

This is author version of article published as:

Waterhouse, Jennifer M. and Keast, Robyn L. (2007) Behind the Scenes: Uncovering Technocratic to Democratic Adjustments. In *Proceedings 2007 British Academy of Management – Management Research, Education and Business Success: Is the Future as Clear as the Past?*, pages pp. 1-19, University of Warwick, United Kingdom.

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**BEHIND THE SCENES: UNCOVERING TECHNOCRATIC TO
DEMOCRATIC ADJUSTMENTS**

**Paper presented to the British Academy of Management Conference:
Interorganisational Relations Track
11-13 September 2007**

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Abstract

New institutional arrangements such as networks, partnerships and collaborations have come to constitute a significant part of the contemporary social and organisational architecture. While there is a significant body of literature on organisational change and networks, little attention has been paid to consider the types of changes necessary to shift an organisation from what is often a traditional hierarchy to a 'network organisation'. This paper addresses the limited research into such change by 'going behind the scenes' of a public sector engineering organisation contemplating the strategic and operational change necessary to prepare for becoming a 'networked organisation'. The paper draws on data collected from a large three year single case study to explore the elements and type of change necessary for a traditional, public sector organisation to shift its culture, behaviour and operating mode to best extract the benefits of collaborative networks.

Introduction

The shift to a network arrangements have arisen because changing social, economic and political conditions across the public, private and voluntary sectors have exposed the limitations of conventional bureaucratic and market-oriented forms of social organisation. It is argued that networked ways of working, with their emphasis on relationships as the 'glue that binds' (Powell, 1990) offer an alternative and effective way for these sectors to transform existing policy, product and service delivery models.

Yet the popularity of networks and their widespread adoption has not been widely considered or examined within the context of an organisation's motivation for their adoption or the change management needed to move organisations to this new mode of operation. Research has tended to focus instead on the establishment and maintenance of networks without investigation of the management decisions made before choosing to participate in or form a network. This paper addresses what motivates organisations to adopt networks, the elements of an organisation that are considered requisite to change and the change management strategies contemplated to transform an organisation to adopt a network model.

To address these issues, the deliberations of a case study organisation's senior management group (SMG) over a 30 month period are presented. Findings outline the underlying motivations to undertake change and the organisational characteristics the SMG considered it necessary to change.

CHANGING TO A NETWORK APPROACH

A network is a form of governance that contrasts with hierarchy and markets which respectively rely on formalised prescribed and legal contractual relations to coordinate elements. At its most basic a network is defined as the ongoing and relatively stable pattern of relationships that occurs between people, organisations and sectors. (Klijn and Koppenjan, 2001). Moreover, unlike hierarchies and markets, networks are essentially social, relying on the underpinning interpersonal relations of trust, reciprocity, mutuality and understanding established overtime to act as the conduit for collective action. It is contended that through these relationships dispersed people, resources and knowledge are better able to be connected- up; thus reducing the cost of coordination, limiting duplication and overlap and maximising finite resources.

These basic aspects of networks are broadly understood through research that has predominantly focused on the development and sustaining of networks and the form such networks take. However, little examination has been undertaken in regard to how organisations come to the decision to network, what changes may be required within individual organisations to address the requisite capabilities needed for successfully participating in networks or the form such change may take. Organisational change literature is a vast field in terms of both empirical research and theory development. Most organisational change literature appears, however, to analyse three key issues (1) why organisations change, (2) how organisations achieve change and (3) what aspects of an organisation are (or should be) changed.

Research has tended to take a retrospective view of network formation from the point at which a network actually forms. Despite the existence of a growing body of understanding of how networks work, a knowledge about why individual organisations choose to form networks and the decisions and actions required to adjust remains under-explored. Theories of why organisations choose to change have been dominated by contingency theories, arguing that organisations change because they operate within open systems and react to their environment (Barnwell 1994). While normative studies have suggested improved performance as the reason for change, a number of different stimuli have been noted as a dynamic for organisational change. Some organisations have responded to market crisis (see for example Pettigrew 1985). DiMaggio and Powell (DiMaggio and Powell 1983) have proposed that organisations practice mimetic isomorphism whereby they tend to imitate one another based, not so much on any evidence that doing so will improve performance, but rather driven by an urge to resemble one another. Dunphy and Stace (1988) and Kondra and Hinings (1998) have suggested that organisations adopt change strategies to develop a better “fit” with their environment. While such contingency theories continue to dominate, they have not been without their critics. Criticism of contingency theories has been aimed at poorly defined linkages between size, structure and performance, that the influence of informal structures within organisations are ignored as has the notion that management may act strategically rather than reactively (Burnes 2000).

The reasons why organisations change appears strongly linked in the literature to how organisations then choose to undertake change. Broadly speaking, models of change have ranged in terms of scale, change direction, pace and whether change occurs on an episodic or continuous basis. An organisation’s current condition within its context and its future desired state have tended to largely determine the type of change undertaken (Dunphy and Stace 1988). The main elements of change are summarised in

the following table bearing in mind that these elements range across a continuum rather than being discrete elements and that various combinations may exist within each element.

