 2003), failure to manage this dynamic could potentially jeopardise project delivery (Lim & Yang, 2008). Consequently, it could be argued that stakeholder engagement may constitute a critical activity in infrastructure development delivered through networks.

Within the road infrastructure context, Yang and Lim (2008, p. 2) have identified that there is a need to establish new approaches which integrate and synthesise the different perspectives of multiple stakeholders involved in provision of road infrastructure. However, this is not a straightforward matter given that road infrastructure may be planned, constructed and managed through arrangements that involve the public and private sectors working jointly within governance networks that incorporate hierarchical, market and networked factors (Keast & Hampson, 2007). While governance networks and particularly public-private partnerships have come to the fore as mechanisms for road infrastructure delivery, little is known about how these types of networks go about engaging with a broader range of actors associated with road provision. Keast, Mandell and Brown (2005) and Keast and Hampson (2007) argued that the dominant governance mode within governance networks provides the main management focus; that is if the network is strongly state oriented then it would principally incorporate public management principles. Therefore this paper adopts the position that infrastructure governance networks operate within the public management context.

This paper makes an original contribution to the literature of stakeholder engagement and network management by bridging these two literatures to address the question of what drives stakeholder engagement by infrastructure governance networks. Given that the issue of stakeholder engagement by governance networks is under explored (Beach, 2009), how stakeholder engagement relates to network management and the role that network managers play in engaging with stakeholders remains unclear. In addressing these issues, the paper is structured in four sections: 1. The significance of stakeholder engagement for road infrastructure delivery, particularly infrastructure delivered through governance networks, 2. Situating stakeholder engagement in the literature 3. The approaches and processes of

network management to illustrate that stakeholder engagement is integral to these activities and, 4. The importance of network managers in enacting and maintaining levels of stakeholder engagement. In drawing together these threads, the paper concludes that engaging with stakeholders could be an important management task for infrastructure delivery networks and further, that the role of network manager may be critical to effective stakeholder engagement.

Having elaborated the contribution and structure of this paper, the emergence of networked models of infrastructure delivery and the complexities that they raise for stakeholder engagement and relationship management are discussed next.

INFRASTRUCTURE DELIVERY THROUGH NETWORKS

Decisions made about roads management can have a critical impact on the social, economic and environmental well-being of citizens and communities. Accordingly, stakeholder engagement has been identified as a critical issue (Doyle, 2008) for several reasons. Firstly, the lifecycle of infrastructure development is long and complex and incorporates many phases (Yang & Yuan, 2009), consequently numerous stakeholders may be affected by road construction projects over long periods of time. Further complicating this issue, these stakeholders can be unique to different projects phases. By dealing with these dynamics through stakeholder engagement, the potential project risks associated with stakeholders can be more effectively managed (Bourne & Walker, 2008).

Secondly, to ensure that the massive public investments in infrastructure result in appropriately situated and effectively functioning roads, it is critical that input be obtained from the right stakeholders, in the right way and in a timely manner (Hylmö, 2005). Given

that the “positive involvement with stakeholders can be a decisive factor that can ‘make or break’ a project” (El-Gohary, Osman, & El-Diraby, 2006, p. 604), obtaining this type of grounded input from stakeholders is essential to the success of road infrastructure provision.

Finally, infrastructure is increasingly being provided through multiple and overlapping networks of interaction and decision making, rather than through the limited exposure of the hierarchy or firm. Therefore, it is becoming increasingly important to understand how stakeholder interactions unfold in governance networks which may incorporate a mix of governance arrangements. Governance and the issues that it raises for stakeholder engagement in a networked environment is discussed next.

Governance Networks and Stakeholder Engagement

Since the late twentieth century, there has been a shift away from delivery of large infrastructure exclusively by the state. Subsequently, a range of alternative mechanisms have emerged in infrastructure project delivery; one of the more prominent being public-private partnerships (Grimsey and Lewis 2005 and Osborne 2000) which, it could be argued are emblematic of the broader phenomenon; governance networks. Effective delivery of road infrastructure through these networks relies upon governance; a mechanism for solving common problems at local, national and global levels taking account of the relationships, rights and obligations of the actors facing the problems and how power and authority play out (Newman, 2001). The literature tends to focus on three major and idealised governance paradigms, unicentric or hierarchical forms (state or firm hierarchy), multicentric (market) and pluricentric (network) (Lowndes & Skelcher, 1998; Powell, 1990; Thompson, Frances, Levacic, & Mitchell, 1991; Van Kersbergen & Van Waarden, 2004).

Hierarchical governance is characterised as a vertical or top down co-ordinating mechanism which is based on the bureaucratic model of organisation (Kooiman, 2005; Peters & Pierre, 1998). By contrast, market governance is a more spontaneous co-ordination mechanism which operates in a market context and makes use of multiple economic and judicial institutions and contractual arrangements to govern economic transactions (Powell, 1990; Van Kersbergen & Van Waarden, 2004).

While network governance is understood to be the overarching form of more collaborative styles of governance (Lowndes & Skelcher, 1998), the literature also acknowledges the concept of governance networks (Sorensen & Torfing, 2007). This network type can be distinguished as horizontally interdependent, but operationally autonomous actors, who interact through negotiations and in so doing, contribute to the production of public value within a particular field of operation (Marcussen & Törting, 2003). However, governance networks differ from other complex organisational forms in several ways and these differences have an impact on the way stakeholder engagement is approached.

