# Urban contractual agreements as an adaptive governance strategy:

# Under what conditions do they work in multi-level cooperation?

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# Urban contractual agreements as an adaptive governance strategy: Under what conditions do they work in multi-level cooperation? Abstract

The Norwegian urban growth agreement (UGA) is a governance platform combining transport-infrastructure development with land-use and transport policy. It is a policy package of measures involving network cooperation between national, regional and local government levels established to coordinate transport and land-use development. Shared responsibility for goal achievement, autonomy and learning and adaptation as new knowledge and experience arise are clear prerequisites for the UGAs. This makes it relevant to investigate the conditions for the UGAs to work as an adaptive governance strategy because their central features are in line with the attributes of adaptive governance. Further, adaptive governance is an approach to handle complex problems like transport development issues. The study shows that UGAs have several strengths in terms of autonomy and learning. However, the multi-level cooperation in the UGAs is framed by complex underlying structures of roles and powers, which challenge the working and legitimacy of the governance structures. Multi-level adaptive governance processes like the UGAs require attention to issues of power and legitimacy. Securing transparency and democratic anchorage is paramount in bringing such processes in line with the intended benefits of adaptive governance.

Keywords: transport-reward schemes, adaptive governance, multi-level governance, urban growth agreement

#### Introduction

In 2014, the Norwegian government launched urban contractual agreements known as urban growth agreements (UGAs). These can be regarded as a continuation of former toll-road transport packages and so-called city packages for transport-infrastructure development<sup>1</sup>. While the former structures were mainly concerned with infrastructure development, the UGAs are broader, targeting national climate goals and the integration of land-use planning and transport policy in the largest urban regions.

Responsibilities within land use and transport are often dispersed across political levels and sectors. Thus, structural fragmentation and sectoral compartmentalisation have been long-standing challenges of transport and land-use policies. To promote improved coordination and cooperation, the UGA structure includes a transport-reward scheme with similarities to the UK transport performance schemes (Marsden et al., 2009), UK City Deals (O'Brien & Pike, 2019; Waite & Morgan, 2018) and Swedish Urban Environmental Agreements (Håkansson, 2019). A governance platform for interaction between municipal, regional and state actors is also provided in the UGA structure. The platform is established for promoting the implementation of policies required to amend a shared problem. The overarching goal for the UGAs is the so-called zero-growth goal (ZGG), under which 'the growth in passenger traffic in urban areas shall be covered by public transport, walking and cycling' (Ministry of Transport, 2017, p. 23). With this goal, the different levels of government seek to reduce negative externalities of urban car usage, such as noise, congestion, greenhouse-gas emissions and accidents.

<sup>&</sup>lt;sup>1</sup> To facilitate reading, all three agreements described in this paper are labelled UGAs.

Equality and a shared responsibility to fulfil common goals were clear prerequisites when the UGAs were launched (Ministry of Transport, 2013, p. 145). The Ministry of Transport also emphasised the need for applying a flexible approach in relation to the specific contexts in each region (Ministry of Transport, 2013, p.145). These perspectives—equality, shared responsibility and flexibility—make it relevant to study UGAs in light of adaptive governance. The adaptive governance literature is also highly relevant when considering how the UGAs address multi-causal, intractable and challenging policy issues involving multiple actors that need to work across sectoral boundaries (Dietz et al., 2003; Duit & Galaz, 2008). We specifically study whether the conditions for successfully operating the UGA as an adaptive governance strategy are met. Thus, we ask the following research question: What are the central conditions for the UGAs to work as an adaptive governance strategy? Our empirical point of departure is the established UGAs in three urban regions in Norway, including the proceeding negotiation processes. Inspired by Ansell and Torfing (2016, p. 4), we define adaptive governance as 'the interactive process through which societies are steered towards collectively negotiated objectives, allowing for learning and adjustments of objectives, policies and measures as new knowledge arises'.

The current paper fills gaps in the research literature in several respects. First, the Norwegian UGA arrangement represents a new approach to multi-level governance processes, including internationally. This study offers insights into how such processes function and the challenges they create. Second, with some exceptions (e.g. for spatial planning; Eshuis & Gerrits, 2019), adaptive governance has mainly been used and discussed in relation to natural resources, environmental management and climate change adaptation (Folke et al., 2005; Plummer & Baird, 2013). Hence, the current paper expands studies of adaptive governance to transport policy and brings a new

understanding to the scope of flexibility and dialogue to solve complex problems. Third, it responds to a gap in the adaptive governance literature by addressing the underlying power relations of stakeholder involvement and transparency in governance structures (Cleaver & Whaley, 2018). Hence, this study adds to the current literature by addressing the different roles and powers of the multi-level governance partners (cf. Torfing et al., 2009) and how this influences the UGAs working as an adaptive governance strategy.

