

Leren van provincies: verder integratie van infra en ruimte door het afstemmen van beleid en uitvoering op nationaal en provinciaal niveau

Marijn van Geet – Rijksuniversiteit Groningen – m.t.van.geet@rug.nl

Sander Lenferink – Rijksuniversiteit Groningen – s.lenferink@rug.nl

Wim Leendertse – Rijkswaterstaat – wim.leendertse@rws.nl

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Samenvatting

Rijk en provincies zijn met het opstellen van Omgevingsvisies druk aan het voorsorteren op de invoering van de Omgevingswet. Een direct gevolg van deze nieuwe wetgeving is dat de nadruk (nog meer) komt te liggen op het formuleren en implementeren van integrale ruimtelijke plannen. Dit vraagt om een goede afstemming (fit) tussen integraal beleid (strategie) en uitvoeringsinstrumentarium (structuur). Dit paper beschrijft de resultaten van een vergelijkend onderzoek naar dit "fitting proces" tussen strategie en structuur op Rijks- en provincieniveau. De inhoudelijke focus van de analyse ligt op de horizontale en verticale integratie van infra en ruimte in planning, programmering en budgetteringssystemen (PPB), zoals bijvoorbeeld het MIRT. De resultaten zijn gebaseerd op een studie van beleidsdocument, rapporten en diepte-interviews binnen zowel het Ministerie van Infrastructuur en Milieu, en de provincies Noord-Brabant en Overijssel. Daarnaast zijn focusgroepen en workshops georganiseerd binnen het Ministerie van Infrastructuur en Milieu. Op strategisch niveau zien we een duidelijke overeenkomst tussen het Rijk en de provincies. Het ontwikkelen en realiseren van geïntegreerd infra en ruimtelijke beleid is een gedeelde, centrale ambitie. In de vertaling van deze strategie naar PPB structuren (de fitting) constateren we een aantal verschillen tussen nationaal en provinciaal niveau, evenals als tussen de twee onderzochte provincies. Zo verschilt de dynamiek van het fitting proces. Op provinciaal niveau lijken de structuren minder rigide waardoor ze sneller kunnen worden aangepast. Daarnaast ontwikkelen de organisaties eigen instrumenten om het PPB systeem beter af te stemmen op de (eigen) strategie.

Trefwoorden: Integrale planning, infrastructuur en ruimte, Omgevingsvisie, MIRT, implementatie, PPB Systeem, strategie-structuur fit, Rijk, Overijssel, Noord-Brabant.

1. Introduction

In general, there is an increasing focus on the formation and implementation of integrated spatial policy strategies. This is confirmed by OECD's recent report (2017) on land use governance. Collaborative policy regimes aim at integrating sectoral objectives to achieve new broad and ambitious policy goals (Rayner & Howlett, 2009). Despite this widespread trend towards integration, successful formation and implementation of integrated strategic policies remains limited. This is illustrated within the domain of transport planning where the international trend of integration is reflected by the concept of *land use transport integration* (LUTI – see Wegener & Fürst, 2004; Van Wee et al. 2013). Growing attention for LUTI is strongly driven by an increasing awareness on the potential synergies that can be obtained by integrating transport and spatial planning and development. But the appraisal and delivery of integrated transport policies is inhibited, and, as such, potential synergies are only captured up to a limited extent. Multiple researchers have discussed the influence of Planning, Programming and Budgeting (PPB) Systems on the formation and implementation of strategic transport policies (e.g. de Jong, 1999; Klakegg, et al. 2016; Marshall, 2013; Williams et al., 2010;). A PPB system is an institutional framework that structures the process from policy formulation to project realization and operation. This suggests a fit between strategic policy objectives and underlying PPB System structures, which is in line with Stead & Meijers (2004) who emphasize the importance of consistency between integrated policies and implementation to achieve desired outcomes.