Table 1: Elements of Change

SCALE	CHANGE DRIVERS	CHANGE DECISION	PACE OF CHANGE	VIEW OF CHANGE
Transformational or Radical Change	Top down Coercive Inspirational	Contingent: Crisis response Better 'fit' Isomorphic	Slow	As an event
Incremental Change	Bottom Up Participative	Normative: Profitability Efficiency gains	Rapid	As ongoing and continuous
	Combination	Strategic Intent		

The scale of change required depends upon the current state of the organisation and its desired future state. Scale refers not just to the extent of the change necessary, but also the target of change within an organisation. Large scale or transformational change involves changing not just components of the organisation but total structures, management processes and corporate cultures (Dunphy and Stace 1988). Ashburner Ferlie, and Fitzgerald's study of the National Health Service (Ashburner, Ferlie et al. 1996) identified five factors inherent in large scale organisational transformations:

1. the existence of multiple and interrelated changes across the system as a whole;
2. the creation of new organisational forms at a collective level;
3. the creation of roles at an individual level;
4. the reconfiguration of power relations (especially the formation of new leadership groups);
5. the creation of a new culture, ideology and organisational meaning.

Conversely, incremental change may involve the simple altering of a small process or component within an organisation. The scale and target of change within organisations shifting to network arrangements is not well understood.

Change drivers refer to the impetus and direction in which change occurs. For example, Dunphy and Stace (1988) have argued that where organisations are significantly out of fit with their environments, then change driven rapidly from the top of an organisation is warranted – that is rapid, top down change. Change may also occur organically from within the organisation from either its middle or lower ranks (Van de Ven & Poole, 1995).

A recent, commonly held view of change has been the differentiation between change as an event and change as a continuous process. Where change is considered an event, the organisation describes a desired future state and plans a change program within a set time frame to attain that state. This assumes periods of stability where change does not occur. However, where change is viewed as a continuous process, change becomes

a natural on-going occurrence. This type of change is commonly associated with the 'organisational learning' school (Senge, 1992).

Bringing together the literature on networks and organisational change, relationships are central to the operation of networks, there is little research into how organisations prepare to be relational or the extent of the change necessary to prepare for networked arrangements. The paper examines an organisation in the process of preparing to become a networked organisation. It explores how decisions are arrived at to undertake this shift and the extent of the change necessary to begin development of a model of organisations transitioning to networked arrangements.

METHODOLOGY

The research was conducted as a three year longitudinal case study of a large, public sector organisation. The complexity and size of the organisation as well as the longitudinal nature of the study resulted in a number of embedded cases arising from a single case study (Pettigrew, 1979). The overall design of the research presented here sought captured these multiple cases through a series of focus groups and interviews conducted at multiple sites at discrete time frames to observe the diffusion of change throughout all levels of the organisation from the Senior Management Group (SMG) through to operational staff on the ground.

Data was collected at four discrete time frames ranging from six to nine months apart. The primary means of data collection were focus groups and interviews conducted with a large cross-section of employees. This included focus groups and interviews with senior management, middle management, district and head office staff and various occupational groups. 63 focus groups and 54 interviews were conducted in total over the period and various departmental documents, both public and intra-departmental were perused.

The Case Study Organisation

The case study organisation is the Queensland Department of Main Roads (Main Roads). Main Roads is a large state government department responsible for the management and development of the state-controlled roads (Main Roads 1997/98). The department is regionally dispersed with fourteen district offices and operates through a functional hierarchy whereby different divisions within the department report to divisional heads within a senior management group headed by a Director General. Main Roads employs approximately 3,500 staff and is divided almost in half through a purchaser-provider arrangement. Under this arrangement the provider of construction services (RoadTek) operates as a commercial supplier of construction services to the "Corporate" arm that plans, coordinates and manages the road system for the state government. RoadTek competes against private sector contractors for large parts of its construction work. The commercialisation of RoadTek was partially intended to refocus Main Roads away from their role as a builder of roads to a new role as a manager of the road network within the transport portfolio (Main Roads 2003).

The department has a long technical history. For the most part, the department's Director General has been a civil engineer. At the time research commenced, however,

government had broken with this tradition and appointed a non-engineer and professional manager as Director General. During the period of the study, the Director General headed a senior management group (SMG) made up predominantly of engineers. The profession has therefore both historically and to the present time dominated the decision-making processes and strategic direction of Main Roads.