## Framework for analysis

Technocratic and top-down management approaches are criticised for failing to provide suitable decision-making schemes to address complex decision problems when there is a high level of uncertainty about how to solve them (Chaffin et al., 2014; Cumming et al., 2006). Rather, decision-making flexibility and extensive collaboration between actors at all government levels are called for (Armitage et al., 2007; McConnell, 2018). Adaptive governance is one approach that incorporates these elements (Dietz et al., 2003; Folke et al., 2005)<sup>2</sup>.

Adaptive governance approaches address governance regimes' failure to promote ecological sustainability and build capacity to tackle uncertainty in decision problems (Chaffin et al., 2014; Dietz et al., 2003; Sharma-Wallace et al., 2018). Often, linear and top-down governance systems based on a steady-state view cannot adjust to environmental and social dynamics, whereas such adjustments are key for complex systems (Eshuis & Gerrits, 2019; Folke et al., 2005). Adaptive governance contributes

<sup>&</sup>lt;sup>2</sup> The *adaptive governance* concept is often used interchangeably with *adaptive co-management* in the literature (Plummer & Baird, 2013). We use *adaptive governance* to highlight the UGAs' governance aspects.

to the literature by pinpointing the need for more holistic governance regimes linking social systems with conditions for ecological sustainability (Chaffin et al., 2014; Folke et al., 2005). Although the literature addresses different aspects and criteria for adaptive governance, there is a general agreement that it involves dialogue-oriented decision making, incorporating different types of knowledge and design that facilitate learning and experimentation (Berkes, 2008; Dietz et al., 2003; Folke et al., 2002; McConney et al., 2007; Olsson et al., 2004). Further, self-organising social networks that draw on various knowledge types for a common understanding of the decision problem have been defined as part of an adaptive governance framework (e.g. Folke et al., 2005). However, adaptive governance may also be enacted in more formal frameworks, allowing for flexibility to the local context and over time (Chaffin et al., 2014; Sharma-Wallace et al., 2018; Westskog et al., 2017).

Adaptive governance shares many similarities with theories of collaborative governance, highlighting the importance of a shared understanding, capacity for joint action and principled engagement to carry out a public purpose that could not otherwise be accomplished (Emerson et al., 2012). Particularly, adaptive governance considers aspects of learning and adaptation in governance, allowing for adjustments and reframing of objectives and decision-making processes as new knowledge arises, as well as adaptation to specific conditions and context (Plummer & Fennell, 2009); this is of specific interest to the UGAs being negotiated in several rounds.

Critiques of adaptive governance theory have characterised it as 'inherently optimistic' (Cleaver & Whaley, 2018). One key criticism has been that it lacks the inclusion of wider cultural and social landscapes. Governance systems 'can only work and endure if they are seen as legitimate and meaningful' (Cleaver & Whaley, 2018, p. 5). This is also linked to the possible loss of democratic accountability with adaptive governance systems due to less clear divisions of responsibility (Huitema et al., 2009; Sørensen & Torfing, 2004). The UGAs are settled by multi-level cooperation, making network-governance perspectives specifically relevant for consideration of *democratic anchoring* (e.g. Sørensen & Torfing, 2005). If networks are to be understood as legitimate, their democratic credentials must be considered (Aarsæther et al., 2011), including stakeholder and political involvement and transparency.

Another criticism of adaptive governance is its insufficient attention to power relations. Moving from a top-down-oriented governance structure with hierarchical power relations to an adaptive governance approach can prove challenging. Former power relations may be preserved (Wilson, 2018).

Inspired by Plummer & Fennel (2009) we adopt the following three attributes of adaptive governance to analyse the central conditions for UGAs to work as adaptive governance strategy:

- *Shared responsibility* for goal achievement. Different actors have different perspectives and knowledge on which policies are implementable; including these insights in decision-making processes may facilitate the implementation of measures and policies (Folke et al., 2005).
- Autonomy to adapt policies and measures to the local context. Such adaptation is paramount for addressing complex problems (Sharma-Wallace et al., 2018; Tørnblad et a., 2014).
- *Learning and adaptation*, representing the capacity to change with new knowledge and experiences. Many authors highlight flexibility to change and experimentation as key to solving complex problems (Dietz et al., 2003; Folke et al., 2002; Lebel et al., 2006).