Research on strategy-structure fit to enhance strategic policy implementation, such as structural contingency theory and configuration theory, is primarily developed from organizational business fields of research (e.g. Chandler, 1962; Miles and Snow 1978; Donaldson, 1996; Donaldson, 2001; Baltazar et al, 2001; Ketchen et al., 1997). So far, comparable studies in the context of public management are limited. However, we argue that strategy-structure fit can offer a valuable theoretical approach in the context of public management to better understand the struggles of LUTI implementation. But this requires a reinterpretation of the strategy-structure fit concept as public and private organizations differ in key aspects (Allison, 1983). It is not the primary goal of this paper to construct a theoretical perspective on strategy-structure-performance relationships in public context, but to provide initial verifications of the theory for the public domain. We focus this study on the fitting process between strategy and structure in the context of Dutch national and regional transport planning.

As mentioned above, similar to multiple other developed countries (Bliemer et al., 2016), the Netherlands are experiencing difficulties in implementing LUTI. Both the Dutch national and regional governments carry a legal responsibility for planning, development and maintenance of transport infrastructure. In executing this legal obligation, they have a certain degree of autonomy. Despite this autonomy a trend is witnessed in the Netherlands that transport planning is moving away from a technocratic, line-oriented, uni-modal, predict-and-provide approach towards an integrated, area-oriented, multi-modal approach. In other words, a converging trend is witnessed between land use planning and transport planning (WRR, 1998; Arts et al., 2016; Heeres et al., 2012, 2016). This integration, however, strongly depends on the fit between strategic policy objectives and underlying PPB System structures.

Until 2012 national *strategic policies* on land use and transport were separated and attempts to combine these continually failed. The current National Policy Strategy for

Infrastructure and Spatial Planning (Ministry of Infrastructure and Environment, 2012) is the first strategic LUTI policy on national scale. In the build-up to the introduction of a new Dutch Environment and Planning Act (expected in 2019), which requires governments to explicitly formulate an *environmental strategy*¹, the Ministry of Infrastructure and Environment has recently published a starting memorandum. In this memorandum land use transport integration is adopted as a key goal (Ministry of Infrastructure and Environment, 2017). Also at the provincial level, transport policy and land use policy used to be described in separate documents. For example, transport policy was usually provided by *Provincial Traffic and Transport Plans*.

Regarding *structure*, national and provincial governments have developed separate institutional frameworks on transport infrastructure planning, programming and budgeting. Corresponding to the above-mentioned shift towards integrated land use transport planning, changes can be witnessed in the institutional design of transport infrastructure PPB systems. The Long-range Programme on Infrastructure, Space and Transport (MIRT), the Dutch national PPB System, has been revised since its adoption in 1991 multiple times to better fit strategic policy objectives (Ploeger, 2014; Arts et al., 2016). At the provincial level, a similar process of fitting between strategic policy goals and PPB systems can be witnessed.

This paper presents a comparison between the Dutch Ministry of Infrastructure and the Environment, and the provinces of Overijssel and Noord-Brabant on how the fitting process of policy (strategy) and PPB system (structure) has taken place to reach the strategic policy goal of LUTI. By this comparison, we aim to gain insight in the way a PPB system accommodates LUTI. More specifically, we aim to compare LUTI in the PPB systems at national and provincial level, to formulate recommendations for improving LUTI through better horizontal integration (between sectors) and better vertical integration (between levels of scale) in infrastructure planning.

2. Theoretical Framework

2.1 The structural contingency framework

This study's underlying theoretical principle is derived from contingency theory, which is grounded in organizational sciences. In general, organizational theory is focused on explaining and enhancing organizational performance in relation to the organizational strategy and structure. Structural contingency focuses on organizational structures as conditioning or moderating variable (Galtung, 1967). The central argument of contingency theory is that there is no 'one best way' to structure an organization. The ideal course of action is contingent upon the extent to which external and internal attributes are in fit (Donaldson, 2001; Burton & Obel, 2004). Chandler's (1962) study was the first to identify strategy as a contingency factor which influences organizational structure. He found a pattern in about 100 large U.S.A. corporations whereby changes in