The delivery of roads is a politically sensitive issue, particularly in the state of Queensland which covers an area of approximately 1.7m sq. kilometres and where the population is more regionally dispersed than any other state in Australia. Roads therefore form an integral part of the state's infrastructure by connecting cities and towns, many of which are very remote. The politically sensitive nature of roads was demonstrated in the 1996 election when a decision in regard to a major road corridor contributed to the overturning of a government that had previously held a significant majority (Waterhouse, Brown & Flynn, 2001). A major policy initiative of the Queensland Government has been the adoption of a whole-of-government agenda which requires government agencies that cuts across organisational boundaries to adopt a broader strategic focus in regard to the delivery of government services (O'Farrell, 2002).

Findings

In 2000, Main Roads implemented a major change initiative aimed at altering its function from a supplier of road services to a manager of the road network. The process by which this change was to be achieved was first documented at the ICM Strategic Planning Conference Canberra in 1998 (Department of Main Roads 1998). This outlined a prescribed process of change involving "three simple steps ... assessment, followed by diagnosis and setting strategy." (page 2). Following diagnosis, a change model was designed which outlined three main foci – (1) to align processes across the department, (2) to focus on relationships and (3) to implement a balanced scorecard with particular attention paid to the quadrant relating to stakeholder satisfaction. These three foci became known as "The Three Frames" and a major communication project involving personal visits by the Director General, newsletters and posters was undertaken to spread the change message across the department. Site visits evidenced that the posters were widely displayed, although not often referred to in focus groups despite some general understanding of the change principles.

An increased focus on community consultation prior, during and after construction of projects was considered a priority of the change program. In this regard a Community Consultation Framework was established and a network of Communication Officers appointed to service all areas of Queensland to assist in community consultation, evaluating community satisfaction with Main Roads and to manage media relationships (Varghese 2000). The consultation framework was critical to the improvement of relationships with external stakeholders and thus an important component in the shift to networking.

The focus on maintaining stakeholder relationships was a significant change to an organisation that previously had concentrated almost exclusively on engineering and technical excellence. A consistent theme noted across all focus groups, including

administrative functions, was a culture of technical excellence. When asked to reflect on the culture of Main Roads over the previous five years, focus group and interview respondents identified a department that maintained a proud technical heritage of building excellent roads. Other departments were said to envy Main Roads because of the perception that Main Roads was given huge “buckets of money”. This, it was said, contributed to Main Roads becoming arrogant and inward looking manifested in their autocratic approach to the delivery of roads. It was acknowledged that little consultation or consideration of stakeholders other than motor vehicle users occurred:

“We never even used to worry about giving anyone refuge when they were crossing the road, we used to have medians with slopes like that (steep vertical slope indicated). Now we don’t do anything like that. And we never considered any room on the pavement for bikes; cyclists they just weren’t even considered I guess. They didn’t pay registration, so they had no right to be there.” Focus Group 1/8.

Therefore, the change in organisational focus to relationship building required a fundamental change in the way Main Roads conducted its business and thought about itself. At the commencement of research, however, this notion of relationships was not widely understood, nor was there significant acceptance outside its Head Office that the department needed to change either the way it did its business or its culture. For example, this comment in regard to the relational changes at a first round focus group from a junior engineer:

“Yea (laughs), that’s all the touchy furry people you know (general laughter) that do all that sort of stuff. It doesn’t have any effect on what we do. Unless it has indirectly and they’ve slipped it in there and we haven’t realised it.” Focus Group 1/8.

A central tenet of the new relational approach was the adoption of a “no-blame” culture. Throughout the research there was disparity among SMG members as to what this meant and the extent to which it had been, or should be, adopted throughout the department. An SMG focus group expressed frustration with people not being proactive because of “the rules, policy or the bureaucracy” but at the same time it was acknowledged that there were a “lot of people in the department that made things happen by taking calculated risks”. The SMG agreed that decisions made after sufficient and logical consideration would gain their support even where they went wrong, however people needed to be held accountable where insufficient consideration had been given to the consequences of decisions. At the end of the research the extent to which a “no blame” culture had been established was still questionable:

“There’s not many rewards working for us to stick your neck out, there’s no positives to it, but if you want things to happen sometimes some people have got to be prepared to exercise their best judgment.” SMG4

Early in the research a new Director General was appointed replacing the instigator of the change initiative. The appointment was met with considerable support as, unlike his predecessor, the new Director General was an engineer and therefore considered

the 'right type of leader for Main Roads'. Within Head Office there was a growing realisation that the future of Main Roads was seen as building on a base of technical excellence to include other areas of expertise and withdrawing from the building and maintenance of roads towards the more strategic focus of managing the road network. The new Director General was seen as a way forward in this regard:

1: "The new DG has heaps of engineering experience and heaps of Main Roads experience. There are lots of positives through this situation. Get something back into the system which is more balanced and focussed.

2: "Agree he is a good change, but would not want to stop the irrational stuff."

3: "Put the expertise back into the department." Focus Group 1/7.