The three atributes have been chosen due to their perceived relevance for the Norwegian UGAs and because they relate to central literature within the field (e.g Armitage et al. 2007; Plummer & Baird, 2013). While Plummer & Fennel (2009) also have *Pluralism and communication* as a fourth category, we did not include this in order to narrow the scope of the analysis.

#### Methods

We selected three Norwegian UGA cases from four urban regions that had signed or were in the process of negotiating a UGA. Oslo and Akershus, Trondheim and Nord-Jæren were chosen; the fourth urban region, Bergen, was excluded due to resource limitations.

The methods employed included document analyses and qualitative interviews. The documents comprised meeting minutes, policy documents, signed UGAs and relevant local, regional and state-level documents. Because the negotiation meetings were closed, our understanding of the negotiation process is based on information from interviews and public documents.

We used purposive sampling for the semi-structured interviews (Lynch, 2013), with emphasis on interviewing the same type of informants in all case regions. However, the type and number of informants varied slightly due to variations in the governance structures and context. We recruited people from the municipal, council and state levels who were directly involved in the negotiations; these included the mayors, personnel responsible for transport and planning at the local and regional levels and key informants at the state level<sup>3</sup>. We recruited relevant actors not directly involved in the negotiations, including political opponents, public-transport entities, chambers of commerce, county governors, neighbouring municipalities and representatives from the Ministry of Local Government and Modernisation and Ministry of Transport.

Our first data collection was carried out just after and during the first round of negotiations, with initial interviews taking place in spring 2017. In spring 2019, we undertook follow-up interviews of a smaller number of interviewees who had first-hand renegotiation experience. This gave us an opportunity to solicit experiences related to both rounds. In total, 37 interviews were conducted in 2017 and 9 in 2019 in all three city regions and at the state level.

We developed a common semi-structured interview guide for the three urban regions, which was modified for interviews with state actors. The interviews were recorded and transcribed. We used NVivo, a software programme suited for analyses of extensive text material, to code and analyse the data via a set of categories defined by the main topics of the interview guide.

# Context and background

#### Institutional setting

The ZGG has been the overarching national goal for transport policy in Norway for nearly a decade, introduced through a parliamentary climate agreement. It addresses the management of urban mobility, including issues of traffic noise, safety, congestion and urban road space use for private cars (Ministry of Transport, 2017). As the Norwegian

<sup>&</sup>lt;sup>3</sup> To preserve the anonymity of the state informants, given their limited number, no further descriptions are given.

authorities consider the UGAs a central tool for reaching the ZGG, they can also be seen as arrangements that transfer the ZGG to local-level action (Tønnesen et al., 2019).

Combined effort from local, regional and state authorities is essential for reaching the ZGG because they all have key responsibilities for influencing travel behaviour. Three actor positions are relevant here: First, land-use decisions are formally delegated to the local level. Although both the regional and state levels may object to local land-use initiatives, and the latter can formally deny them, such involvement is politically sensitive in Norway due to the understanding that local governments are positioned to develop policies tailored to the local context. Second, in Norway, largescale transport infrastructure is typically co-financed by state grants and toll roads. Developments in existing or new toll-road schemes are initiated by the local and regional levels and formally approved by parliamentary decisions. Third, the levels of government have overlapping responsibilities regarding different road and publictransport types. In sum, the government tiers are mutually dependent in terms of developing effective transport and climate policies (Aall et al., 2007).

# Urban growth agreements

A former variant of the UGAs was introduced in 2013, and the first agreement was signed for Trondheim in 2016. The Ministry of Transport had the overall responsibility in the initial negotiations, resulting in a reduced focus on land use. With the renegotiations from 2018, the land-use dimensions were actively included. Consequently, the Ministry of Local Government and Modernisation, which is nationally responsible for land-use policy, was included to co-lead the UGAs with the Ministry of Transport. In practice, the former has delegated the state representation to the county governor in the UGAs, while the latter has delegated it to the Norwegian Public Roads Administration. Other UGA participants are the national rail authorities and political leaders at the regional and local levels, supported by administrative representatives. A political steering group led by the Ministry of Transport determines the annual budgets and 4-year action plans. Hence, a body has emerged outside the traditional structures of public administration, where non-elected state representatives are deeply involved in local policymaking. As providers of the large transport-investment grants in the UGAs, the state and transport sector are arguably central in the governance structure. Moreover, UGAs arguably grant the state a stronger position for influencing local affairs.