Firstly, the literature has acknowledged that governance networks can simultaneously exhibit various hierarchical, market and networked arrangements through the adoption of a hybrid approach (Considine & Lewis, 1999; Keast, Mandell, & Brown, 2006; Powell, 1990). That is, governance networks link together a range of actors through a mix of governance modes one of which is network governance. Working under hybrid arrangements creates tensions for infrastructure delivery networks (Provan & Kenis, 2005) seeking to engage with stakeholders because they operate in an environment that blends aspects of three different modes of governance. As a result, these networks face the complexity of dealing with stakeholders in relationships which operate on a relational level through reciprocity, trust and

interdependence (Keast & Hampson, 2007) but also incorporate contractual or legislative elements. Under hybrid governance arrangements, stakeholder engagement undertaken by infrastructure delivery networks would not be straightforward or simple to manage.

Secondly, while power is seldom at the forefront of theorising about governance networks (Klijn & Skelcher, 2007, p. 602), the literature has recognised that power distribution within networks is asymmetrical, resulting in a series of power dependence relationships (Agranoff and McGuire 2001). Differential power distribution is particularly pertinent to governance networks as demonstrated by a number of studies (Agranoff, 2007; Eglene, Dawes, & Schneider, 2007; Graddy & Chen, 2006; Provan & Milward, 1995) which show that government can be an actor in governance networks. Given its potential to dominate because it is usually a major funder of road infrastructure projects, government, as a stakeholder, may be accorded privileged status by the network and receive disproportionately favourable treatment than other equally influential stakeholders. Managing this dynamic also points to the complexities that infrastructure governance networks face in interacting with stakeholders.

Thirdly, Sorensen and Torfing (2003) contend that individual actors may be unable to discard the responsibilities of belonging to a particular organisation in favour of the collective network approach despite the pressure brought to bear by working in a networked environment. This inability or unwillingness of network members to set aside their representative role (Mandell & Keast, 2008) may influence decision making about stakeholders, particularly as the result of power domination. It could be argued that this impact may be more pronounced if there is direct political representation within networks

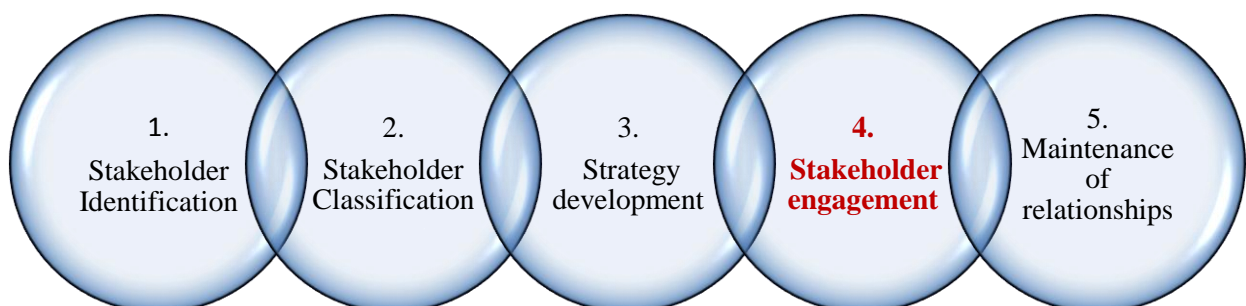
responsible for delivery of infrastructure as a result of tension between public managers and democratically elected representatives.

Getting stakeholder participation right (Glicken, 2000) is a significant challenge for infrastructure delivery networks. Operating in a network form presents opportunities to more effectively leverage relationships with stakeholders to achieve results. However, it also raises a number of challenges for stakeholder engagement due to network operating arrangements: the complexity associated with mixed governance modes, the impact of power differentials and the difficulties of organisational representation. All of these factors can influence the way that infrastructure networks conceptualise stakeholder engagement and management. The next section presents a framework for stakeholder management and situates stakeholder engagement within this framework.

Stakeholder Management and Engagement

The literature has suggested a number of steps that are important in effectively managing stakeholders (Freeman, 1984). These elements are presented in Diagram 1 as an integrated chain through which organisations can manage relationships with stakeholders.

Diagram 1 Stakeholder Management Framework



This framework shows that stakeholder management is undertaken through a series of five interlinked activities. The starting point, stakeholder identification (Donaldson & Preston, 1995; Freeman, 1984; Friedman & Miles, 2006; Mitchell, Agle, & Wood, 1997; Rowley, 1997) focuses on defining stakeholders of an infrastructure project. From this step, stakeholders are classified and prioritised according to one of the many schemas suggested in the literature (Clarkson, 1995; Donaldson & Preston, 1995; Frooman, 1999; Frooman & Murrell, 2005; Goodpaster, 1991; Hill & Jones, 1992; Jones, Felps, & Bigley, 2007; Mitchell et al., 1997; Savage, Nix, Whitehead, & Blair, 1991).