To address the strategic direction of the department, a need was identified to compile the road network strategy and get this distributed. This would then "set the change for the next paradigm in Main Roads", clarify the higher order values of the department and set a broad strategic direction. The SMG at this stage were still unclear as to whether this would involve incremental change along the same theme as had been started or whether major changes needed to be undertaken. In this, government was seen as a major influence:

"Broad objectives of the department need clarification over the next few months. Some of this will come from government direction or redirection ... whether we have some choices on this side or whether there are some governmental guidelines that will give us some guidance." SMG2.

Eighteen months after the commencement of the research the SMG finalised the Strategic Plan but this had not yet been delivered throughout the department. The SMG commented that previous plans had tended to encourage a focus on the sections pertaining to individual areas whereas this plan forced a broader perspective in viewing how each area fitted into the overall picture. The previous plan had presented nine key result areas with four of these dedicated to managing the road network and five dedicated to managing the organisation (Main 1999). The new Strategic Plan made no differentiation between these two areas and was strongly focussed towards Main Roads' role in the road network as part of the broader transport portfolio. This was a substantial shift for the department in documenting what its main role was to be. Into the future, the Strategic Plan set the stage to move Main Roads away from its focus on construction and maintenance and towards a role as a manager of the transport network:

"I expect, to come back to a five year view, to have a much stronger focus on operating in a network rather than building things, a much stronger view as to how the total transport system works and how the road network works, so we start to manage the system rather than the projects." SMG3.

Despite the non-delivery of the formal strategic plan there was some understanding through Main Roads of the intended strategic direction towards networking. However, focus group respondents identified that this direction needed to be better translated into the working documents and daily routines of departmental staff to make them more meaningful. To achieve this, staff in all areas felt that senior management

needed to personally deliver strategic documents in a language that could be understood, was relevant to their day to day lives and could demonstrate how operational changes fitted into the strategic direction:

“If this is a change we need to know why we need to have it and what are the benefits.” Focus Group 3/1.

The result of not translating strategic direction in understandable language was that many considered that the department had no strategic direction. Districts in particular considered that the department was not proactive and that it was changing only in reaction to outside forces.

The principal message that emerged from the third SMG focus group was the need to present a united front and to ensure that Main Roads too acted as a network. In this senior management had involved other senior managers in projects within their own individual areas. Presenting a clear direction through visible consistency amongst SMG members was seen as the means by which the new vision for the department could be successfully disseminated.

The focus across the department was shifting to networks and alliances throughout the period of the research. Main Roads entered into a number of alliances including research and development with universities and a strategic alliance with the asphalt industry. The most significant alliance was that with the Local Government Association of Queensland and it was planned to develop this association further. In a time of shrinking budgets it was seen as a priority that local governments were involved in the prioritisation of works and were kept apprised of the constraints under which Main Roads was operating. Ultimately the alliance sought to cede to the councils greater decision-making over roads in their local areas that, legislatively only, came under the jurisdiction of Main Roads. The sharing of power is identified as a key, if difficult to achieve, network attribute (Mandell, 2001). It was considered, however, that Main Roads generally was not yet ready for such a significant relinquishment of “power” but that the alliance was a way forward to more efficient operations:

“The alliance will be the framework where it will set out everybody’s role and responsibilities and what everyone has to do. So it’s working together rather than banging our heads together.” SMG3.

A change aimed at addressing some of the ingrained bureaucratic cultures within the department was also mooted, primarily to overcome some of the tensions that had developed between Corporate and RoadTek, the commercialised construction arm of the Department. There was also external pressure from government to draw RoadTek back a little from its increasingly commercial focus to allow it to fulfil its role in the whole-of-government agenda, in particular the government’s employment objectives in remote areas. RoadTek was therefore under pressure to meet both government objectives and commercial outcomes. The tension between the two divisions had occurred due primarily to these commercial imperatives placed on RoadTek which RoadTek staff felt were not understood or catered for by Corporate who continued to focus on government priorities. This was evidenced in the two divisions’ approach to project management. While both parts of the department were said to be adopting

project management, RoadTek was being judged on its ability to turn a profit out of project management while Corporate was focussed on meeting government objectives often creating project delays for RoadTek. Corporate consulted widely with the public on the development of projects while RoadTek sought innovation through their involvement in project management through such actions as a successful joint bid with a major private sector contractor for the construction of a road bridge.

The SMG in the final round of data collection discussed the rollout of the Strategic Plan and the release of a major strategic document Roads Connecting Queenslanders. These two strategic documents combined represented a long-term strategy that was more focussed than previous plans and that closed some options regarding the future of Main Roads. Both documents clearly positioned Main Roads within the broader transport portfolio and, more broadly still, within the whole of government context. A principal objective of the strategic documents was to alter the department's role from being a builder of roads to being a manager of the road network. This role was described as:

“... not just about building and maintaining roads. It is also about managing their use and operation, integrating roads with land-use planning, and providing roads as part of an integrated, sustainable transport system.” Roads Connecting Queenslanders p. 16.