¹ The explanatory memorandum of the Environment and Planning Act describes the environmental strategy as "an integrated strategy consisting of primary long-term strategic policy choices in relation to the living environment. This strategy is established by the State, the provinces and, wherever desired, by municipalities in relation to their budget and within their territorial boundaries. It takes the form of a political and administrative document that provides a comprehensive definition of the policy governing the physical environment. Comprehensive means that the strategy relates to all areas of the physical environment" (p.29)

strategy eventually were followed by structural adaptation. Multiple scholars have elaborated on Chandler's findings, and established varying perspectives and interpretations on the relationship and dynamics between organizational strategy and structure (e.g. Miller, 1987, Mintzberg, 1980). Within these different conceptions, there is broad consensus on the important of the fit between strategy and structure (e.g. Naman & Slevin, 1993; Ketchen et al.,1997; Burton & Ober, 2004) for realizing performance. This relationship is schematized in Donaldson's structural contingency framework (2001) as shown in Figure 1 which states that the degree of fit between strategy and structure influences organizational performance.

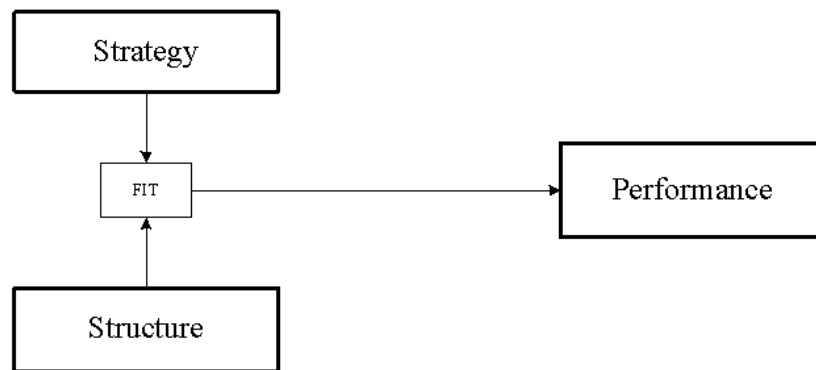


Figure 1 Fit between strategy and structure influences performance (based on Donaldson, 2001).

Donaldson refers to Child's (1972) work on strategic choice to define *strategy*. Strategic choice includes the evaluation and weighing of the conditional situation, choice of goals, establishing internal structures, and defining performance standards. As such organizational strategy forms the link between contextual change and structural change. Strategic management is about adjusting the relationship between an organization and its environment, in such that internal structures and processes must fit the strategy to be successful (Andrews et al, 2009). To conceptualize *structure*, Donaldson (2001) formulates four dimensions of organizational structure: specialization, formalization, structural differentiation and decentralization (Donaldson, 2001). *Performance* is expressed as degree of effectiveness. A low fit associates with ineffectiveness and a high fit leads to effectiveness. Within structural contingency theory effectiveness may refer to strategic goals such as profitability, efficiency or worker satisfaction (Donaldson, 2001)

Our premise is that the basic conception of the structural contingency model, strategy-structure fit affects performance, also applies to public management. But it requires a reinterpretation of its elements as public and private organizations are different (Allison, 1983). In the following paragraphs we formulate and substantiate a 're-interpretation' of Donaldson's structural contingency model, based on the scope of this research. Emphasize will be on the fitting process between strategy and structure. The link to performance is therefore not further discussed in detail in this paper.

2.2 LUTI as strategic policy objective (strategy)

Public organizations generally have multifunctional considerations and goals (Christensen, 2007), because the public sector has not one specific interest, but must

serve society as a whole (Jørgensen & Bozeman, 2007). As such, (public) strategy is a much more encompassing concept involving multiple policy domains as compared to business organizations referred to in Donaldson's definition (2001). As already mentioned, in transportation planning a development is witnessed in the adoption of land use transport integration as strategic policy objective. Stead et al. (2004) define integration as the management of issues transcending existing boundaries of established institutional responsibilities, which are dispersed in horizontal and vertical dimension. This means that the effectiveness of LUTI is dependent on the level of interaction between concerned actors associated with a policy issue, making integration a very context-dependent notion (Healey, 2006). For our further analysis we distinct between horizontal and vertical integration. Horizontal integration refers to inter-sectoral, intra-sectoral, and cross-territorial integration. Vertical integration occurs between different layers of government.