The UGA arrangement commits all government levels to the ZGG via carrots and sticks (cf. Bemelmans-Videc, 1998). The state offers to fund up to 50% of the construction costs of new public-transport infrastructure in city regions with a UGA. In total, 6.6 billion euros are allocated nationally for investments and operations of transport infrastructure in the 10-year agreement period. Negotiations concern the size of the projects and what is to be included in the state's share; meanwhile, the regional and local authorities are expected to establish land-use practices, such as urban densification, for reducing car-use dependency. If measures fail, local authorities are expected to implement stronger car restrictions, for example, higher parking rates. The regional and state levels are expected to conduct cautious land-use policy facilitating zero growth. Still, the state intervening in local-level land-use policy is a sensitive issue and was a central theme in the UGA negotiations.

#### The UGA in Oslo and Akershus

The first UGA agreement between the state, the City of Oslo and Akershus County was signed in 2017. In the renegotiation, which has yet to be finalised, Oslo and three smaller neighbouring municipalities were invited, while the 18 remaining Akershus municipalities were represented by the county authorities. Despite numerous urban

agglomerations around Oslo, the capital city is undisputedly at the top of the regional hierarchy.

The main financial carrot offered by the state in the UGA was co-funding the construction of a new metro line. In the first UGA, the local actors decided to increase tolls and expand the number of roads included in the toll scheme. From a land-use perspective, the UGA also formalised future development. The actors agreed to follow the regional land-use and transport plan, implying dense land use in prioritised areas with good public-transport services. It is worth noting that there are differences between Oslo and Akershus County in terms of traffic growth: Oslo has zero growth, whereas the surrounding Akershus has experienced traffic growth (Ministry of Transport, 2017).

## The Nord-Jæren UGA

Together with Rogaland County, four municipalities—Stavanger, Sandnes, Sola and Randaberg—signed the first UGA agreement with the state in 2017. A renegotiated UGA was signed in 2019. An important contextual condition is the polycentric urban structure of Nord-Jæren (Næss et al., 2018), with Sandnes and Stavanger representing one of the few Norwegian examples of conurbation cities. This involved the challenge of making two cities agree on how to conduct land-use and transport policy in the UGA framework.

The main public-transport project in the UGA is a new bus rapid transit (BRT) system. To achieve the ZGG and secure funding, a new and more extensive toll scheme has been introduced. The local and regional actors have also agreed to revise their land-use plans to better align with the ZGG.

#### The Trondheim UGA

Trondheim municipality and Trøndelag County were the first local and regional actors

to reach a UGA with the state in 2016. The renegotiated agreement was signed in 2019. Different from the other two urban regions, the first UGA involved only one municipality. With the renegotiations, three neighbouring municipalities were included. These had a much lower population, leaving Trondheim at the very top of the regional hierarchy.

The main public-transport project in the UGA is the development of a new bus rapid transit (BRT) system, partly financed by the state. In all city regions, all actors have agreed to promote compact urban development and densification around publictransport nodes.

# **Empirical findings**

Informed by the insight on adaptive governance, we present the empirical findings for the three following key features of this governance practice: i) shared responsibility, ii) autonomy and iii) learning and adaptation.

# Shared responsibility

Two aspects of shared responsibility in the UGAs are exemplified in our study—the involvement of relevant parties in the negotiations and integration of transport and land-use planning.

# Involvement of relevant parties

Many of our informants expressed concern that the negotiation overlooked fundamental democratic processes at the local level. The criticism raised by informants in Trondheim concerned the level of openness between the group negotiating the agreement and elected politicians at the municipal and county levels, as well as the wider public:

We, the local politicians, discuss our priorities for the negotiations. We are represented by the mayor [...], and in principle, we don't know what happens there, so when she comes back and tells us—this is what I could achieve—we must believe her. I have no reason to believe otherwise, but the process has been very closed. (Informant, Trondheim)

To some degree, there was acceptance of the closed nature of the negotiations, given the time constraints to complete them, which made the process more efficient. However, the high level of urgency to complete the negotiation process from the state authorities was not fully accepted by the informants in the Trondheim region. There were similar concerns over the negotiation process in Nord-Jæren, which was considered too fast to involve relevant actors and ensure everyone was heard.

In Nord-Jæren, the toll-road protests raised awareness of the importance of a solid anchoring for the UGAs in the population and through local democratic channels. Both the speed of and access to the negotiation process from those outside the negotiations limited the possibilities for democratic anchoring. Access to information for those outside the negotiations varied greatly for all the UGAs, and those who had such access could use informal channels to influence and interact with the negotiators:

We complained that we were not part of the negotiations, but I know everything, even though many of these things are secret. If I hadn't been on good terms with the roads director, I wouldn't have been informed. (Informant, public-transport operator<sup>4</sup>)

<sup>&</sup>lt;sup>4</sup> To preserve anonymity, the informant's city region is omitted.