Having allocated priorities to various stakeholders, the strategy development phase (Freeman, 1984; Harrison & St. John, 1996) of stakeholder management focuses on building stakeholder relationships that are strategically important to delivery of the infrastructure and buffering projects from the negative effects of lower priority stakeholders. Based on this strategy, stakeholder engagement which involves a structured approach to connecting with stakeholders (Friedman & Miles, 2006; Greenwood, 2007; Leach, Lowndes, Cowell, & Downe, 2005; Thomson & Bebbington, 2005) is enacted with priority stakeholders. The final step in the chain is the maintenance or de-activation of stakeholder relationships (Crane & Livesey, 2003; Post, Preston, & Sachs, 2002) depending upon their continuing strategic importance to project outcomes. While acknowledging the significance of each element of this framework, this paper primarily deals with the core activity of stakeholder engagement and how it is enacted by infrastructure governance networks.

Although the stakeholder concept is evident in the governance network literature (Agranoff, 2007; Agranoff & McGuire, 2001b, 2003; Edelenbos & Klijn, 2006; McGuire, 2002), it could be argued that a more in-depth understanding of the mechanisms that governance networks

use to interact with stakeholders is required. Given that a degree of "publicness" (Antonsen & Jorgensen, 1997) is inherent to infrastructure delivery networks, it could be argued that the public sector approach to stakeholder engagement is highly relevant to such networks.

In the literature, a broad spectrum of stakeholders has been identified as important to the effective delivery of public outcomes. These include: citizens, service users or consumers, the business community, interest groups and stakeholders (Bryson, 2004). Given this breadth of stakeholders who may have a claim, legitimate or otherwise, in the delivery of roads, it could be argued that a more strategic approach to managing stakeholder relationships needs to be adopted to secure the stakeholder "buy in" required for successful project completion. For infrastructure delivery networks, this translates into the challenge of satisfying "the needs and interests of stakeholders at network and organization levels, while emphasizing the broader needs of the community and the clients the network must serve" (Provan & Milward, 2001, p. 422).

Deciding how to include stakeholders in decision-making processes about road infrastructure projects, is a difficult network activity because of the range of influencing strategies that stakeholders can employ (Frooman, 1999; Frooman & Murrell, 2005) and the impact that this can have on project completion and delivery of outcomes. The next section takes this a step further by arguing that stakeholder engagement is a network management activity.

STAKEHOLDER ENGAGEMENT AS A NETWORK MANAGEMENT ACTIVITY

A strong link running through the network management literature is the importance of engaging with and managing actors in network processes, with the objective of improving outcomes by incorporating a range of diverse ideas, insights, responses and solutions

(Agranoff & McGuire, 1999). This is supported by Agranoff (2007) and Koppenjan and Klijn (2004) who contended that engaging with actors in network processes is a fundamental aspect of network management.

The literature has identified a range of network management structures that might be adopted to organise and manage networks: 1. Self-governing general assembly, 2. Lead organisational structure, 3. Equal partnership, 4. Network administrative organization and 5. Collaboration manager (Provan & Kenis, 2007). However, irrespective of the network management structure implemented, the objective of using that structure as a means of managing and leveraging relationships remains paramount.

Keast and Hampson (2007) in a recent study of a Cooperative Research Centre as an interorganisational innovation network, reinforced the concept that relationships are a significant feature of networks and further, that these relationships need to be strategically managed by networks to obtain the best possible results. In contending that management “must happen for networks to be effective”, McGuire (2003, p. 6) also supported this position. However, despite acknowledgement that networks and therefore, the interconnecting relationships through which they operate (Klijn & Skelcher, 2007) need to be managed (Keast & Hampson, 2007), there are ongoing debates in the literature about the conceptualisation of network management and activities that might be undertaken under the auspices of network management.

In the literature, a wide range of non-traditional management strategies have been proposed as mechanisms for guiding network interactions (Agranoff & McGuire, 2001b, 2003; Koppenjan & Klijn, 2004; Mandell, 2001). However, McGuire (2003) has challenged the

notion that networks need different management strategies suggesting that network management tasks may not be different from hierarchical management activities.

Adding to the complexity, Jarvenisvu and Moller (2008) assert that there is no developed theory of network management because the field is so fragmented. This is supported by Rethemeyer and Hatmaker (2007) who contend that there is no integration across network management processes and models. This viewpoint is in keeping with Agranoff 's (2007) contention that there is a shortfall in knowledge about how governance networks are managed.

However despite these disagreements within the network management literature, the following networks management functions have been distilled (Agranoff & McGuire, 2001a, 2001b; Keast & Hampson, 2007; Kickert, Klijn, & Koppenjan, 1997; McGuire, 2003):

1. Activating- recruiting members and resources,
2. Framing- establishing the vision and rules,
3. Mobilising- creating joint commitment, and
4. Synthesising- building and maintaining relationships.

Given the relational tasks embedded within both network management (Keast & Hampson, 2007) and stakeholder engagement (Maak & Pless, 2006), it could be argued that there is an alignment between the two concepts particularly within the activating, mobilising and synthesising functions.

Activating

Activating has been identified as the identification and selection of actors and stakeholders who are important to achievement of network outcomes and so as to obtain access to resources including money, expertise and support (Agranoff & McGuire, 1999; Keast & Hampson, 2007). Indeed, Agranoff and McGuire (2003) point out that selection of partners is critical to success. This supported Klijn (1996) who argued that network management involves the selective activation and introduction of new actors to networks.

