

# **Implementing the EU Water Framework Directive in Norway: Bridging the gap between water management networks and elected councils?**

*Sissel Hovik, Professor, Department of Public Administration, Oslo and Akershus University College of Applied Sciences.*

Address: P.O. Box 4 St. Olavsplass, 0130 OSLO, NORWAY

Telephone: +47 67238236

e-mail: [sissel.hovik@hioa.no](mailto:sissel.hovik@hioa.no)

*Gro Sandkjær Hanssen, Senior Researcher, Norwegian Institute for Urban and Regional Research.*

Address: Gaustadalleen 21, 0349 OSLO, NORWAY

Telephone: +47 97537362

e-mail: [gro.hanssen@nibr.no](mailto:gro.hanssen@nibr.no)

## **ABSTRACT**

To handle the challenge of complex cross-sector and multi-level coordination in the implementation of the EU Water Framework Directive, Norway has established multi-level governance networks. Observers have pointed to a risk of such governance arrangements being dominated by experts. This article studies the highly complex multi-level governance networks of water management in Norway, and unveils the importance of *political anchorage* of such governance networks at local and regional levels. The study finds evidence that political anchorage matters for further network achievements. Because the water governance networks are subordinated to the hierarchy of government, they need to “talk to” the system of hierarchical government in order to be effective. In this regard it seems crucial that networks are politically anchored. Furthermore, the study unveils the important role of political leadership and network managers in ensuring political anchorage.

## **Introduction**

The EU Water Framework Directive (WFD) has been developed as an attempt to ensure a sustainable use of water resources. This extensive legal framework will steer water planning in the EU member states for several decades to come (Hedelin, 2008). The WFD requires river-basin-oriented water management using multi-level governance networks to coordinate efforts across policy sectors and levels of government, as well as countries. The directive's aim is to develop policy plans and programs of measures that will ensure good chemical and ecological status of all waters (EU, 2000).

Governance networks are, however, secondary structures, subordinated to hierarchical sector government. Studies of the member states' implementation of WFD point to a lack of clear linkages between the river-basin-oriented water management system and the existing representative democratic system (Hedelin, 2005; 2008; Behagel & Arts, 2014; Bourbland *et al.*, 2013). This is a serious criticism because the question of how to improve the ecological status of water is a highly political one that implies making difficult choices about how to prioritize among policy sectors and interests and unpopular decisions about which actors must bear the burden. As a consequence, there is a growing attention on democratization in studies on the WFD (Lundqvist, 2004; Newig & Fritsch, 2008; Moss & Newig, 2010; Behagel, 2012; Behagel & Turnhout, 2011; Pares *et al.*, 2015; Bäckstrand *et al.*, 2010; Blackstock *et al.*, 2012; van der Heijden *et al.*, 2014).

This article studies the linkages between the river-basin-oriented water management system (multi-level governance networks) and the traditional representative systems in Norway. By analyzing comprehensive material based primarily on surveys, supplemented by interviews and documents, we discuss whether and how these two systems of governance ensure political anchorage. By political anchorage we mean that the networks are properly linked to the elected councils of municipalities and counties, through political representation

and control (Sørensen & Torfing, 2005). The article furthermore studies how political anchorage is influenced by structural and managerial features of these governance networks, and how it is linked to two other procedural achievements that these networks are supposed to foster: cooperation and integration.

Our study contributes to the growing literature about the democratic dimension of the WFD. First, while studies so far have primarily focused on stakeholder participation and private–public collaboration (Koontz & Newig, 2014; Blackstock *et al.*, 2012), we study politicians in elected councils at local and regional levels. Second, Norway is an interesting case when studying organizational preconditions for multi-level and cross-sector cooperation and integration because it has chosen a model that is among the most decentralized in Europe (Nielsen *et al.*, 2013) and established a new governance structure that cuts through the established territorial borders of government. Our study also contributes to the broader discussion on how European Union policies are implemented by the member states and associated members like Norway (Treib, 2014; Liefferink *et al.*, 2011).

### **Implementing the EU's Water Framework Directive in Norway: River basin districts and multi-level governance networks**

Due to the Agreement on the European Economic Area (EEA), Norway is obliged to implement the EU Water Framework Directive. Norway has done this by the Norwegian Water Regulation. The WFD addresses the problems of coordinating a fragmented public sector. It aims to stimulate holistic water management across all water uses and policy sectors, and its main goal is to achieve good chemical and ecological status of water and to distribute the relative advantages and costs as fairly as possible (EU, 2000). To this end, the WFD states that the functional unit for water management must be catchment areas that drain all surface water to a single point (river basins, ecosystem principle, Hammer *et al.*, 2011; Nielsen *et al.*, 2013).

While most countries have established river basin districts which to a large extent are based upon existing structures (Nielsen et al. 2013), Norway has designed *new* geographical units: 11 river basin districts (RBD) cutting across existing municipal (428), county (19) and regional state administrative borders. In each of these districts, a complex cross-sector, multi-level governance network has been established, called the *River Basin District board*. The RBD boards comprise all public authorities at local, regional and national levels that affect, or are affected by, the ecological status of water within the RBD.

The RBD boards are cross-sector arenas that include public authorities representing hydro power, industry, fish farming, agriculture, transport, wastewater and sewage, urban and rural planning and environmental management. One of the counties within a catchment area is appointed as the River Basin District Authority, which coordinates the network through an administrative coordinator and a political leader. In most river basin districts an executive group works as the operative leadership, and in some regions a political steering group is established to ensure political guidance of the work.

The 11 RBDs are divided into 101 sub-districts (SD), which also cut across geographical and administrative borders and have the same types of actors in their sub-district boards. Private interests are only represented in a mandatory regional advisory group.

The geographical scale and complexity of the 11 river basin districts varies. While seven districts comprises mainly one county and two districts comprises mainly two counties, the two largest districts comprises seven counties each. The number of affected municipalities varies from 19 in one of the single-county districts, to 105 in one of the most complex districts. The number of affected regional state authorities also varies, and is considerable higher in the largest districts.

TABLE 1 APPR HERE

Just as the complexity of the districts varies, the number of participants in the boards also varies, ranging from 12 to over 300.

The mandate of the governance networks is to draw up a mandatory joint management plan which, by consensus, identifies all environmental threats and risks to the ecological status of water within the catchment area, formulates a plan for goal achievement and presents relevant measures. The plan process follows the EU's 6-year planning schedule. In the end, the joint management plan must be decided upon in each county council (elected body). These joint management plans influence the work of municipalities and counties, which are the responsible authorities within areas such as wastewater treatment, agriculture, land-use planning (municipalities) and transport (counties). They might put strong restrictions on land-use planning and industrial development, policy areas where local and regional governments traditionally have strong autonomy.