#### Integrated land-use and transport planning

The issue of shared responsibility can also be analysed in relation to the integration of land use and transport across agencies and municipal borders. In the first UGAnegotiation round, land use was less of a theme, and the county governor (representing the Ministry of Local Government and Modernisation) only had an observational role. The regional and local parties felt that this resulted in land-use issues being given insufficient attention in the UGA negotiations:

The fact that the Ministry of Local Government and Modernisation was not represented in the negotiations was a challenge or signified a major weakness. It was [left to] the Norwegian Public Roads Administration, which does not have expertise in land use. And I think this had consequences for the overall negotiations because land-use issues were treated a bit too casually. (Informant, Nord-Jæren)

Land-use planning and transport issues became more actively linked in the renegotiations of the UGAs, with the full inclusion of the Ministry of Local Government and Modernisation from 2018. All our informants considered this an important move. From their perspective, there was a need to focus more on land-use planning to achieve the ZGG and coordinate the processes and measures between those responsible for transport and land use. At the state level, those responsible are the Ministry of Transport and Ministry of Local Government and Modernisation. However, many informants expressed concerns over the power balance between them, as the former is considered far more powerful in the process than the latter is, largely because most money allocated from the state through the agreements originates in the transport sector via the National Transport Plan. Moreover, the negotiations are led by the Norwegian Public Roads Administration, allowing the transport sector more opportunities to influence the process.

A key UGA feature is the coordination of land-use and transport planning across the city regions. As the ZGG is to be obtained at an urban-region level, it is insufficient for the core city to perform alone. Instead, municipalities need to coordinate their ambitions, policies and measures, in addition to the needed coordination between the local, regional and state levels in transport and land-use policies. This represents both a challenge and potential of the UGAs.

#### Autonomy

The possibility of selecting and deciding on measures and strategies to implement the ZGG emerges as an important aspect of autonomy for local parties in our study.

# Selection of measures

The municipal and regional authorities can choose which measures to implement to fulfil the overall UGA goal. Through the negotiations, the receiving parties must present a feasible plan for using the UGAs to fulfil the ZGG via a package of policy measures. Moreover, the national authorities emphasise that the agreements must be adapted to each urban region and lead to improved accessibility:

The selected measures must contribute to developing solutions that ensure better accessibility in the cities overall, especially by facilitating attractive alternatives to private cars. [...] It will be necessary to exercise some discretion and attain a flexible approach regarding specific conditions in each city. (Ministry of Transport, 2014)

Despite some flexibility at the outset to choose between different combinations of measures, the package must be adjusted if transport trends are not achieving the ZGG. All UGAs contain such clauses, exemplified here with the Trondheim UGA,

If one or more parties assert that the trend is failing to comply with the objective of the agreement, the parties shall jointly discuss the possibility of alternative measures to reverse this trend. Compensatory measures must be attempted for at least 2 years before the agreement can be terminated. (Trondheim UGA, 2016, p. 7)

Although there is theoretically some tractability in terms of combining measures to achieve the ZGG, in practice, a toll-road system is a prerequisite for a UGA. The state covers 50% of the cost of the projects and investments, with the local and regional levels expected to contribute the rest. The required funds are typically above what local and regional partners can finance through their ordinary budgets; hence, toll-road financing is required. The government has repeatedly claimed that the urban regions are free to choose whether to implement new or stronger toll-road schemes. However, without a scheme in place, financial resources decrease, potentially hindering many desired projects. The state has declared that toll roads are not required in principle; thus, it is unwilling to take responsibility for the implicit requirement of toll roads to ensure financing.

In Nord-Jæren, local resistance to increased tolls has been strong. One of the four municipalities in the UGA, Sandnes, threatened to withdraw from the agreement unless the congestion charges were scrapped. Street protests erupted, and on one occasion, a city council meeting in Stavanger was interrupted when protesters entered. Responding to local resistance to tougher toll-road schemes, Prime Minister Erna Solberg described the entanglements of national goals and local-level decision making (Verdens Gang, 2018):

The toll revenues are based on local decisions, but [it is] the Parliament that has decided that we are to achieve zero growth in car traffic. When municipalities choose toll-road financing, it's up to them. [...] I understand that people react, but if we are to get more clean air in the cities in the future, then this requires co-financing.