An initial step in activation is the identification of network participants (Lipnack & Stamps, 1994) whose skills and resources are required by the network (Agranoff & McGuire, 1999). Furthermore, the need for networks to identify stakeholders has been explicitly confirmed by Gray (1989). Therefore, it could be argued that the task of stakeholder identification, a fundamental step in stakeholder engagement, is encompassed within the activating function of network management.

Taking this a step further, Klijn's (1996) contention that an element of selectivity is required when bringing new actors into networks, points to a parallel process in the stakeholder literature; prioritisation of stakeholders to be included in stakeholder engagement processes. Stakeholder prioritisation is fundamentally a process of selectively making choices between stakeholders based on a range of attributes including access to resources (Frooman, 1999; Frooman & Murrell, 2005). This similarity between these processes, adds weight to the argument that stakeholder prioritisation could be considered a network activating function.

For road infrastructure delivery networks, activation of stakeholders is unlikely to be a "one off" activity given that road provision may take decades from planning to construction.

Therefore it could be argued that because of the long timeframes associated with road projects, activation may be a cyclical activity which is undertaken at the various stages of a project. As a result, the unique sets of stakeholders which are likely to emerge in projects spanning decades can be selectively activated depending on the resources that they can alternatively provide or block at each distinct phase of a project.

The previous discussion provided a clue as to how stakeholder engagement and network activation may be linked. 1. Identification of new network members is analogous to stakeholder identification and 2. Stakeholder prioritisation parallels the processes of selecting new network members. The role of framing in facilitating stakeholder engagement is discussed next.

Framing

The network management activity of framing is essentially about establishing the operating system of the network through the development of rules and norms (Agranoff & McGuire, 2001b) and establishing “a sense of interdependency and the need for collective action (Keast & Hampson, 2007, p. 368). To achieve this shift from a positional to a collective approach, framing operates as a mechanism for negotiating the terms of agreement for the network (Waterhouse, Keast, & Brown, Forthcoming).

It could be argued that framing facilitates stakeholder engagement in two ways. Firstly, framing activities could extend beyond the network boundary to establish the terms of engagement for interactions with stakeholders in the surrounding web of relationships (Rowley, 1997). Secondly, having established how the network engages with stakeholders, framing can be used to build interdependency with stakeholders and increase their level of

commitment to collective outcomes over self interest. In this way, relationships with stakeholders can be leveraged to create the collaborative advantage necessary to achieve network outcomes (Waterhouse et al., Forthcoming).

By framing relationships with stakeholders in these ways, infrastructure delivery networks will be better able to understand what stakeholders are seeking to achieve from infrastructure projects, develop options that are mutually beneficial and negotiate productive outcomes. By creating this type of platform for engagement with stakeholders, networks will be better able to manage the constant process of framing, reframing and negotiation that will be inevitable as a result of the extended time frames required for road projects.

The preceding discussion identified two key network management tasks which facilitate stakeholder engagement at the framing stage: 1. Establishing the terms of engagement for the network, and 2. Building levels of interdependency to increase commitment to collective outcomes. Mobilisation and its relationship with stakeholder engagement is discussed in the next section.

Mobilisation

The network management function of mobilisation is concerned with bringing together separate entities into a collective unit through alignment of interests and building a sense of common purpose (Agranoff & McGuire, 2003). Key mobilisation tasks include developing new coalitions (Keast, Mandell, Brown, & Woolcock, 2004) and building support within and beyond the network (Gray, 1989). Both of these activities can be directly related to the processes associated with stakeholder engagement (Bourne & Walker, 2006). When viewed as a catalyst for stakeholder engagement, mobilisation provides a means of building support

beyond network boundaries through deliberative relationship development strategies designed to ensure stable resource flows (Keast & Hampson, 2007), a strong motivation for stakeholder engagement.

This type of relationship development is critical to road infrastructure networks because of the propensity of stakeholders with conflicting objectives to consume significant amounts of time while these differences are resolved (Olander & Landin, 2005). Therefore effective mobilisation of stakeholders could reduce the incidence of road projects becoming embroiled in negative spirals of controversy and conflict.

As shown previously, two key mobilisation tasks may facilitate stakeholder engagement:

1. Developing new coalitions and 2. Obtaining support both within and outside the network.

The role of synthesising will be examined from a stakeholder engagement perspective in the next section.

Synthesising

The synthesising activity of network management focuses closely on developing the environment and conditions (Keast & Hampson, 2007) which will engender productive relationships among members (McGuire, 2006). According to Keast and Hampson (2007, p. 370), one of the key activities in maintaining these relationships is “checking levels of engagement and contribution”. It could be argued that synthesising activities are directly applicable to those stakeholders identified and selected for inclusion in network activities through activation processes. In the case of road construction projects, synthesis could be more complex as a result of the multiple activation cycles that are likely to take place in projects that span long periods of time.

In the literature it is contended that information exchange strategies are fundamental to creating network synthesis (Herranz Jnr., 2005). Information exchange strategies are also an important feature of stakeholder engagement as emphasised by Friedman and Miles (2006) in the ladder of stakeholder management and engagement. In the road infrastructure context, the significance of information exchange as a stakeholder engagement technique was also supported by Lemley (1995) in a review of the Channel Tunnel project. Given the high priority placed on information exchange, network synthesis could be seen as a mechanism to engage with stakeholders who are on the periphery (Rowley, 1997) of road infrastructure networks. Thus network synthesis activities could be considered a key activity for infrastructure networks seeking to engage with stakeholders as a means of reducing project risks which could result in cost and time overruns. Based on the earlier discussion, it is possible to see that two key synthesising tasks are parallel to processes in stakeholder engagement: 1. Checking levels of engagement and contribution, and 2. Information exchange.