Even if the networks are given the authority to formulate management plans, they are clearly subordinated to the hierarchical structures of different sector authorities (Hanssen *et al.*, 2014). The responsibility for the implementation of the plans is left to the individual municipalities and agencies that comprise the networks. Thus, ownership of the management plan and its goal becomes important to ensure that it is implemented by all the authorities participating in the networks.

## **Theoretical framework and research questions**

### ***The importance of political anchorage of multi-level water governance network***

Because a variety of activities and policy sectors influence the quality of water, achieving a good ecological status depends upon measures in many policy sectors and is the responsibility of state, county or municipal authorities (Hanssen *et al.*, 2014, van Meerkerk, *et al.*, 2013; van

Meerkerk *et al.*, 2014). Norway has decentralized the responsibility for coordinating these authorities to multi-level governance networks, namely 11 River Basin District boards. These RBD boards are key network arenas for formulating the water management plans, and include all key actors for realizing the plans. Multi-level governance networks can be defined as structures involving multiple nodes – agencies and organizations from different levels of government – with multiple linkages, ordinarily working on cross-boundary collaborative initiatives (McGuire & Agranoff, 2011, p. 266). Such networks are assumed to be useful tools for coordinating the efforts across policy sectors, levels of government, and countries (Sørensen & Torfing, 2005; Armitage, 2008), as well as with regard to WFD -implementation (Moss, 2004; Liefferink, *et al.*, 2011). Furthermore, they have the potential to democratize and open up WFD processes (van Meerkerk *et al.*, 2014; van Buuren, *et al.*, 2012; Behagel & Turnhout, 2011).

Political ownership of the water management plans is crucial in order to secure implementation of these. Since the different authorities involved in the Norwegian water government networks cannot be forced to implement the management plans, goal achievement depends upon political support and political will to prioritize implementation. Active and early involvement of politicians can ensure that democratic institutions will approve the outcome of network interaction (Sørensen, 2006). Thus, political anchorage, namely the linkages to the elected councils of the participating local and regional authorities through political representation in and control of these multi-level water governance networks, is important.

The network governance perspective (Sørensen & Torfing, 2005: 2009) focuses on network relations between actors, and points to four ways of anchoring the work of governance networks in the democratic processes: the anchorage of networks in representative democracy, the membership basis of participating groups, accountability to a territorially

defined citizenry, and democratic rules of conduct. However, as an analytical framework for understanding democratic governance, it is not sufficiently developed. This framework needs to be supplemented with a perspective that takes power-relations into consideration, allows for multiple and context-specific political rationalities, and rejects the idea that policy actors automatically adapt to institutional constraints and new types of relationships in governance networks (Behagel & Arts, 2014; Behagel & Turnhout, 2011).

In their review of governance network research, Klijn and Koppenjan (2012) point out that studies have shown that formal linkages between networks and representative bodies or stakeholders do not guarantee an influential role for these actors, and that many network governance processes have a predominantly technocratic nature. The literature points to a risk of these processes being dominated by experts (Sørensen, 2006, Olsson, 2003; Bache & Olsson, 2001) and of "creeping managerialism" (Davies 2007). These challenges are especially relevant in environmental management and the WFD because the scientific nature of environmental policies and the technical and procedural complexity of the WFD (Bourdbland *et al.*, 2013) can reinforce such tendencies.

To take this into account, we do not limit our study to formal linkages between multi-level water governance networks and representative councils. We expand our focus by studying whether and how politicians use their formal position to gain influence, as well as the role of the network managers in the political anchoring of the networks. Thus, we study not only who the actors are, but also what practices they engage in (Behagel & Arts, 2014).

Democratic anchorage as such is not the concern of this paper. We limit our study to *political* anchorage – in other words, how the work of the water governance networks is anchored within the elected political leadership of the participating local and regional public authorities. We ask the overall question of whether the linkages between the river-basin-oriented water management system (governance networks) and the traditional representative



systems in Norway are ensured. We operationalize the question by asking three related research questions:

Q1: How are local and regional politicians formally involved in the networks?

Q2: How does participants' assessment of the local and regional political anchorage of these complex networks relate to the formal involvement of politicians and to network management?

Q3: To what extent does political anchorage matter? How is the participants' assessment of political anchorage linked to their assessment of achievement regarding network cooperation and integration?

To answer these questions, we need analytical tools for assessing the linkages between the networks and political councils.

### ***How to link multi-level governance networks to democratic councils?***

The linkages between networks and political councils depend upon the ways in which the networks are politically controlled or metagoverned (Sørensen & Torfing, 2009).

Metagovernance denotes an indirect form of governing, through 'the organization of self-organization' (Jessop, 1998, p. 42). Thus, when identifying linkages between networks and elected councils, the two main types of metagovernance provide a useful point of departure (Sørensen & Torfing, 2009, p. 246): *Hands-off* metagovernance takes place through either *network design* or *network framing*. While network design aims to influence the scope, character, composition and institutional procedures of networks, network framing seeks to determine networks' political goals, fiscal conditions, legal basis and discursive story lines. *Hands-on* metagovernance can take place as *network management* – understood as guiding,

supporting and facilitating network interaction – or through *participation*, where the metagovernor is one of many actors negotiating collective solutions. Hands-off and hands-on metagovernance requires different degree of involvement in the networks. A combination of these two types of metagovernance is often considered to be most successful strategy, particularly as networks mature (Sørensen & Torfing, 2009; Damgaard & Torfing, 2011). This article studies how the regional and local politicians are involved in the networks, and in doing so examines the possibilities for political hands-off and hands-on metagovernance.

Even if the networks' overall aim and institutional structure is defined by the national government (in the water regulation), the county council, being the responsible water authority, can decide in more detail on the composition and institutional procedures of these networks. Moreover, the management plans must be approved by the councils of all affected counties, giving politicians the power to sanction the negotiated solutions. These features of traditional hierarchical government constitute a basis for political hands-off metagovernance (network design and network framing), and are shared by all water regions.

In addition, the *participation* of elected politicians links the networks to representative government. By taking part in the deliberations and negotiations on how to achieve the WFD goal, politicians gain more insight and can influence outcomes directly. Still, not all municipalities take advantage of the opportunity for political representation in the networks. Politicians can also contribute to the management of networks, for example by playing a leading role through a steering group. Steering groups can be composed of politicians, administrators, or a combination of both, and often engage in network management (Sørensen, 2006), for example, by guiding, supporting and facilitating network interaction, together with the (administrative) network manager.

Our second research question addresses the relation between formal political involvement in governance networks and the participants' assessment of political anchorage.

Does direct representation of councillors or the establishment of a political steering group increase how the actors perceive the political anchorage of the networks?