While there is a possibility of selecting measures for local contexts, this is constrained by the need for local financing of major infrastructure projects. The politically difficult issue of toll-road payment is characterised by a lack of clarity of decision-making power and responsibility between the parties, leading to a lack of transparency of the UGAs.

#### Learning and adaptation

Our study reveals two dimensions illustrating the possibilities for learning and adaptation in the UGAs, specifically, the principles for geographic demarcation and how the negotiation processes accommodate diverse actors and outcomes.

# The principles for geographical demarcation

In the first round of UGA negotiations, the geographical demarcation varied between the urban regions. As mentioned above, the first Trondheim UGA involved only one municipality. Informants noted that surrounding municipalities should be involved in regulating the whole area:

It is the commuter area, the mobility area for Trondheim. So, for us, it is important that they are part of the solutions. (Informant, Trondheim)

In the renegotiations, the model for the geographical demarcation of the UGAs has been

adjusted. While there were no changes for Nord-Jæren and the four municipalities involved, in both Trondheim and Oslo, three surrounding municipalities were included. This signifies the development of the scope of the UGAs based on experiences gained in the first agreements that were signed.

Coordinating multiple municipalities with different interests and practices is demanding. Furthermore, excluding municipalities that are part of the functional region around the core city area creates challenges regarding the ZGG. Alongside the stronger inclusion of land use, the expansion of signing municipalities is perhaps one of the clearest examples of learning and adaptation in UGA negotiations.

#### The negotiation processes

In most interviews with representatives at the local and regional levels, the limited prospect for having a 'real' influence on the outcome of negotiations was discussed. The National Transport Plan underlines the importance of equality between the parties in the UGA negotiations (Ministry of Transport, 2013). However, the municipalities experienced a negotiation process in which the state had a non-negotiable mandate, giving the municipalities limited room for manoeuvring. Many questioned whether the word 'negotiation' could describe this process. It was explained that the state was represented by bureaucrats with little scope to go beyond their mandate, while the municipalities were represented by politicians. The state also carries more weight in the negotiations:

The state has the money, so it is an illusion to think that the parties are equal. (Informant, Oslo and Akershus)

In Nord-Jæren, concerns were expressed that the state had low ability to adjust the goal and indicators as new experiences emerged: These are not real negotiations. We get the same response [as in the first negotiation round]. [...] The state claims that everything is decided through the National Transport Plan and that they have nothing to offer beyond what is decided there. (Informant, Nord-Jæren)

Interestingly, one informant related the limited negotiation power to the number of municipalities in the UGA, describing a situation where stakeholder involvement is obtained at the detriment of negotiating power vis-á-vis the state:

The frame for negotiations is approved plans in all four municipalities. No mayor may commit beyond municipal political decisions. Through the negotiations, there may be a need for new political decisions, but this again requires anchorage in many places. In terms of negotiations, it is very easy for the state to outplay the municipalities. (Informant, Nord-Jæren)

Informants in Nord-Jæren also emphasised the short timeframe in the first UGA and the pressure to implement a stronger toll-road scheme. The mayor of Sandnes described the discontent with the scheme from the first UGA negotiation in the following comment, which also illustrates learning and a local demand for adjustments: 'Yes, we were a part of it, but it was a mistake. We should never have agreed to it, but we must also dare to change it' (Rogalandsavis, 2018). Through this learning process, the rules of the game changed. After fierce protests, the renegotiations resulted in a 'milder' toll-road scheme for Nord-Jæren.

# Discussion

#### The incorporation of adaptive governance in the Norwegian UGA's

Our analysis has shown that the governance approach of UGAs has been only partly successful when it comes to *autonomy*. The urban regions had the opportunity to choose

between different strategies and packages of measures to fulfil the ZGG and adapt their policies to local contexts. However, the possibility of adjusting measures—for instance, to minimise toll-road revenues—was clearly limited, given the role of such tolls for the financing of the large-scale public-transport projects in the UGAs. Toll-road payments have proven politically controversial in several of the city regions. Public protests and the surprising growth of the political party 'The peoples' movement against more tolls' illustrate how a highly visible and restrictive measure can make planned implementation—and hence, goal achievement—difficult. Toll roads also became part of a blame game between national and local authorities. The state declared that toll roads were not a requirement in principle, whereas the local authorities stressed that tolls were unavoidable if planned transport projects were to be financed. When actors are unwilling to take responsibility for the policies resulting from the UGAs, it is also difficult for citizens to know who should be accountable. This could be interpreted as a way of consolidating the respective parties' interests in not promoting toll roads.