Drawing on the insights from the stakeholder literature and the network management literature, the preceding discussion demonstrated that that the relational tasks associated with stakeholder engagement align closely within the activating, framing, mobilising and synthesising functions of network management. This is demonstrated in the framework which links network management and stakeholder engagement activities as proposed in Table 1.

Table 1 Linkages between Network Management and Stakeholder Engagement

Network Management Stage	Network Management Activity	Stakeholder Engagement Activity
Activating	Identification of new network members Selecting new network members.	Stakeholder identification Stakeholder prioritisation
Framing	Establishing terms of engagement Building levels of interdependency to increase commitment to collective outcomes	Identifying the parameters for stakeholder engagement processes Undertaking engagement activities designed to build commitment
Mobilising	Developing new coalitions Obtaining support both within and outside the network.	Stakeholder identification Undertaking engagement activities designed to build commitment
Synthesising	Checking levels of engagement and contribution Information exchange.	Monitoring changes in stakeholder engagement levels Information exchange

Although preliminary in nature, this framework provides an indication of how stakeholder engagement might be conceptualised in a networked situation. However there is an additional element that needs to be considered in developing a more complete picture of how stakeholder engagement is undertaken by road infrastructure networks: the role of the network manager as the driver of interactions with stakeholders. The significance of this role is discussed next.

ROLE OF THE NETWORK MANAGER IN STAKEHOLDER ENGAGEMENT

Despite the self-organising nature of governance networks, there is a need for network managers to guide the network toward a set of goals and away from blockages in decision making and achieving outcomes (Rethemeyer & Hatmaker, 2007, p. 15). Thus the role of the network manager is well established in the literature (Agranoff & McGuire, 2001b; Keast & Hampson, 2007; Keast & Mandell, 2005; Klijn, Koppenjan, & Termeer, 1995; Mandell, 2001; McGuire, 2002, 2003). This role may be undertaken by one or more network

members who ensure that networks stay on track and develop a collective sense of purpose, (Mandell & Keast, 2009) through implementation of the network management functions of activating, framing, mobilising and synthesising. Depending on the issue, the network manager's approach to undertaking these tasks can range from facilitation to orchestration of relationships (Rethemeyer, 2005). Elaborating on this approach, Keast and Brown (2006) characterised network managers as drivers who assume the responsibility for managing relationships to achieve outcomes (Keast & Hampson, 2007).

Given the sensitivity and significance of road infrastructure projects and the resultant complexity involved in engaging with stakeholders it could be argued that the network manager's role may be more attuned to relationship management than group facilitation activities. This distinction is particularly important where the intent of building relationships with stakeholders is to leverage resources towards the creation of collective benefit (Keast & Hampson, 2007, p. 371) to both the network and stakeholders. To maximise these benefits, it could be argued that the relationship management tasks which are embedded in stakeholder engagement need to be driven by network managers through the network management activities identified Table 1.

Further, it could be argued that network managers have an important role in enacting network management processes that result in effective stakeholder engagement which capitalises on the investment in building relationships with stakeholders and contributes to the planning and provision of safe and efficient road infrastructure, In this way, road infrastructure networks are able to engender stakeholder support and "buy in", but more critically, leverage these relationships (Waterhouse et al., Forthcoming) to achieve the essential task of delivering roads that meet current and emerging social and economic needs.

It has been acknowledged that eventuating results from stakeholder engagement can be time and resource intensive (Keown, Van Eerd, & Irvin, 2008) over the life of a road project.

Nonetheless, as this paper has argued, network managers have an important role as drivers of stakeholder engagement for road infrastructure projects delivered through networks.

CONCLUSION

Given the capacity for stakeholders to mobilise public support in favour of or in opposition to infrastructure projects (Cleland & Ireland, 2006), the challenge for road infrastructure networks, is to be able to effectively manage a wide range of stakeholder expectations while providing the best possible roads using limited resources. Within this context, this paper proposes that there is a link between network management and managers and stakeholder engagement by infrastructure governance networks; a concept not previously addressed in the literature.

By unpacking the relationships between network management and stakeholder engagement, this paper has generated a number of insights. Firstly, it has indicated that the relational tasks associated with stakeholder engagement are embedded within the network management functions of activating, framing, mobilising and synthesising. By refocusing network management activities on the implementation of “fit for purpose” stakeholder engagement, road infrastructure networks will be better equipped to manage the risks and capitalise on the opportunities presented by stakeholders.

Secondly, it has proposed that as a result of strategically using the network management functions of activating, framing, mobilising and synthesising, infrastructure networks are more likely to be able to leverage the relationships created with stakeholders to build

collaborative advantage and secure better outcomes. Finally it has identified that to capture these benefits, the role of the network manager is critical in enacting the relational tasks associated with stakeholder engagement. By driving stakeholder engagement in this way, network managers will be more likely to attain the “buy in” that is an important element in the successful delivery of road infrastructure projects by governance networks.