Political metagovernance is conducted in concert with network managers (project leaders/coordinators). Network management refers to the deliberative action taken to facilitate, guide, or direct the interactions of actors (Agranoff & McGuire, 2001; Klijn *et al.*, 2010). There is strong evidence that a network manager using a combination of management strategies improves the outcome of networks, specifically trust, adequate interaction between actors and resource mobilization (Hovik & Hanssen, 2014; Meier & O'Toole, 2010; Klijn *et al.*, 2010; Verweij *et al.*, 2013; Edelenbos & Klijn, 2006). Network managers can create desirable conditions for democratic water governance by creating constructive interaction between stakeholders (van Meerkerk, *et al.*, 2014). Thus, we argue that active network management is crucial for encouraging the political anchorage of networks. This might be particularly true in complex networks like those under scrutiny here. In such networks, it seems to be important for network managers to act as “boundary spanners” who connect actors across the cleavages between professional experts and politicians, the public and private sectors and different levels of government or policy sectors (Williams, 2002; Klijn *et al.*, 2010; van Meerkerk, *et al.*, 2014). Knowing when and how to involve various actors is an important competence for managers of complex networks (Holmen & Hanssen, 2013, van Meerkerk, *et al.*, 2014).

### ***How is political anchorage related to other network achievements?***

Our knowledge of the relation between political anchorage and outcomes of governance networks is rather limited; only a few studies have explored it. Furthermore, the findings of these studies are ambiguous, either indicating positive effects (Klijn & Edelenbos, 2013) or no effects (Edelenbos & Klijn, 2006; Edelenbos *et al.*, 2010). In our case, the management plans

are still not decided, and it is therefore too early to document the outcomes of the water governance networks. It is, however, possible to identify procedural achievements: First, the networks are intended to facilitate conflict reduction and coordination through information and knowledge sharing in a collaborative atmosphere based on trust and reciprocity. Second, the networks being studied are, as mentioned, subordinated to hierarchical government. These networks must be integrated with hierarchical government because their success depends on knowledge, finances and measures generated within local and regional government and sector authorities, and their effectiveness is determined by the compliance of all these authorities.

### **Data and methods**

The data stems from a survey given to all members of the 11 river basin district boards (RBD boards) in Norway and to all members of the sub-district boards (SD-boards) in three districts (digital survey distributed by e-mail in 2013). The survey was sent to 860 people, and 357 answered, giving a response rate of 42%. There is only small variation in the response rate among districts, between RBD-boards and SD-boards, and between representatives from municipalities, counties and state authorities (Hovik and Hanssen 2015). Even though this bias is rather small, we control for district level and the respondents' affiliation in our analysis.

Information about formal political involvement through direct representation in the networks and the existence of political steering groups was gathered through the study of the regional planning programs ([www.vannportalen.no](http://www.vannportalen.no)). In commenting on the findings from the quantitative study, we use qualitative data from in-depth studies in three river basin districts, one being among the most complex regions and two among the least complex. Key actors representing the water authorities (counties), the county governors and other state agencies, municipalities and private organizations were interviewed. This material was supplemented

by document studies and interviews with actors representing central government (at ministerial and directorate level). In total, over 50 interviews were conducted.

### *Operationalizing the variables*

We start with describing how formal political involvement is organized in each water region. *Political leadership* is a variable indicating whether or not the region has a political steering group responsible for organizing, guiding and facilitating the network process. *Representation* is another variable, indicating if all elected municipal councils are directly – or indirectly – represented in the regional network.

We then study how the two variables formal political leadership and representation are linked with the actors' assessment of the political anchorage of the networks. Political anchorage is measured rather roughly by actors' responses to the following questions from the RBD board and SD board surveys: 'Is the work sufficiently politically anchored at the municipal level?' and 'Is the work sufficiently politically anchored at the county level?' We use the mean value of the answers, both measured on a five-point Likert scale. Even if this is a rough measure, it gives us valuable information about the actors' perception of whether or not the new governance networks are sufficiently anchored in the representative democratic system at local and regional level.

Then, we analyze how the perceived level of political anchorage of these complex networks is affected by political leadership, representation and network management. We include a variable measuring the board members perception of network management constructed by the mean score of the respondents' assessment of the coordinators and project managers' performance on 11 network management variables (See table A1 in appendix). The 11 variables are formulated to measure how the managers use different network management strategies.

Furthermore, we analyze how political anchorage is linked to other network achievements, more precisely network cooperation and integration with hierarchical government. Network cooperation is measured through questions regarding different levels of cooperation (information sharing, coordinating world views, coordinating behavior and joint measures), and questions about actors relations (reciprocity, conflict resolution and networking; see Table 2). Network integration is measured through questions about the division of responsibilities and the appropriateness of the management system.

#### TABLE 2 APPR HERE

Our data are the *perceptions* of participating actors, which are used as a proxy for measuring network performance (Klijn et al. 2010; van Merkerk et al. 2014). This represents a methodological constraint: because we have tested the statistical relations between perceptual measures of different achievements, we cannot conclude on causality. We do, however, find it interesting to study how the assessment of political anchorage is linked to the assessment of collaboration and integration, as this can indicate whether strong political anchorage is a feature of networks that are also successful in other respects.

Actors in different positions might have differing perceptions of political anchorage. We have therefore tested for models that include variables describing actors' *affiliation* and *network position*. These variables show no statistically significant effects, indicating that the actors' assessments depend on his or her experiences of the process, rather than on individual expectations. As no one of these control variables has any effect on either political anchorage or network collaboration or integration, the results from these analyses are not presented here. The descriptive statistics of all variables are presented in Table A2 in the appendix.

## **Political anchorage, its preconditions and effects: Empirical findings**

### ***Political involvement and anchorage***

The level of formal involvement of regional and local politicians in the networks varies, as shown in Table 3. In six of the 11 river basin districts, all municipal councils are directly represented in the boards. Only two river basin districts, the most complex ones, have a political steering group. In these two districts, the local councils are directly represented, making tight formal linkages between democratic councils and the network. In the five river basin districts with only indirect representation of local councils, the steering function is left to a purely administrative group, making these formal linkages weaker.

TABLE 3 APPR HERE

The right column of table 3 reports the formal representation of municipal councils in the RBD-boards. Even if the networks are compulsory, they have a rather open character. The participants are invited, but do not necessarily attend. The political members report having attended on average one network arena (mean 1.38 of 7 arenas), mainly limited to either the RBD board and/or the SD Board (and for two regions the political steering group). The executive committee, working groups and sector groups are more or less exclusive for administrators, who on average report attending two network arenas (mean= 2.18).

Do the members of the networks think it is important to ensure political anchorage of the work in the networks? There is an almost total consensus that it is important to anchor the activity of the WFD work at the political level of the counties and municipalities: 46% of the members totally agree, and another 38% partly agree that it is important – in total 84%. The coordinators and project leaders emphasize it even slightly more. But how do they perceive

the actual situation? Do they consider the activity to be sufficiently politically anchored?