Relationships were considered integral in achieving the objective of becoming a manager of the road network. This extended from Main Roads' external relationship with other government agencies, the community, local councils and government to the internal relationships between Corporate and RoadTek, district offices and head office and technical and non-technical staff within the department.

External relationships, particularly the building, or in some cases mending, of relationships with other agencies was considered particularly problematic due to departments being loath to surrender control of their territory. Additionally, Main Roads' earlier reputation for arrogance and “empire building” was considered a blockage to the achievement of better relationships with other agencies and the establishment of networks between work units and other stakeholder groups. This was now seen to be changing and that training aimed at relationship skills had aided the change. The need for a whole of government perspective was driven by an acknowledgement that the public did not concern itself with which department was responsible for issues. To meet the public's needs a cultural change that dismantled the demarcation of roles between departments needed to be achieved:

“... at the end of the day the public just wants vehicles moved ... they don't care if it's council's road or our role or it's the fire brigade ... they want the thing done different so I guess it is the start of us giving away a bit of our power to work with others to get a better outcome ...” SMG4.

In some district offices their major consultations took place with industry. These industry sectors often had strong political affiliations resulting in some districts dealing with particularly sensitive political situations that, in one case, resulted in the cancellation of a major federally funded project. It was admitted that this poor result had been partly due to Main Roads' inability to effectively consult and bring about a

resolution between the affected parties. By the final round of data collection staff commented that Main Roads had now developed a better image with its public through consultation and had developed new methods of project delivery such as partnerships and alliances. These, it was argued, enabled Main Roads greater scope to deal with the issue of shrinking budgets while simultaneously satisfying the community. Through consultation they could pre-empt public reaction and address issues before they arose:

“I think the department is prepared to stand up more and let the public know there is not an unlimited bucket of money ... We have been building up alliances with local government, private enterprise and other departments in limited budgetary times.” Focus Group 4/14.

As part of the change initiative, networks within Main Roads were to be achieved through a greater utilisation of teams as a means of organising and undertaking work. In particular, the aim was to break down the divisional silos of the organisation. Yet it was clear that middle management at district level resisted the implementation of teamwork as they defended their power base through maintaining their focus within narrow designated areas. Despite significant communication from the SMG in respect to the changes required, district managers effectively blocked these messages arguing that they did not relate to them:

“I am not getting any messages from Senior Management, as I said nothing has been happening very much in the last six months ... apart from funding for roads, which isn't my area and the technical officer review which isn't my area either.” Interview, Middle Manager Administration, Round 3.

Intra-organisational members therefore continued to operate within their own communities of practice and within their own frames and values. Consequently, they did not necessarily make the adjustment to the new network frame immediately. Part of the issue was that, whilst messages were being forwarded from Head Office regarding what was required, the processes were not sufficiently put in place to immediately support the new ways of working.

An integral part of the process of shifting to a networked organisation was the alignment of systems and process across the organisation. Many years of autonomous district operations had led to each district establishing its own procedures. Systems differed between Head Office and districts. Despite IT system standardisation across the department the standardisation of processes was considered a major stumbling block to the adoption of project management and ultimately a network approach:

“We have not yet accepted across the state that we need a common quality system. We still have people doing their own things in the districts. We have agreed to the common system for about twelve months and are working towards it. We were hoping to get some more departmental impetus. It has been put on hold so we can explain the benefits.” Interview 2/13.

At the conclusion of data collection there continued to be blockages at middle management levels in regard to adopting a more relational way of doing business within the organisation. Externally though, the notion of project management, networks, alliances and partnering was strongly adopted. These changes were viewed as a permanent shift that included networked arrangements with a broader range of other bodies. As this evolution took place it existed side by side with a continuation of the formal functional hierarchy.

FINDINGS /ANALYSIS

Drawing from the evidence presented in the case study the next section reports on the findings. To address the paper's goal particular attention is directed to drivers for change, change decisions and changed actions to align with a network model.

Drivers for change/Change decision

Top/down

A major driver for change in the case study presented was driven from the top. There was an appreciation within Main Roads of the need to build both personal and departmental relations to progress the government's whole-of-government initiative which formed a large part of the Premier's agenda (O'Farrell, 2002). This top/down orientation to a relational approach was most noticeable within the Main Roads Corporate group. The location of this group, at a more strategic level of operation in government more closely linked them to the strategic policy agenda of government.

The alignment with government policy tends to argue an institutional isomorphism in that Main Roads did not wish to draw attention to itself through a failure to adopt a whole of government perspective. There were underlying threats attached to any recalcitrance in this regard. The department identified that by practicing isomorphism some legitimacy could be established and their reputation with government assured thus staving off any major incursions into the department from external forces. In particular, the threat of forced major restructure, privatisation or amalgamation could be averted by 'towing the line'. In this way it can be seen that institutionalism provided a strong foundation for the shift from siloed, hierarchy to relational networks as the way to undertake business.