REFERENCES

- Agranoff, R. (2007). *Managing Within Networks: Adding Value to Public Organizations*. Washington, DC: Georgetown University Press.
- Agranoff, R., & McGuire, M. (1999). Managing in network settings. *Review of Policy Research*, 16(1), 18-41.
- Agranoff, R., & McGuire, M. (2001a). After the network is formed: Processes, power, and performance. In M. Mandell (Ed.), *Getting results through collaboration: Networks and network structures for public policy and management* (pp. 11–29). Westport, Conn.: Quorum Books.
- Agranoff, R., & McGuire, M. (2001b). Big Questions in Public Network Management Research. *Journal of Public Administration Research and Theory*, 11(3), 295-326.
- Agranoff, R., & McGuire, M. (2003). *Collaborative Public Management: New Strategies for Local Governments*. Washington, DC: Georgetown University Press.
- Antonsen, M., & Jorgensen, T. (1997). The 'publicness' of public organizations. *Public Administration*, 75(2), 337-357.
- Beach, S. (2009). Who or what decides how stakeholders are optimally engaged by governance networks delivering public outcomes?, *International Research Society for Public Management Conference* (pp. 1-36). Copenhagen Denmark
- Bourne, L., & Walker, D. (2006). Visualising Stakeholder Influence- Two Australian Examples. *Project Management Journal*, 37(1), 5-21.
- Bourne, L., & Walker, D. (2008). Project relationship management and the Stakeholder Circle™. *International Journal of Managing Projects in Business*, 1(1), 125-130.
- Bryson, J. (2004). What to do when Stakeholders matter. *Public Management Review*, 6(1), 21-53.
- Clarkson, M. (1995). A Stakeholder Framework for Analyzing and Evaluating Corporate Social Performance. *The Academy of Management Review*, 20(1), 92-117.
- Cleland, D., & Ireland, L. (2006). *Project management: strategic design and implementation* (5th ed.). New York: McGraw-Hill Professional.
- Commonwealth of Australia. (2009). Nation Building Economic Stimulus Plan Progress Report 3 February 2009 – 30 June 2009. In Coordinator-General (Ed.) (pp. 1-66). Barton, ACT Department of the Prime Minister and Cabinet.
- Considine, M., & Lewis, J. (1999). Governance at Ground Level: The Frontline Bureaucrat in the Age of Markets and Networks. *Public Administration Review*, 59(6), 467-481.
- Crane, A., & Livesey, S. (2003). Are You Talking to Me? Stakeholder Communication and the Risks and Rewards of Dialogue. In J. Andriof, S. Waddock, S. Rahman & B. Husted (Eds.), *Unfolding Stakeholder Thinking: Relationships, communication, reporting and performance* (pp. 39-52). Sheffield: Greenleaf.
- Donaldson, T., & Preston, L. (1995). The stakeholder theory of the modern corporation: Concepts, evidence and implications. *Academy of Management Review*, 20, 65-91.
- Doyle, N. (2008). Civic Engagement in Queensland Australia: Participation in Road System Management A Case Study of Main Roads Experience, Queensland. In *Building Trust Through Civic Engagement* (pp. 157-198). New York United Nations
- Edelenbos, J., & Klijn, E. H. (2006). Managing Stakeholder Involvement in Decision Making: A Comparative Analysis of Six Interactive Processes in the Netherlands. *Journal of Public Administration Research and Theory*, 16(3), 417-446.
- Eglene, O., Dawes, S., & Schneider, C. (2007). Authority and Leadership Patterns in Public Sector Knowledge Networks. *American Review of Public Administration*, 37(1), 91-113.
- El-Gohary, N., Osman, H., & El-Diraby, T. (2006). Stakeholder management for public private partnerships. *International Journal of Project Management*, 24(7), 595-604.
- Freeman, R. (1984). *Strategic management: A Stakeholder Approach*. Boston: Pitman