Table 4 shows the results.

#### TABLE 4 APPR HERE

On this question the answers are more mixed. Only 39% partly or completely agree that the work is sufficiently politically anchored at the municipal level, while 28% (partly or totally) disagree. Respondents seem to consider the work to be better anchored at the regional level, as 58% report this. Because the counties are delegated as the water authority, this result is expected. This observed variation in assessed political anchorage, we will now explore.

#### *What influences the assessment of political anchorage?*

Political anchorage is measured as the mean value for the answers to questions regarding political anchorage at the local and regional levels. We use an OLS regression to analyze how the perceived political anchorage is related to political involvement and network management. The results are reported in Table 5. The variables measuring political representation and leadership are included in model 1; in model 2 they are replaced by a set of dummy variables representing each river basin district (RBD).

#### TABLE 5 APPR HERE

The table shows that the two regions with political steering groups score highest on political anchorage, while direct or indirect representation of local councils does not matter. The relation between representation and political anchorage is in fact negative, but weak. It seems



to be leadership, not representation, that is important.<sup>1</sup> As expected, there is a strong positive relationship between the perception that there is an active network manager and the perception of strong political anchorage. The presence of an active and visible coordinator seems to involve local and regional politicians and emphasize the anchorage of the processes in elected councils.

The two regions with political steering groups are also the two most complex regions. The interview data from three of the regions—one complex and two less complex—unveil different attitudes regarding how and when to involve politicians. In all three cases, the RBD board is more like a conference than a decision-making arena. It is a forum for information dissemination where the participants can express their views. The sub-arenas of the executive board, the project groups and sector groups are considered to be the most important arenas for decision making and preparation. To what extent the work in these arenas is led by politicians varies across regions. In the complex region, there is a political steering group composed of representatives from the affected county councils. This steering group works closely with the coordinator, and both parties find this tight relationship useful. As the regional coordinator said: “[S]ince there are many county municipalities involved... I find [the political steering committee] very useful. It is important for us as a water authority to have such an arena that acts as a cross-border political arena.” In this region, we find political steering groups in most sub-districts, which represent arenas where local and regional politicians discuss and steer the activity of the sub-district.

In the two less complex regions, we find no established political steering groups. In these regions, the leader of the RBD board is a politician who represents the county council (vice mayor) or county cabinet. They do not involve themselves in the day-to-day work. Here, the coordinators and project leaders seem to choose which matters are relevant for political

---

<sup>1</sup> Still, the local councils are directly represented in the two RBD boards led by political steering groups.

involvement, finding most of the work to be of a professional character. As one project leader expressed, “[t]here is no reason to involve the politicians before there is a case where their opinion is needed” (Sub District project leader), while a coordinator said “The [political RBD board] leader has not been very active. And that has not been necessary” (RBD coordinator).

The initial phases of characterization and classification of water bodies is perceived to be a professional matter, in which there is no need to involve politicians. These tasks are also defined as professional in the complex region, but here we find a totally different attitude. In this region, informing and involving local and regional politicians is considered to be important in order to anchor the work so that the local and regional politicians have confidence in the early planning process and understand the need for taking measures. One coordinator explains:

It is the municipalities that to the largest degree must implement measures. .... I myself will not be comfortable if we, as planning authority, have conducted a planning process without sufficient [political] participation from the municipalities .... (RBD coordinator)

Another reason to involve politicians is to keep them informed and interested:

I present many cases for the municipal council [...] many could probably have been handled by us in the administration, but I try to keep their consciousness.’ (Municipal public administrator)

These citations illustrate different opinions about which matters are of interest to politicians, and when to inform and involve them. The study also reveals different perceptions of who is

responsible for the wider political anchorage—the participating politicians or the coordinators. In the most complex region, the coordinator, project leaders and local (municipal) administrators emphasize that ensuring political anchorage is one of their most important responsibilities because it is considered to be an important precondition to achieve the goals of the WFD. Such attitudes are not expressed in the least complex regions.

***How is political anchorage related to other network achievements?***

As shown, the political anchorage of the Norwegian WFD work varies between the 11 river basin districts. The question is, does it matter? Is political anchorage related to other network achievements, such as the ability to collaborate within a network or to integrate the work of the network with the traditional system of government? We explore these questions by analyzing how the actors' assessment of successful cooperation and integration is related to their assessment of political anchorage using OLS regression analyses. Variables describing network management and formal political representation and leadership or RBD affiliation are also included. The results are shown in Table 6.

TABLE 6 APPR HERE

Table 6 shows that political anchorage matters. The analysis finds that the respondents' perception of political anchorage is positively related to their assessment of integration with hierarchical government, but not to their assessment of cooperation within networks. Furthermore, the existence of a political steering group has a strong direct effect on the assessment of cooperation within networks. It has no direct effect on integration; here the effect is indirect, through political anchorage (see Table 5). The board members' assessment of network management is strongly related to both cooperation within networks and

integration. The more active the board members perceive the coordinators and project leaders to be, the higher they assess the results. This is in accordance with the main findings in other studies of network managers (Klijn *et al.*, 2010; Verweij *et al.*, 2013; Edelenbos & Klijn, 2006).

## **Discussion**

The political and contested nature of water management makes political involvement and anchorage of the WFD work crucial (Blackstock *et al.*, 2012). The network mode of water governance chosen by Norway does have the potential for political influence, but also carries the risk of being dominated by experts (Sørensen, 2006; Olsson, 2003). Our study shows that local and regional politicians are formally involved in the water governance networks in Norway, but also that the extent and nature of their involvement varies. The local councils have direct access (representation) in six of 11 boards, while the work is steered by a genuinely political steering group in only two regions. Not surprisingly, then, our study further unveils that the network actors' assessment of political anchorage also varies. What are the implications of these findings? Can we identify some prerequisites for ensuring sufficient political anchorage?

### ***Political involvement, network management and political anchorage***

We find evidence that the actors' assessment of political anchorage is related to formal political involvement in the networks. Active political leadership through a political steering group seems to foster political anchorage, while direct representation does not guarantee such results. This is no surprise: some previous studies have illuminated that formal linkages between representative democracy and networks do not necessarily ensure political anchorage or influence (Olson, 2003; Bache & Olsson, 2001; Edelenbos & Klijn, 2006), while other

studies have emphasized the importance of arenas that enable hands-on political meta governance (Damgard & Torfing, 2011; Klijn & Edelenbos, 2013; Sørensen & Torfing, 2009). A political steering group is one such arena. Another finding is the importance of network management, which is not surprising, as it is supported by evidence in the literature (Edelenbos, *et al.*, 2011; Klijn, *et al.*, 2010; Verweij *et al.*, 2013).