2.3 PPB system as structuring framework (structure)

Elements that are traditionally included in the concept of organizational structure (specialization, formalization, structural differentiation and decentralization) represent only a small share of the structural traits that are relevant for influencing operations of interaction in public management (Bouchikhi, 1998). So, a broader institutional perspective on structure is necessary. Institutions can be formal (e.g. regulation, policy, and formal rules) and informal (e.g. habits, cultural principles, and attitude). In this paper, we confine the concept of structure to the institutionalized PPB system. Multiple authors have referred to the influential role of institutional frameworks like Planning Programming and Budgeting (PPB) systems for appraisal, funding and delivery of transport policies (e.g. Hatzopoulou, 2008; Hull, 2009; Smith, 2014). These systems function as institutional vehicles structuring the process of policy formulation, adoption, execution and evaluation over a longer time period.

2.4 Institutional design for policy implementation (fitting and performance)

Performance is determined by the 'ability to achieve goals' (Parsons, 1961). Traditionally, performance, in business organizational science, is determined by testing results to predefined, specific, measurable, usually economic goals. However, in public organizations performance is less clear defined, because societal objectives are numerous and qualitative (Jørgensen & Bozeman, 2007). Measuring performance is a subjective process of evaluation (Barrett, 2004). Performance can be seen as the degree to which LUTI is achieved. Apart from the type of objectives pursued by an organization, performance is (always) positively influenced by the fit between structure and strategy (Donaldson, 2001; Miller, 1987). As mentioned before, a successful implementation of LUTI, implies involvement and balancing of relevant actors, both at the same authoritative level (horizontal) and different levels (vertical). According to the structural contingency theory strategy (the LUTI policy) and structure (the PPB system) should fit to reach this balanced integration. In practice, however, the fit of strategy and structure is not a static concept but rather a process that evolves. Therefore, in this paper, we will focus on the *process of fitting* more than the fit itself.

3. Research design

The findings presented in this paper are based on document research and in-depth interviews at the Ministry of Infrastructure and the Environment and two Dutch Provinces. These findings were analysed and discussed in several focus group sessions. For the document research, we analysed the current spatial laws, strategic spatial policy documents and institutional frameworks for infrastructure and land use planning, as well as the various reports that provide the outlines for the proposed changes to these laws, policies and frameworks. The interviews, held with 30 experts at the Ministry of Infrastructure and the Environment and the Provinces of Noord-Brabant and Overijssel, covered the policy formulation, the legal and financial institutional frameworks and the implementation in projects and programmes, in a semi-structured manner. Finally, two focus group discussions were held with a carefully composed group of experts with experience in (1) strategic policy formulation, (2) planning programming and budgeting, and (3) policy implementation in programmes and projects.

In the data collection, we limited our scope in a couple of ways. First we only investigated the relation between strategy and structure at national and provincial level. This means that the relation with governments at higher levels (i.e. European Union) are disregarded and the relation with lower levels is limited to that of the provinces with the municipal government. Secondly, the focus is on governments, making that civilians, interest groups, NGOs and business are not included in our data collection or analysis. A final limitation lies in the fact that we limit ourselves to LUTI only, focusing on land use and transportation, which means that relations with sectors such as health, economy or ecology are not investigated.

When interpreting the results of this research, it has to be stressed that the new national strategic spatial vision, as required by the new Environment and Planning Act, is still in development. The result from the interviews with the experts therefore both reflect on their experiences in working with the existing national strategic policy document (SVIR) and thinking about the contents and workings of the new strategic policy (NOVI). The experts refer to the way things are done under the old, current regime, in comparison with what they know about the outlines of the new, future NOVI strategy (Ministry of Infrastructure and Environment, 2017).

4. Context: towards an integrated approach in the Environment and Planning Act

Dutch land use planning is arranged in the WRO, the Spatial Planning Act (2008). Traditionally, land use planning is decentralized in The Netherlands to local authorities, i.e. the municipalities (Van der Cammen et al. 2012; Arts et al. 2016). Land use planning is funded on the basis of business cases. These business cases rely on public (municipal) involvement as well as private investments. The role of provinces is often limited to providing subsidies for the realization of societal goals that cannot be covered by the business case (e.g. regeneration of industrial areas, removing soil contamination, regional infrastructure investments and public transport subsidies).