- Friedman, A., & Miles, S. (2006). *Stakeholders: Theory and Practice*. New York: Oxford University Press.
- Frooman, J. (1999). Stakeholder Influence Strategies. *Academy of Management Review*, 24(2), 191-120.
- Frooman, J., & Murrell, A. (2005). Stakeholder Influence Strategies: The Roles of Structural and Demographic Determinants. *Business & Society*, 44(1), 3.
- Glicken, J. (2000). Getting stakeholder participation 'right': a discussion of participatory processes and possible pitfalls. *Environmental Science and Policy*, 3(6), 305-310.
- Goodpaster, K. E. (1991). Business Ethics and Stakeholder Analysis. *Business Ethics Quarterly*, 1(1), 53-73.
- Graddy, E. A., & Chen, B. (2006). Influences on the Size and Scope of Networks for Social Service Delivery. *Journal of Public Administration Research and Theory*, 16(4), 533.
- Gray, B. (1989). *Collaborating: Finding common ground for multiparty problems*. San Francisco, CA: Jossey-Bass Publishers.
- Greenwood, M. (2007). Stakeholder Engagement: Beyond the Myth of Corporate Responsibility. *Journal of Business Ethics*, 74(4), 315-327.
- Harrison, J., & St. John, C. (1996). Managing and partnering with external stakeholders. *The Academy of Management Executive* 10(2), 46-60.
- Herranz Jr., J. (2005). *Network Governance Strategies for Public Managers*. Paper presented at the Public Management Research Association, Los Angeles, California.
- Hill, C., & Jones, T. (1992). Stakeholder-agency theory. *Journal of Management Studies*, 29(2), 131-154.
- Hylmö, K. (2005). Improving the Road Planning Process: A Case Study of Stakeholder Comments on Two Swedish Road Projects. *Environmental Practice*, 7(1), 44-53.
- Järvensivu, T., & Möller, K. (2008). *Metatheory of Network Management: A Contingency Perspective*. Retrieved 17 October 2008, from <http://hsepubl.lib.hse.fi/pdf/wp/w448.pdf>
- Jones, T., Felts, W., & Bigley, G. (2007). Ethical Theory and Stakeholder Related Decisions: The Role of Stakeholder Culture. *Academy of Management Review*, 32(1), 137-155.
- Keast, R., & Brown, K. (2006). Adjusting to New Ways of Working: Experiments with Service Delivery in the Public Sector. *Australian Journal of Public Administration*, 65(4), 41-53.
- Keast, R., & Hampson, K. (2007). Building Constructive Innovation Networks: The Role of Relational Management. *Journal of Construction Engineering and Management* May(5), 364-373.
- Keast, R., & Mandell, M. (2005). Governance Arrangements and Network Management: The Impact on Hybrid Networks, *International Research Symposium on Public Management*. Milan, Italy.
- Keast, R., Mandell, M., & Brown, K. (2006). Mixing State, Market And Network Governance Modes: The Role Of Government In "Crowded" Policy Domains. *Journal of Organizational Theory and Behaviour*, 1(9), 27-20.
- Keast, R., Mandell, M., Brown, K., & Woolcock, G. (2004). Network Structures: Working Differently and Changing Expectations. *Public Administration Review*, 64(3), 363-371.
- Keown, K., Van Eerd, D., & Irvin, E. (2008). Stakeholder engagement opportunities in systematic reviews: Knowledge transfer for policy and practice. *Journal of Continuing Education in the Health Professions*, 28(2), 67-72.
- Kickert, W., Klijn, E., & Koppenjan, J. (1997). Introduction: A Management Perspective on Policy Networks. In W. Kickert, E. Klijn & J. Koppenjan (Eds.), *Managing Complex Networks: Strategies for the Public Sector* (pp. 1-13). London: Sage Publications Ltd.
- Klijn, E. (1996). Analyzing and Managing Policy Processes in Complex Networks *Administration and Society* 28(1), 90-119.

- Klijin, E., Koppenjan, J., & Termeer, K. (1995). Managing Networks In The Public Sector: A Theoretical Study Of Management Strategies In Policy Networks. *Public Administration*, 73(3), 437-454.
- Klijin, E., & Skelcher, C. (2007). Democracy and governance networks: compatible or not? *Public Administration*, 85(3), 587-608.
- Kooiman, J. (2005). *Governing as Governance*. London: Sage Publications.
- Koppenjan, J., & Klijin, E. (2004). *Managing Uncertainties in Networks: A Network Approach to Problem Solving and Decision Making*. London: Routledge.
- Leach, S., Lowndes, V., Cowell, R., & Downe, J. (2005). Meta-evaluation of the Local Government Modernisation Agenda: Progress Report on Stakeholder Engagement with Local Government. In Office of the Deputy Prime Minister (Ed.) (pp. 1-63). London ODPM Publications.
- Lemley, J. (1995). Managing the Channel Tunnel--Lessons learned. *Tunnelling and Underground Space Technology*, 10(1), 9-11.
- Lim, S., & Yang, J. (2008). *Understanding the Need of Project Stakeholders for Improving Sustainability Outcomes in Infrastructure Projects*. Paper presented at the Proceedings of Joint CIB Conference: Performance and Knowledge Management, Rotterdam, Netherlands
- Lipnack, J., & Stamps, J. (1994). *The Age of the Network: Organizing Principles for the 21st Century*. New York: John Wiley and Sons
- Lowndes, V., & Skelcher, C. (1998). The Dynamics of Multi-organizational Partnerships: an Analysis of Changing Modes of Governance. *Public Administration*, 76(2), 313-333.
- Maak, T., & Pless, N. M. (2006). Responsible leadership in a stakeholder society--A relational perspective. *Journal of Business Ethics*, 66(1), 99-115.
- Mandell, M. (2001). *Getting Results Through Collaboration: Networks and Network Structures for Public Policy and Management*. Westport, CT: Greenwood Publishing Group.
- Mandell, M., & Keast, R. (2008). Voluntary and Community Sector Partnerships: Current Inter-organizational Relations and Future Challenges. In S. Cropper, M. Ebers, C. Huxham & P. Smith Ring (Eds.), *The Oxford Handbook of Inter-Organizational Relations*. (pp. 175-202). Oxford: Oxford University Press.
- Mandell, M., & Keast, R. (2009). A new look at leadership in collaborative networks : process catalysts. In J. Raffel, P. Leisink & A. Middlebrooks (Eds.), *Public Sector Leadership : International Challenges and Perspectives* (pp. 163-178). Cheltenham: Edward Elgar.
- Marcussen, M., & Törting, J. (2003). Grasping Governance Networks, *Working paper 5:3*. Denmark: Centre for Democratic Network Governance, Roskilde University.
- McGuire, M. (2002). Managing Networks: Propositions on What Managers Do and Why They Do It. *Public Administration Review*, 62(5), 599-609.
- McGuire, M. (2003). Is it really so strange? A critical look at the 'network management is different from hierarchical management' perspective, *Seventh National Public Management Research Association Conference* (pp. 1-28). Washington DC.
- McGuire, M. (2006). Collaborative Public Management: Assessing What We Know and How We Know It. *Public Administration Review*, 66(S1), 33-43.
- Mitchell, R., Agle, B., & Wood, D. (1997). Toward a theory of stakeholder identification and salience: Defining the principle of who and what really counts. *Academy of Management Review*, 22(4), 853-886.
- Munnell, A. (1992). Policy watch: infrastructure investment and economic growth. *The Journal of Economic Perspectives*, 6(4), 189-198.
- Newcombe, R. (2003). From client to project stakeholders: a stakeholder mapping approach. *Construction Management and Economics*, 21(8), 841-848.