The argument for isomorphism is, however, somewhat simplistic. Whilst the whole-of-government agenda set the main strategic direction, the means by which this was to be achieved was not directed by government. In the case of Main Roads the Director General acted strategically to an external threat through the design of a change model that would deliver the requisite outcomes but not necessarily lead to Main Roads looking like all other departments. There was recognition that the technical core needed to be maintained and that new cultural elements needed to be built on top of this.

By comparison, the adoption of a networked way of working was adopted for different reasons by RoadTek. Whilst commercialisation had been directed by government, the division acted strategically in how it interpreted this. At a time when government was attempting to draw them back a little to a more traditional public service role, RoadTek saw cross-organisational relationships as the means to break the

public sector shackles, drive profits up and gain technical expertise through partnering with private enterprise. Therefore, the main driver in the case of RoadTek was more instrumental. That is, RoadTek were willing to engage in networks, not because they were mandated to or because they saw networks as the right thing to do, but because they saw networks as a practical way of product delivery through reducing duplication of processes.

Bottom/up

At the same time there was also evidence that some employees recognised the limitations of working in 'silos' and wanted to be more 'networked' to have better relations with colleagues in other units. Further, there was a growing realisation that improved relations across and between units and sectors was necessary to continue to meet the organisational objectives and personal goals of "building beautiful roads". Accordingly, at this technical level an instrumental, pragmatic and interpersonal (professional pride) approaches were contributing factors to the uptake of a networked way of working. In this way, it can be seen that even within the one organisation there can exist an array of orientations towards networks; each of which provides different rationales, operating frames and expectations.

For both of these orientations – top/down and bottom/up, key initial considerations were the presence of a 'will to change' and the acceptance of a greater absorption of risk.

Relations

The focus of the change was on relationships both internal and external to the department. In regard to the former the department had a long history of informal networks that were highly exclusive in their membership. This closeness of the network based on prior knowledge, professional level and geographic location served to constrain membership. Through change processes aimed at formalising networked arrangements, the networks were opened up and became more inclusive facilitating alternative views and new information.

In regard to external relations, the case study reveals that the organisation started from a position of relatively poor relations with external and internal stakeholders driven by the experience of ongoing silos, professional ideology, and organisational history. There was a realisation of a need to improve relationships in order to make the adjustments to work in a network model. The shift in relationships was evident in the way members considered each other and adopted a more collegiate approach to doing business. This was despite resistance from middle management.

The focus on mending internal relationships was strong and indicates that the department understood it needed to alter its own behaviour before it could significantly change its relationship with external stakeholders. It is therefore surprising that Main Roads appeared to be more successful in its endeavours with external relationships than with internal relationships. This situation could be partially explained by strong internal and/or professional networks also described as 'communities of practice' operating within the organisation that counteracted the acquisition of the necessary behaviours to successfully operate in a relational way.

External stakeholders, on the other hand, were often already involved in networks or more relational ways of working and therefore were more experienced and comfortable with what was required. Reputation and accountability also appear to be explanatory factors in that, whilst behaving badly was acceptable with internal stakeholders who would not willingly damage their reputation; the same could not be said for external stakeholders who had more to gain, primarily financially, from projects extending overtime.

Whereas previously the department had been reticent to share information that reflected poorly on their performance, they demonstrated the need to trust other organisations with information regarding fiscal constraints. There was recognition that an evolutionary process was required. Initially commencing with the simple sharing of information it was acknowledged that ultimately power must be ceded but at this time the organisation was not yet ready to achieve this. As a result, respondents identified benefits of improved collegiality; that is, not only brought groups together but contributed to an increased commitment to achieving goals.

Changed perceptions actions/structures

A further example of a step towards a network model can be seen in the recognition by organisational members of their interdependence. That is, they relied on each other to achieve collective goals. The development of a common goal and a common sense of purpose was an indicator of mobility toward this network aspect. The establishment of this 'common mindset' or commitment to a common goal is described by Mandell (1999) as the 'program rationale'. Program rationale, with its emphasis on securing a 'whole view' provides the framework for a network mode and points to the types of behavioural and cultural adjustments that are required. As shown in the case studies, organisational members spoke of adopting a 'big picture' of the organisation and how it was connected. This was graphically illustrated as a "shift from a view of individual parts to strategic level" (Interview).

In this way the transference towards a new organisational culture was commenced. A weakness of the change program was that organisational members were unable to understand how changes in their day to day operations translated into the strategic direction. The disconnect between systems and processes has been identified as an ongoing issue for many networks (Keast and Brown, 2002).

Nevertheless, a range of network norms of interaction can be distilled from the cases. In particular, respondents highlighted the development of a new meta-language that was able to cut across previously autonomous working groups with particularistic languages, and facilitate communication. Further, a no blame culture was instilled that sought to replace a more punitive approach. By removing blame, the organisation sought to encourage open and more genuine communication. That is, members would be more willing to be 'frank and fearless' in sharing both positive and negative views.