This evidence has strong relevance in water management, as indicated both in the survey data and in the case studies. The complex and scientific nature of water policy can leave an impression amongst politicians and administrators that water management is mainly a matter for experts. If this is the predominant attitude, the main role for politicians and political councils might be reduced to ratify plans and policies formulated by experts and administrators. The findings from this study illustrate how important it is for politicians to take the lead and put themselves in a position where they can conduct both hands-on and hands-off metagovernance of water governance networks.

Furthermore, our study indicates that to be successful, political anchorage of complex water governance networks is not solely the responsibility of political leaders. It is important that public managers—in our case both network managers (coordinators and project leaders) and the public managers within municipal and county administration—have the awareness and the competence to involve politicians. They need to know when and how to involve politicians (Holmen & Hanssen, 2013), and do that in a way that makes it relevant for political considerations and prioritizing. This conclusion is in line with other studies that emphasize the role of public managers in involving politicians (Naustdalslid, 2015, Feldman & Khademian, 2007). Our case studies illuminate the importance of how the manager conducts his or her role, and that he or she has "boundary spanning" capacities (Williams, 2002) to connect the professional and political world. If no such conscious efforts are made to connect these two realms, water governance networks tend to be dominated by administrators

and experts. Local and regional councils have a reactive role; they have to respond to, and are expected to accept, solutions negotiated by experts. As a consequence, there is a risk that the proposed river basin management plans neither reflect the public interest of the local and regional communities nor are perceived as authoritative plans that municipalities and counties are obliged to implement.

Rather surprisingly, political anchorage of water governance is considered to be strongest in the two most complex networks. Our case study indicates that the extreme complexity of these two river basin districts might generate awareness of how important political anchorage of water governance is: it cannot simply be taken for granted. The processes and results of the governance networks must be supported by all regional and local councils in the District. There is, furthermore, a huge potential for conflicts between different public authorities in these complex regions. This might foster political interest and participation, and thus also promote political anchorage.

### ***Political anchorage and network cooperation and integration***

So, does political anchorage matter? In order to achieve good ecological status of water, water governance networks must talk to government. In Norway, multi-level water governance networks are subordinated to the traditional hierarchical, sector-based system of government. These networks represent a secondary principle applied to prevent some of the undesired effects of hierarchy and compartmentalization (Hanssen, *et al.*, 2014). To be effective, they need to be integrated in the system of government. Previous studies have shown that sector authorities (agriculture, fish farming, hydropower, etc.) often tend to stay in their hierarchical mode of governance and are unwilling to give up their privileges and power positions. Our statistical study indicates that political anchorage is important to ensure such integration, and our case study contributes to explain this finding. To impose its rationale on public agencies

at different government levels, a network must borrow legitimacy from politicians. This assertion is supported by a recent study that points to the importance of having mayors represented in the governing boards of water networks because it gives the networks political weight and ensures a higher commitment to implement agreed-upon measures locally (Naustdalslid, 2015, p. 926). Politicians at the local and regional levels have the power to direct their administrations and to put pressure on central government agencies. Achieving a good ecological status of water requires a huge effort from all, especially from municipalities. Norwegian municipalities have strong local autonomy within the policy areas of land-use planning and water and sewage services, and cannot be directed by regional government. Other empirical studies have shown that governance networks help municipalities take on a stronger regulatory role, for example in requiring private sewage purification plants (Andersson *et al.*, 2012; Naustdalslid, 2015; Hanssen *et al.*, 2014). This requires local political leadership that is informed and willing to formulate strategies and take unpopular decisions to reduce the pressure on water. There is also a need to integrate the processes of water management planning and local land-use planning. Political anchorage at the local level is crucial here because local land-use planning is an important instrument by which local politicians reach their goals for local development.

This line of argument can also explain why we do not find any strong direct effect of political steering groups on achieved integration. Such integration depends on the anchorage of network activities in affected authorities. Hands-on metagovernance by the political steering group enhances such anchorage, and thus indirectly enhances integration.

However, political anchorage does not seem to affect network collaboration, measured as inter-actor relations and individual learning. It is tempting to conclude that the planning processes run smoothly regardless of how they are anchored in the political leadership of the affected municipal authorities. However, hands-on political metagovernance of these

processes—through a political steering group—enhances network cooperation. This conclusion is in accordance with Pares et al.'s study (*et al.*,2015), which found that political engagement and the resources invested are crucial to understand the success of deliberative processes in water management networks. We were not surprised to find a strong positive relationship between network management and network cooperation and integration, as several previous studies have produced similar evidence (Edelenbos *et al.*, 2011; Klijn *et al.*, 2010; Verweij *et al.*, 2013; van Meerkerk *et al.*, 2014; Richard-Ferroudji, 2014).

The fact that the two most complex networks are perceived as the most successful deserves some more comments. Complexity is often assumed to constitute a hindrance to governance networks (Verweij *et al.*, 2013; Olsson, 2003). Our case study indicates that successful outcomes in complex networks might be contingent upon the combination of active political leadership and active network management. Active leadership and management can ensure the centrality and integration of the network, which the network literature often assumes is necessary in order to exploit the innovative and creative potential of the diverse actors that take part in these complex networks (Carlson & Sandström, 2008; Sørensen & Torfing, 2012). In the most complex regions, new constellations of actors can create situations of learning and innovation, while in the least complex regions actors follow the usual (hierarchical) tracks.

### **Summing up**

The implementation of the WFD faces huge challenges of complex cross-sector and multilevel coordination. Previous studies have pointed to the need to open up the administrative process and make it more democratic (Behagel & Thurnhout, 2011), and to organize the management in a way that recognizes that improving the ecological status of water is a highly political question, not just a technical one (Blackstock, *et al.*, 2012). Our



analysis contributes with empirical insights that unveil the importance of political anchorage for governance networks at local and regional levels in the implementation of WFD. We find that political anchorage matters for integration between governance networks and hierarchical government. In Norway, water governance networks are subordinated to the hierarchy of government: water management solutions must be accepted, formally agreed upon and implemented by the participating public authorities. Our study indicates that the ability of these networks to enforce compliance from state sector agencies also seems to be strengthened by the active involvement of local and regional politicians. Political anchorage is important because it makes governance networks talk to government—and thereby able to integrate the primary hierarchical structure and secondary network structures of governance. If this integration is not achieved, the networks will exist as satellites outside the formal, hierarchical system of government, and the work done in the networks might be wasted time and lead to network fatigue.

Our study indicates that Norway's multi-level and cross-sector water governance networks can lead to more openness and involvement from politicians. For this to happen, requires that both the political leadership and the administrative coordinator recognize the importance of, and are able to, involve politicians and anchor networks within regional and local councils. By deepening our understanding of why and how political hands-on metagovernance of complex water governance networks is important, and by underlining the pivotal role of the network manager as an enabling actor for ensuring political anchorage, we contribute to the literature on political steering of governance networks (Behagel, 2012; Sørensen, 2006; Van Meerkerk *et al.*, 2014; Richard-Ferroudji, 2014). Network managers create important conditions for democratic governance processes, as they often are responsible for linking the debates in the governance networks to formal decision-making structures and processes (Van Meerkerk *et al.*, 2014).