Turning to the issue of *learning and adaptation*, the results are largely positive. A prerequisite for learning is the ability to monitor and incorporate new knowledge into an adaptive governance process (Folke et al., 2002; Plummer & Baird, 2013). The renegotiations involved stronger emphasis on the integration of land use and transport. Our informants unanimously emphasised the benefits of the agreements handling this policy field in a more integrated manner.

With the stronger focus on land use, the UGA's regional dimension became clearer. The state's ambition has been for the main city to enter a renegotiated UGA, with three or four smaller municipalities. Hence, the state delegated a clearer responsibility for goal achievement to the municipalities surrounding the core city. This adaptation of the arrangement also marks a shift away from former Norwegian state initiatives, typically addressing transport-system development in ambitious core cities. This regional ambition holds some of the strongest potential of the UGA.

The challenge of a regional approach lies in the higher levels of car dependency on the urban outskirts, creating geographically based differences of interest for land-use and transport policy. This helps explain a persistent challenge also found elsewhere: The willingness to take environmental action is typically lower in suburban areas than in the central city (Dierwechter, 2010; Næss et al., 2018). For example, the City of Oslo has zero traffic growth, but there is growth in the surrounding Akershus County (Ministry of Transport, 2017). It is important to find holistic solutions to achieve the ZGG across the urban region and address the complexity of transport problems (Edelenbos et al., 2010). Hence, in line with adaptive governance, it is beneficial that relevant actors, represented here by municipalities in the functional living and working region, have been included in the decision-making process (Olsson et al., 2004). This illustrates how implementation barriers vary across the urban region and help seek new ways of solving them.

# The legitimacy of the UGA structure

Many informants pointed out that the opportunity to anchor the UGA processes and outcomes in democratic channels through municipal and county councils has been limited by the lack of openness and limited time for negotiations. This reduces the democratic anchorage of the UGA as a governance structure (Sørensen & Torfing, 2005). While the need for progress and to settle the agreement can be understood from an efficiency perspective, the feeling of haste and limited time experienced by some municipalities is problematic. After all, the negotiation process is of vital importance for the legitimacy of governance structures (Van Meerkerk et al., 2015). An adaptive governance strategy recognises the importance of involving multiple actors in decision-making processes to generate a shared understanding of an issue and initiate action (Plummer & Baird, 2013). Excluding actors and ignoring differences, such as in values and worldviews, may hamper these arrangements' legitimacy (Cleaver & Whaley, 2018). Broad involvement seems to have been increasingly emphasised at a structural level in the UGAs. Land-use authorities were eventually included (Ministry of Local Government and Modernisation and county authorities), along with municipalities surrounding the core city. However, involvement is not reflected similarly in relation to inclusion of political actors at the local level. A limited set of persons have been directly involved in the UGA negotiations, putting a great responsibility on the participants' shoulders. Neither have there been strong integration of stakeholder groups affected by the UGAs. The resistance to the toll roads included in the UGAs may be understood from this perspective. Failure to anchor the UGAs' processes and outcomes in the population and include local politicians and actors in the processes may have impaired their legitimacy.

# Underlying structures of power

Adaptive governance highlights the importance of 'power sharing' between actors (Cleaver & Whaley, 2018). The state described equality between the parties as a UGA cornerstone from the outset. Considering the extent to which the actors could influence the requirements set in the arrangement (Lukes, 1974), the negotiation space is still clearly limited by underlying structures of power.

Informants in all three urban regions perceived that the state has a rather nonnegotiable mandate. This was especially noticeable in discussions on funding and planning specific projects. One main challenge has been an inability at the state level to commit to projects beyond what has been decided in the National Transport Plan. This illustrates that tiers of government have different roles and powers (cf. Torfing et al., 2009), including when new multi-level arrangements with clear references to adaptive governance emerge. The strong state influence over how the UGA networks are composed and the institutional procedures is clear in the empirical cases. The state holds the core positions, such as the leader position in the political steering group. It is also by far the most important economic contributor. Thus, while there are de facto negotiations in some fields—for instance, in relation to land-use requirements for all parties—others are outside the scope of negotiations. From this perspective, the local and regional levels argue that, despite the state's strong emphasis on equality between the actors, there has not been sufficient power sharing between them. A public officer in Trondheim noted that, while equality between the tiers of government had been announced, 'there is no doubt that the state is the heavyweight'.