Additionally, the introduction of new staff members from various professional backgrounds provided the means to include perspectives that no always fitted with the traditional engineering view. From a network perspective, this expanded opinion and skill base, changed the dynamics of the existing interactions and modelled new ways of thinking and behaving within the various networks. Building on this diversity, a

team based approach was implemented to facilitate the adoption of new business practices. Together these aspects of organisational change demonstrated an adjustment in prior operating procedures to a more horizontal orientation that began to break through organisational silos and profession enclaves to foster more egalitarian interactions. Table 2, provides a summary of the core change processes that were distilled from the case study.

Table 2: Summarising direction, focus and action

CHANGE DIRECTION	DECISION FOCUS	NETWORK ACTIONS
Top Down	Instrumental	Information Sharing
	Institutional	
Bottom Up	Interpersonal	Trust
		Power ceding
		Teams

To expand, the change direction was both top down and bottom up, that is directed down from strategic decision makes as well as emerging from the practitioner floor. The decision making focus reflected the duality of the change direction, with three positions evident – instrumental (pragmatic), institutional (mandate) and interpersonal (collegiate). Finally, the case distilled a set of relational adjustments that were addressed in moving to the network mode.

DISCUSSION

A significant aim of the change program was the introduction of a relational way of doing business through the formation of intra and inter-organisational networks. This was to impact on how Main Roads dealt with both their external and internal stakeholders.

There is evidence throughout this study of changes in four of the six areas noted by Ashburner et al (1996). Firstly, there were multiple and inter-related organisational changes such as the shiving off of RoadTek and numerous divisional realignments all aimed at breaking down functional silos and developing a broader whole of government perspective. Secondly, the development of new organisational forms was evident in the shift to project management as an alternative to the functional hierarchy as the means of production. This was further evidenced in the greater use of alliances and partnerships with “outsiders” as a mechanism for service delivery with an aim to shift the department further towards a networked structure. Thirdly, a major focus throughout the change process was to initiate a consistent organisation-wide system. This was somewhat achieved by the end of the research. Fourthly, there was a noticeable creation of new roles within the department such as environmental, cultural heritage, native title and organisational development officers.

The difficulty within the case study presented was that a reconfiguration of power relations and cultural transformation was deemed necessary if organisational members were to successfully co-operate with external stakeholders and project partners. The initial attempt by senior management to alter the structure of Main Roads away from a functional hierarchy to a more networked arrangement seems to have met with limited success in fully shifting the locus of power away from engineering. For the organisation as a whole, networked arrangements and strategic alliances were seen to

offer both an arena for the ceding of power, but an opportunity to gain power through central positions within networks. Even the title “manager of the road network” suggests the department was not well prepared to engage in equal relations with its network partners. In this way, it could be argued that while the organisation and its members understood and mentally accepted the need to network, they had not fully embedded the network processes within practice, or worse had not yet fully committed to the mode.

Overall, this suggests only a limited reconfiguration of power relations but that the most significant locus of power, held within the engineering profession, remained relatively immune to major change. The focus of the department is changing from a road builder to a broader role of managing the road network. This has necessitated the employment of professionals outside the engineering profession that potentially may shift the professional power away from engineering.

A significant aspect of the change in Main Roads is a change of strategy aimed at altering not just how an organisation does business, but what its main purpose is. In the case of Main Roads rather than just creating new roles at an individual level there was a complete overhaul of the organisation’s principal role through a major shift in strategy. For all its history Main Roads was an organisation that built roads. What is most significant is that, with commercialisation, Corporate Main Roads no longer performs this function. They have become a purchaser, rather than a provider, of roads. Their role now, according to the SMG, is not in the construction of roads, but in the management of the road network as part of the broader transport portfolio.

At SMG level and in management ranks directly below the SMG the new primary purpose of Main Roads was well understood. Below that level the evidence suggests that this strategy was not well linked to what was occurring in people’s daily work routines. Staff recognised the broader professional roles being adopted and the lack of control Corporate now had over the quality of roads constructed. These were not, however, identified as belonging to the broader strategy of becoming a manager of the road network. Employees identified that the department was taking increased responsibility in areas outside their direct area of expertise however there was little understanding of how these expanded roles were a direct result of the change of organisational strategy.

CONCLUSION

Main Roads, similar to many other organisations adopted a deliberative strategy based on enhanced relations and intra and inter-organisational networks to more effectively meet service delivery and outcomes. In effect there was a desired shift from technocracy to democracy. However, the move to networks is not always a straightforward endeavour. It is complicated by the existence of different change drivers and orientation as well as different levels for network formation. The resulting disconnect between the overall organisational change strategy and the actual implementation processes at various operational levels, points to the need to have a more nuanced approach to strategy. Further, power-ceding in networks, how this is carried through from pre-network to network establishment and whether it can be maintained is a significant area for future research. Perhaps most importantly, the

scale of the relational adjustments required to be established and sustained was under considered.