When it comes to the generalizability of the results, our study is limited to Norway and the findings might be influenced by the country's highly decentralized and compartmentalized system of government. However, since all European countries face the challenges of multi-level integration and cross-sector coordination, our study also is relevant for other European countries.

### **Acknowledgement**

The article is based upon data collected in the research project 'Water Pollution Abatement in a System of Multi-Level Governance: A Study of Norway's Implementation of the EU's Water Framework Directive' (WAPABAT), financed by the Norwegian Research Council.

## References

- Agranoff, R. & McGuire, M. (2001) Big Questions in Public Network Management Research, *Journal of Public Administration Research and Theory*, 11(3), pp. 295-326.
- Andersson, I., Petersson, M. & Jarsjö, J. (2012) Impact of the European Water Framework Directive on local-level water management: Case study Oxunda Catchment, Sweden, *Land Use Policy*, 29(1), pp. 73-82.
- Armitage, D. (2008) Governance and the Commons in a Multi-level World, *International Journal of the Commons* 2 (1): 7-32.
- Bache, I. & Olsson, J. (2001) Legitimacy through Partnership? EU Policy Diffusion in Britain and Sweden, *Scandinavian Political Studies*, 24(3), pp. 215-237
- Bäckstrand, K., Jamil Kahn, Annika Kronsell and Eva Lövbrand (2010) *Environmental Politics and Deliberative Democracy: Examining the Promise of New Modes of Governance*. Cheltenham: Edward Elgar Publishing.
- Behagel, J. (2012) *The Politics of Democratic Governance: The Implementation of the Water Framework Directive in the Netherlands*, Thesis for: PhD; Cum Laude,
- Behagel, J. & Turnhout, E. (2011) Democratic Legitimacy in the Implementation of the Water Framework Directive in the Netherlands: Towards Participatory and Deliberative Norms? *Journal of Environmental Policy & Planning*, 13(3), pp. 297-316
- Behagel, J.H. & Arts, B. (2014) Democratic governance and political rationalities in the implementation of the water framework directive in the Netherlands, *Public Administration*, 92(2), pp. 291-306.
- Blackstock, K.L, Waylen, K.A., Dunglinson, J. & Marshall, K.M. (2012) Linking process to outcomes – Internal and external criteria for a stakeholder involvement in River Basin Management Planning, *Ecological Economics*, 77, pp. 113-122.
- Carlson, L. & Sandström, A. (2008) Network governance of the commons, *International Journal of the Commons*, 2(1), pp. 33-54.
- Carrozza, C. (2015) Democratizing Experience and Environmental Governance: Different Approaches to the Politics of Science and their Relevance for Policy Analysis, *Journal of Environmental Policy & Planning*, 17(1), pp. 108-126.
- Carter, J. & Howe, J. (2006) Stakeholder Participation and the Water Framework Directive: The Case of Ribble Pilot, *Local Environment*, 11(2), pp. 217-231.
- Damgaard, B. & Torfing, J. (2011) The impact of metagovernance on local governance networks. Lessons from Danish employment policy, *Local Government Studies*, 37(3), pp. 291-316
- Davies, J.S. (2007) The limits of partnership: an exit-action strategy for local democratic inclusion, *Political Studies*, 55(4), pp. 779-800.
- 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), pp. 417-446.
- Edelenbos, J., Steijn, B. & Klijn, E.-H. (2010) Does Democratic Anchorage Matter? An Inquiry Into the Relation Between Democratic Anchorage and Outcome of Dutch Environmental Projects, *The American Review of Public Administration*, 40(1), pp. 46-63.

- Edelenbos, J., Klijn, E.-H. & Steijn, B. (2011) Managers in Governance Networks: How to reach good outcomes? *International Public Management Journal*, 14(4), pp. 420-444.
- European Union. 2000, The Water Framework Directive 2000, Directive/2000/60/EC
- Feldman, M.S. & Khademian, A.M. (2007) The Role of the Public Manager in Inclusion: Creating Communities of Participation, *Governance: An International Journal of Policy, Administration, and Institutions*, 20(2), pp.305-324.
- Hammer, M., Balfors, B, Mörtberg, U., Petersson, M. & Quin, A. (2011) Governance of Water Resources in the Phase of Change: A Case Study of the Implementation of the EU Water Framework Directive in Sweden, *AMBIO*, 40(2), pp. 210-220.
- Hanssen, G.S., Hovik, S, & Hundere, G.S. (2014) Den nye vannforvaltningen – nettverksstyring i skyggen av hierarki, *Norsk statsvitenskapelig tidsskrift*, 30(3). pp. 155-180
- Hedelin, B. (2005) Potential Implications of the EU Water Framework Directive in Sweden A comparison of the Swedish municipalities' current water planning regime with the requirements of the EU's new Water Framework Directive, *European Journal of Spatial Development* Refereed Articles May 2005 no 14
- Hedelin, B. (2008) *Planning for Sustainable Use of Water*. DISSERTATION. Karlstad University Studies 2008:37
- Holmen, A.K. & Hanssen, G.S. (2013) *Styring av og ledelse i kommunalt organiserte samarbeid*. IRIS-report 2013/215. (Stavanger: IRIS)
- Hovik, S. & Hanssen, G.S. (2015) The impact of network management on multi-level coordination, *Public Administration*, 93(2), pp. 506-523.
- Jessop, B. (1998) *The rise of governance and the risk of failure: The case of economic development* (Oxford: Basil Blackwell).
- Klijn, E-H. & Edelenbos, J. (2013) The Influence of Democratic Legitimacy on Outcomes in Governance Networks, *Administration & Society*, 45(6), pp. 627-650.
- Klijn, E-H. & Koppenjan, J.F.M. (2012) Governance Network Theory: Past, Present and Future, *Policy & Politics*, 40(4), pp.587-606.
- Klijn, E-H., Steijn, B. & Edelenbos, J. (2010) The Impact of Network Management on Outcomes in Governance Networks, *Public Administration*, 88(4), pp. 1063-1082.
- Koontz, T.M & Newig, J. (2014) Cross-level information and influence in mandated participatory planning: Alternative pathways to sustainable water management in Germany's implementation of the EU Water Framework Directive, *Land Use Policy*, 38, pp. 594–604
- Liefferink, D., M.Wiering & Uitenboogart, U. (2011) The EU Water Framework Directive: A multi-dimensional analysis of implementation and domestic impact, *Land Use Policy*, 28(4), pp. 712–722
- Lundqvist, L. 2004. 'Integrating Swedish Water Resource Management: A Multi-Level Governance Trilemma', *Local Environment*, 9(5), pp. 413–24.
- McGuire, M. & R. Agranoff (2011) The limitations of public management networks, *Public Administration*, 89(2), 265-284.
- Meier, K.J. & O'Toole, L. (2010) Beware of Managers not Bearing Gifts: How Management Capacities Augments the Impact of Managerial Networking, *Public Administration*, 88(4), pp. 1025-1044.