# Conclusion

When the new UGAs were launched in 2014, the Norwegian government highlighted flexibility, equality and shared responsibility between the governance partners as their cornerstones. As these are central features within adaptive governance, we applied this perspective as an analytical framework. Our interest was in investigating central conditions influencing whether the UGAs would work as an adaptive governance strategy. Three features of adaptive governance—*shared responsibility, autonomy* and *learning and adaptation*—were used to structure our analysis (Plummer & Fennell, 2009).

Starting with the last feature, substantial learning and adaptation have occurred. Most notably are the broadening of the UGA scope to include land-use development and orientation towards the adjacent municipalities of the core city, which have largely been successful. However, the broadening has also posed challenges to the negotiating process with the need to involve more parties, and with this, the risk of excluding relevant parties. Sharing responsibility becomes more complex. With the broadening of the scope of the UGAs to involve the land-use sector and adjacent municipalities, two ministries must coordinate their policies and action, and coordination is needed between the municipalities in each urban region. Relevant political actors and stakeholders at the local level were excluded from the negotiation, placing great responsibility on the participants. This illustrates a tension of the UGAs between shared responsibility to reach the ZGG in the city regions and the efficiency of policy processes, challenging the working of UGAs as an adaptive governance process.

Considering the dimension of autonomy, this is provided by the flexibility given to select some types of measures, but this does not include the use of toll-road payment. Tolls have raised significant public and political resistance. Blame games between the political levels emerged as both national and local authorities denounced each other for increased toll-road fares. Hence, both in relation to stakeholder involvement and autonomy, there are challenges related to transparency and a lack of local anchoring. These are conditions hindering the UGAs successfully working as an adaptive governance strategy. Giving room for autonomy in multi-level governance processes where the involved actors have different roles and power is demanding when policies and measures involve unpopular strategies, tempting the involved actors to blame each other. It also illustrates a structure through which the state seeks to engage in environmental policymaking at the local level found in other contexts and institutional arrangements (Bulkeley, 2010). The UGA political steering group exemplifies the emergence of a body outside the traditional structures of public administration. Here, non-elected state representatives are deeply involved in local policymaking. With few municipal political leaders participating in this group, one could also say that there is a lack of transparency and political involvement of the municipal political system as such.

While the opportunity to have substantial transport-infrastructure investments is attempting for regional and local authorities, an arrangement like the UGA is also challenging. The state announced the UGAs as an arrangement with a range of adaptive governance characteristics. However, it also involved a new role for the state in local and regional policies, as well as a concentration of power to a limited set of politicians. Thus, the UGA working as an adaptive governance strategy is also challenged by more overall governance-network mechanisms. More specifically, power given to networks may result in politicians losing control of a direct steering opportunity, as observed by Aarsæther et al. (2011). Hence, the UGAs are threatened by a possible loss of democratic accountability (Huitema et al., 2009, Sørensen & Torfing, 2004), underlining the importance of considering the democratic element of these and similar arrangements.

Our results point to challenges the UGAs must surmount to work as an adaptive governance strategy. Although they initially shared important characteristics of adaptive governance, multi-level cooperation within areas of land use and transport is framed by complex underlying structures of roles and powers, which challenge the working of such governance structures, and thus, their legitimacy.

A criticism of adaptive governance has been its insufficient attention to power relations (Cleaver & Whaley, 2018; Sørensen & Torfing, 2004; Wilson, 2018). This paper contributes to the literature by highlighting how multi-level adaptive governance is framed by underlying power structures. The three levels of government do have different roles and powers (cf. Torfing et al., 2009), and these factors also persist in the new multi-level cooperation characterised as adaptive governance. We find clear differences in power relations through the state's ability to define the network composition and institutional procedures (Sørensen & Torfing, 2004). The state defines the timeframe of the negotiations and overall policy goal to be obtained (ZGG), taking leadership of the governance network. It could be argued that such invisible patterns of power in governance processes may result in processes delivering less than expected and having unforeseen consequences (Cleaver & Whaley 2018), such as the strong public protests against toll roads and the UGAs in Norway.

The results contribute to the literature on adaptive governance in several ways. First, multi-level adaptive governance processes require attention to issues of power and legitimacy. Securing transparency and democratic anchorage is paramount to bringing such processes in line with the intended benefits of adaptive governance (Dietz et al., 2003; Folke et al., 2005). Second, for politicians and practitioners, our results indicate how adaptive governance processes would benefit from early-phase clarification of what shared responsibility, autonomy and learning and adaptation entail. Finally, adaptive governance processes, especially those with complex underlying structures of roles and power, require time to develop.

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