Adams, D. and Hess, M. (2000). "Community in Public Policy: Fad or Fashion" Australian Journal of Public Administration 60 (2): 13-23.

Agranoff, R. and McGuire, M. (2001a). "Big Questions in Public Network Management Research" Journal of Public Administration Research and Theory 11 (3): 295-326

Agranoff, R., & McGuire, M. (2001b). After the network is formed: Process, power, and performance. In M. P. Mandell (Ed.), Getting results through collaboration: networks and network structures for public policy and management (pp. 11-29). Westport: Quorum Books.

Ashburner, L., E. Ferlie, et al. (1996). "Organizational Transformation and Top-Down Change: The Case of the NHS." British Journal of Management 7: 1-16.

Barnwell, R. E. (1994). Organisational Theory in Australia. Sydney, Prentice Hall Australia Pty Ltd.

Burnes, B. (2000). Managing Change: A Strategic Approach to Organisational Dynamics. Harlow, Pearson Education Limited.

Brown, K., & Keast, R. (2003). Community –government engagement: Community connections through networked arrangements. Asian Journal of Public Administration, 25(1), 107-132.

Castells, M. (2000). "Materials for an Exploratory Theory of the Network Society." British Journal of Sociology 51(1): 5-24.

Clarke, M. and Stewart, R. (1997). Handling the Wicked Issues: A Challenge for Government, LOV Discussion Paper, Institute of Local Government Studies, University of Birmingham

Department of Main Roads (1998). Effectively Implementing Change Management. ICM Strategic Planning Conference, Canberra, Unpublished.

DiMaggio, P. J. and W. W. Powell (1983). Institutional Isomorphism. Organization Theory. D. S. Pugh. London, Penguin Books.

Dunphy, D. C. and D. A. Stace (1988). "Transformational and Coercive Strategies for Planned Organisational Change: Beyond the OD Model." Organisation Studies 1988, 9/3((c) 1988 EGOS): 317-334.

Hebbert, W, Keast, R, and Mohanak, K. (forthcoming, 2007). The Strength of Oscillating Ties Innovation:MMP (April)

Huxham, C. (2000). The challenge of collaborative advantage. Public Management, 2, 337-357

Huxham, C., & Vangen, S. (1996). Working together: Key themes in the management of relationships between public and non-profit organizations. *International Journal of Public Sector Management*, 9(7), 5-17.

Inkpen, (1996)

Keast, R., & Brown, K. (2002). The government service delivery project: A case study of the push and pull of central government coordination. *Public Management Review*, 4(4), 439-459.

Keast, R., Mandell, M.P., Brown, K., & Woolcock, G. (2004). Network structures: Working differently and changing expectations. *Public Administration Review*, 64(3), 363 – 371.

Kickert, W., Klijn, E-H, and Koppenjan, J. (1997). Managing Complex Networks: Strategies for the Public Sector London: Sage.

Klijn, E-H, and Koppenjan, J. (2000). Public Management and Policy Networks Public Management 2 (2): 135-158

Lowndes, V. and Skelcher, C. (1998) The Dynamics of Multi-Organisational Partnerships: An Analysis of Changing Modes of Governance Public Administration 76 (2): 313-333.

Main, Roads (1999). Strategic Plan 1999-2002. Queensland Government Publication. Brisbane.

Main Roads (1997/98). Annual Report. Queensland Government.

Main Roads (2003). <http://www.mainroads.qld.gov.au>. **2003.**

Mandell, M.P. (1999). The Impact of Collaborative Effort: Changing the Face of Public Policy Through Networks and Network Structures Policy Studies Review 16: 4-47.

Mandell, M.P. (2001) The Impact of Network Structures on Community-Building Efforts, in Mandell, M.P. (ed) Getting Results Through Collaboration: Networks and Network Structures for Public Management (129-153) Westport: Quorum.

O'Farrel, G. (2002). Public Sector Reform in Queensland Canberra Bulletin of Public Administration (June) 6-8.

Pettigrew, A. (1985). The Awakening Giant: Continuity and Change in Imperial Chemical Industries. Oxford, Blackwell.

Powell, W.A.L. (1990). Neither Market, State or Hierarchy: Network Forms of Organization Research in Organizational Behavior 12: 295-336.

Senge, Peter M. 1992. *The fifth discipline : the art and practice of the learning organization.* Milsons Point, N.S.W: Random House Australia.

Van de Ven, Andrew H. and Marshall Scott Poole. 1995. "Explaining Development and Change in Organizations." *Academy of Management Review* 20:510-540.

Varghese, J. (2000). Presentation by the Director-General Education Queensland Jim Varghese (previously Director General Main Roads) "Aligning for Success in Main Road - a Marketing Case Study".

Waterhouse, J., Brown, K. and Flynn, C. (2001) "The Pacific Motorway: A Case Study Examining Public Sector Management Dilemmas", The Journal of Contemporary Issues in Business and Government, 7(1): 21-28