- Moss, T. (2004) The Governance of Land Use in River basins: Prospects for Overcoming Problems of Institutional Interplay with the EU Water Framework Directive, *Land Use Policy*, 21(1), pp. 85-94.
- Moss, Timothy and Jens Newig (2010) Multilevel Water Governance and Problems of Scale: Setting the Stage for a Broader Debate, *Environmental Management* (2010) 46:1–6
- Naustdalslid, J. (2015) Multi-level water governance – the case of the Morsa River Basin in Norway, *Journal of Environmental Planning and Management*, 58(5), pp. 913-931
- Newig, J. & Oliver, F. (2008) *Environmental governance: Participatory, multi-level - and effective?* UFZ Diskussionspapiere, No. 15/2008
- Nielsen, H.Ø, Fredriksen, P., Saarikoski, H., Rytönen, A-M. & Pedersen, A.B. (2013) How different institutional arrangements promote integrated river basin management. Evidence from the Baltic Sea Region, *Land Use Policy*, 30(1), pp. 437-445.
- Olsson, J. (2003) Democracy Paradoxes in Multi-Level Governance, *Journal of European Public Policy*, 10(2), pp. 283-300.
- Pares, M., Q. Brugue, J. Espluga and A. Ballester (2015) The Strengths and Weaknesses of Deliberation on River Basin Management Planning: Analysing the water framework directive implementation in Catalonia (Spain), *Environmental Policy and Governance*, 25(2) 97-110.
- Richard-Ferroujji, Audrey (2014), Rare birds for fuzzy jobs: A new type of water professional at the watershed scale in France, *Journal of Hydrology*, 11/2014; 519:2468-2474.
- Sørensen, E. (2006) Metagovernance: The Changing Role of Politicians in Processes of Democratic Governance, *American Review of Public Administration*, 36(1), pp. 98-114.
- Sørensen, E. & Torfing, J. (2005) The Democratic Anchorage of Governance Networks, *Scandinavian Political Studies*, 28(3), pp. 195-218.
- Sørensen, E. & Torfing, J. (2009) Making Governance Networks Effective and Democratic Through Metagovernance, *Public Administration*, 87(2), pp. 234-258.
- Sørensen, E. & Torfing, J. (2012) Introduction: Collaborative Innovation in the Public Sector, *The Innovation Journal: The Public Sector Innovation Journal*, 17, article 1.
- Treib, O. (2014) Implementing and complying with EU governance outputs, *Living Reviews in European Governance*, Vol. 9, No. 1 <http://www.livingreviews.org/lreg-2014-1> doi:10.12942/lreg-2014-1
- van Buuren, A., E.-H. Klijn & Edelenbos, J. (2012) Democratic Legitimacy of New Forms of Water Management in the Netherlands, *International Journal of Water Resource Development*, 28(4), pp. 629-645.
- van Bueren, E. M., Klijn, E-H., & Koppenjan, J.F.M. (2003) Dealing with Wicked Problems in Networks: Analyzing an Environmental Debate from a Network Perspective, *Journal of Public Administration Research and Theory*, 13(2), pp. 193-212.
- van der Heijden, J., ten Heuvelhof, E, Broekmans, B., van der Arend, S., van Bueren, E., Hartevelde, C. & van Ruijven, T. (2014) Contrasting stories on overcoming governance challenges: the implementation of the EU water Framework Directive in the Netherlands, *Local Environment*, 19(3), pp. 318-333.

- Van Meerkerk, I., van Buuren, A. & Edelenbos, J. (2013) Water Managers' Boundary Judgments and Adaptive Water Governance. An Analysis of the Dutch Haringvliet Sluices Case, *Water Resource Management*, 27, pp. 2179-2194.
- Van Meerkerk, I., Edelenbos, J. and Klijn, E-H. (2014) Connective management and governance network performance: the mediating role of throughput legitimacy. Findings from survey research on complex water projects in the Netherlands, *Environment and Planning C: Government and Policy*, 32. doi:10.1068/c1345.
- Verweij, S., Klijn, E-H., Edelenbos, J. & van Buuren, A. (2013) What makes governance networks work? A fuzzy set qualitative comparative analysis of 14 Dutch spatial planning projects, *Public Administration*, 91(4), pp. 1035-1055.
- Williams, P. (2002) The competent boundary spanner, *Public Administration*, 80(1), pp. 103-124

**Appendix:**

**Table A1.** Questions measuring network management activity (A valid answer on at least 5 sub-strategies is required)

<b>Network management activity:</b> The board members were asked to assess to what extent the regional coordinator or sub-district project leader is active in the following activities, on a five point Likert scale
Disseminate information about the EU's WDF and the (Norwegian) Water Regulation
Clarify the division of responsibilities and tasks between the participants
Facilitate good discussions
Secure compliance of participants with deadlines and duties
Stimulate active participation, where the involved use their knowledge and competence
Raise awareness of the participants' responsibility for water quality
Highlight visions and goals for water management
Link the work at regional and national levels
Broker between different concerns and interests in the region
Make sure that all actors feel ownership of plans and other documents
Chrombachs alpha: 0.94

**Table A2.** Descriptive statistics of the variables in the model (mean, std.dev. minimum and maximum. N=236).

	Mean	Standard deviation	Minimum	Maximum
<b>Political anchorage</b>	3.30	0.98	1	5
<b>Assessment of cooperation in network</b>	3.51	0.64	1.38	5
<b>Assessment of integration with hierarchical government</b>	3.48	0.64	1	5
<b>Political steering group</b>	0.43	0.50	0	1
<b>Municipalities directly represented</b>	0.84	0.37	0	1
<b>Network management activity</b>	3.56	0.78	1	5
<b>Extent of participation</b>	2.17	1.67	0	8
<b>Affiliation</b>				
-Regional state	0.22	0.42	0	1
-County municipality	0.10	0.30	0	1
-Municipality	0.66	0.48	0	1
-Other	0.02	0.14	0	1
<b>Politician</b>	0.34	0.47	0	1
<b>RBD board survey</b>	0.89	0.31	0	1