- Newman, J. (2001). *Modernising Governance: New labour, Policy And Society*. London: Sage.
- Olander, S., & Landin, A. (2005). Evaluation of stakeholder influence in the implementation of construction projects. *International Journal of Project Management*, 23(4), 321-328.
- Peters, B., & Pierre, J. (1998). Governance without Government? Rethinking Public Administration. *Journal of Public Administration Research and Theory*, 8(2), 223-244.
- Post, J., Preston, L., & Sachs, S. (2002). Managing the extended enterprise: The new stakeholder view. *CALIFORNIA MANAGEMENT REVIEW*, 45(1), 6-28.
- Powell, W. (1990). Neither Market Nor Hierarchy: Network Forms of Government. *Research in Organizational Behavior*, 12, 295-336.
- Provan, K., & Kenis, P. (2005). Modes of Network Governance and Implications for Network Management and Effectiveness, *Eighth National Public Management Research Conference*. Los Angeles, USA.
- Provan, K., & Kenis, P. (2007). Modes of network governance: Structure, management, and effectiveness. *Journal of Public Administration Research and Theory*, 18(2), 229-252.
- Provan, K., & Milward, H. (1995). A Preliminary Theory of Interorganizational Network Effectiveness: A Comparative Study of Four Community Mental Health Systems. *Administrative Science Quarterly*, 40(1), 391-417.
- Provan, K., & Milward, H. (2001). Do Networks Really Work? A Framework for Evaluating Public-Sector Organizational Networks. *Public Administration Review*, 61(4), 414-423.
- Queensland Government. (2009). South East Queensland Infrastructure Plan and Program 2009-2026. In Department of Infrastructure and Planning (Ed.) (pp. 1-94). Brisbane, QLD.
- Rethemeyer, R. (2005). Conceptualizing and measuring collaborative networks. *Public Administration Review* 65(1), 117-121.
- Rethemeyer, R., & Hatmaker, D. (2007). Network management reconsidered: An inquiry into management of network structures in public sector service provision. *Journal of Public Administration Research and Theory*, 18(4), 617-646.
- Rodrigue, J., Comtois, C., & Slack, B. (2006). *The Geography of Transport Systems* (2 ed.). New York: Routledge.
- Rowley, T. (1997). Moving Beyond Dyadic Ties: A Network Theory of Stakeholder Influences. *Academy of Management Review*, 22(4), 887-910.
- Savage, G. T., Nix, T. W., Whitehead, C. J., & Blair, J. D. (1991). Strategies for assessing and managing organizational stakeholders. *Academy of Management Executive*, 5(2), 61-75.
- Sorensen, E., & Torfing, J. (2003). Network Politics, Political Capital, and Democracy. *International Journal of Public Administration*, 26(6), 609-634.
- Sorensen, E., & Torfing, J. (2007). Introduction: Governance Network research: Towards a Second Generation. In E. Sorensen & J. Torfing (Eds.), *Theories of Democratic Network Governance* (pp. 1-21). Basingstoke, Hampshire: Palgrave MacMillan.
- Thompson, G., Frances, J., Levacic, R., & Mitchell, J. (1991). *Markets, Hierarchies and Networks The Coordination of Social Life* London: Sage Publications Ltd.
- Thomson, I., & Bebbington, J. (2005). Social and environmental reporting in the UK: a pedagogic evaluation. *Critical Perspectives on Accounting*, 16(5), 507-533.
- Van Kersbergen, K., & Van Waarden, F. (2004). 'Governance' as a bridge between disciplines: Cross-disciplinary inspiration regarding shifts in governance and problems of governability, accountability and legitimacy. *European Journal of Political Research*, 43(2), 143-171.
- Waterhouse, J., Keast, R., & Brown, K. (Forthcoming). Negotiating the Business Environment In: Palgrave MacMillan
- Yang, J., & Lim, S. (2008). Reality Check—The Identification of Sustainability Perception & Deliverables for Australian Road Infrastructure Projects, *The New Zealand Society for*

Sustainability Engineering and Science, Blueprints for Sustainable Infrastructure Conference (pp. 1-10). Auckland, NZ.

Yang, J., & Yuan, M. (2009). *Managing Knowledge to Promote Sustainability for Infrastructure Development* Paper presented at the SASBE2009 Delft, the Netherlands.