## Tables:

**Table 1.** The complexity of the 11 River Basin Districts

		<b>Complexity</b>			
<i>Least complex</i>		<i>Medium complex</i>		<i>Most complex</i>	
<b>RBD Hordaland (5 SDs)<sup>2</sup></b>	1 County 1 County governor 33 municipalities 7 regional state authorities <sup>3</sup>	<b>RBD Agder (7 SDs)</b>	2 Counties 2 County governors 45 municipalities 8 regional state authorities	<b>RBD Vest-Viken (18 SDs)</b>	7 Counties 4 County governors 105 municipalities 6 regional state authorities
<b>RBD Nordland (10 SDs)</b>	1 County 1 County governor 44 municipalities 11 regional state authorities	<b>RBD Trøndelag (12 SDs)</b>	2 Counties 2 County governors 48 municipalities 9 regional state authorities	<b>RBD Glomma (14 SDs)</b>	7 Counties 5 County governors 101 municipalities 6 regional state authorities
<b>RBD Sogn og Fjordane (4 SDs)</b>	1 County 1 County governor 26 municipalities 5 regional state authorities				
<b>RBD Rogaland (4 SDs)</b>	1 County 1 County governor 26 municipalities 6 regional state authorities				
<b>RBD Møre og Romsdal (5 SDs)</b>	1 County 1 County governor 36 municipalities 6 regional state authorities				
<b>RBD Troms (6 SDs)</b>	1 County 1 County governor 25 municipalities 6 regional state authorities				
<b>RBD Finnmark (10 SDs)</b>	1 County 1 County governor 19 municipalities 5 regional state authorities				

<sup>2</sup> The number of the SDs in the table adds to 95, while the total number is 101. In addition to the ones in the table, there are international Sub-Districts that cross national borders, where the main part of the SD is in other countries.

<sup>3</sup> The number of regional state authorities is taken from the list of participants of RBD-boards, showing the regional state authorities that actual take part in meetings in the boards. Officially, the number of relevant regional state authorities is higher in most River Basin Districts.

**Table 2.** Questions measuring network achievements: Cooperation within networks and integration with hierarchical government

<b>Cooperation within networks:</b> The board members were asked to what extent the multi level water governance network had achieved the following, measured on a five point Likert scale:	<b>Integration with hierarchical government:</b> The board members were asked to indicate to what extent they did agree on the following statements, measured in a five point Likert scale:
Information and knowledge sharing	There is a clear demarcation between the county municipal responsibility of process coordination and the county governors responsibility for the coordination of the scientific inquiries
Common discussions and deliberation, and coordinating world views	All participants have contributed with relevant knowledge to the process of classification and characterization
Adjust behavior to avoid externalities or gain synergies	The division of tasks and responsibilities between the regional and sub-regional level are clear
Joint measures across sectors and levels of government	The systems of water regions and sub-regions, and regional and sub-regional boards are appropriate in order to reach the WFD-goals
Mutual respect between actors across levels of government or sector cleavages	River basin units contribute to a comprehensive (more holistic) water management
Comprehensive, cross-sector perspective	All important premises are still decided by each sector, the regional water governance networks have little real influence (Turned around)
To unveil the interests of all actors	The management plan is or will become a useful tool for integrated water management
To solve conflicts of interest between actors	
To develop networks of professional actors	
A broader network of relevant actors	
Chrombachs alpha=0.91	Chrombachs alpha=0.74

**Table 3.** Formal political leadership and representation of municipal councils in the 11 RBD-boards.

<b>Region</b>	<b>Political leadership</b>	<b>Municipal representation</b>
Glomma	Political steering group	Direct
Vest Viken	Political steering group	Direct
Hordaland	Mixed executive	Direct
Sogn og Fjordane	Mixed executive	Direct
Møre og Romsdal	Mixed executive	Direct
Trøndelag	Adm executive	Direct
Agder	Adm executive	Indirect
Rogaland	Adm executive	Indirect
Nordland	Adm executive	Indirect
Troms	(No executive)	Indirect
Finnmark	Adm executive	Indirect

**Table 4.** Network actors' opinion regarding whether the WFD-work is sufficiently politically anchored at municipal and county level (percentage)

	<b>Is the work sufficiently political anchored at:</b>	
	Municipal level	County level
<b>Totally agree</b>	8	15
<b>Partly agree</b>	31	43
<b>Indifferent</b>	33	23
<b>Partly disagree</b>	17	13
<b>Totally disagree</b>	11	6
<b>N</b>	325	270

**Pearsons r= 0.54.**

**Table 5.** Perception of political anchorage depending on political involvement and network management (model 1) or network management and RBD-affiliation (model 2)<sup>4</sup> (OLS regression, slope and standard errors in parentheses, n=238).

	<b>Model 1</b>	<b>Model 2</b>
<b>Constant</b> (Vest Viken, with steering group and direct representation, is reference category in model 2)	1.45 (0.30)	2.06 (0.32)
<b>Political steering group</b>	0.40** (0.13)	--
<b>Direct representation of municipalities</b>	-0.03 (0.17)	--
<b>Network management activity</b>	0.48*** (0.07)	0.43*** (0.08)
<b>Glomma (steering group and direct representation)</b>		-0.13 (0.18)
<b>Agder (no steering group and indirect representation)</b>		-0.31 (0.30)
<b>Rogaland (no steering group and indirect representation)</b>		-0.34 (0.30)
<b>Hordaland (no steering group and direct representation)</b>		-0.19 (0.22)
<b>Sogn og Fjordane (no steering group and direct representation)</b>		-0.61* (0.25)
<b>Møre og Romsdal (no steering group and direct representation)</b>		-0.56** (0.20)
<b>Trøndelag (no steering group and direct representation)</b>		-0.49* (0.21)
<b>Nordland (no steering group and indirect representation)</b>		-0.14 (0.28)
<b>Troms (no steering group and indirect representation)</b>		-1.09 (0.64)
<b>Finnmark (no steering group and indirect representation)</b>		-1.31** (0.41)
<b>Adjusted R square</b>	0.18	0.19

\*, p<0.05, \*\*, p<0.01, \*\*\*, p<0.001

<sup>4</sup> In model 2 Vest Viken is the reference district. We chose Vest Viken because it is a district with many respondents and which place itself on one extreme (strongest political anchorage). The coefficients for the other districts show the average difference in perceived political anchorage between this district and Vest Viken.

**Table 6.** Assessment of network achievements depending on political anchorage and formal political involvement, and network management. (OLS regression, slope and standard errors in parentheses, N=238, 236)

	<b>Network achievements regarding</b>	
	cooperation within network	integration with hierarchical government
<b>Constant</b>	2.07 (0.26)	2.20 (0.24)
<b>Political anchorage</b>	0.03 (0.04)	0.12** (0.04)
<b>Political steering group</b>	0.28*** (0.08)	0.11 (0.07)
<b>Direct representation of municipalities</b>	0.08 (0.10)	0.10 (0.10)
<b>Network management activity</b>	0.37*** (0.05)	0.41*** (0.05)
<b>Adjusted R square</b>	0.29	0.37

\*, p<0.05, \*\*, p<0.01, \*\*\*, p<0.001