With respect to infrastructure planning, the Dutch national government carries a legal responsibility for planning, building and maintaining national surface transport infrastructure networks, currently laid down in the Infrastructure Act (see e.g. Arts et al.

2016). The dominant national Infrastructure Fund and the Delta Fund secure annual budgets for executing this task. The allocation of these fund is done with national PPB system called MIRT - *Long-range Infrastructure, Space and Transport Programme* - which serves as an official annex to the national budget planning (see.Ploeger, 2014). The *MIRT rules* provide a formal administrative institutionalization structuring the procedure of policy integration, policy adoption, policy execution and monitoring and evaluation. In several distinct phases separated by formal administrative decisions, ministerial strategic transport policy goals are translated into clearly outlined projects.

As a result of the Environment and Planning Act, numerous Acts will be integrated, primarily among those the Spatial Planning Act and the Infrastructure Act. As indicated in the introduction, the concept of LUTI is at the heart of this development. However, the Environment and Planning Act is not the first introduction of LUTI to Dutch land use and infrastructure planning. In 1991, MIT, the precursor of the MIRT (without the R which stands for 'ruimte': space), was introduced, in which a shift occurred towards integrated planning (Heeres et al, 2012; Arts et al. 2016). Land use transport integration became a central policy goal, as captured in the Infrastructure Planning Act (1996) to "emphasize the need for integrated traffic and transport policy. This means intersectoral integration and integration with spatial planning, environment and economy". In 2008 the 'R' was adopted in MIRT. The Ministry of Transport, Public Works and Water Management and The Ministry of Housing Spatial Planning and the Environment merged into one Ministry of Infrastructure and the Environment. However, despite these, and several other institutional adaptations, the implementation of land use transport integration is limited at best (Lambrigts et al., 2016; Heeres et al., 2016). The new Environment and Planning Act is aiming to further the application of LUTI.

The Nationale Omgevingsvisie (National Strategic Spatial Policy, NOVI) and the Provinciale Omgevingsvisie (Provincial Strategic Spatial Policy, POVI) are instruments required by the new Environment and Planning Act. They lay out the long-term strategic policy choices for the physical environment in the Netherlands, at the national and provincial level respectively (Kamerstukken II 2013/14, 33 962, nr. 3, p. 7). The NOVI replaces over 60 existing national level policy plans and vision documents, but is primarily the successor of the Structuurvisie Infrastructuur en Ruimte (SVIR) [Structure Vision Infrastructure and Space]. It integrates the national policy on spatial planning, water, nature, living environment, landscape, mobility, and infrastructure, which, up until now, are mainly implemented separated from each other (PBL, 2016). With regard to land use planning and infrastructure planning the POVI replaces the separate "streekplan" (Area plan) and "provinciaal verkeers- en vervoersplan" (Provincial traffic and transport plan) of the Dutch provinces.

5. Results

This section describes the results from the study. First, in 4.1 we will describe the findings at the national level. Secondly, in 4.2 and 4.3 the findings from respectively the province of Noord-Brabant and the province of Overijssel are described.

5.1 Fitting of strategy and structure at national level

Strategy

At the national level the strategy is primarily laid out in the NOVI. The NOVI-strategy is centred on delivering coherent themes that address national challenges. The challenges are (Ministry of Infrastructure and the Environment, 2017): a sustainable and competitive economy, a climate-proof and climate-neutral society an accessible living and working environment, now and in the future, and a high-quality living environment.

Further, the NOVI is expected to enable customized policy implementation at a local and regional level, facilitate decentralization of responsibilities, and further integrate the policy for the physical environment. The integration is pursued in four dimensions: between sectors, between areas, between levels of scale and over time (PBL, 2016). In order to formulate a strategy that resonates with the provincial and local governments, NOVI werkplaatsen (NOVI workshops) were organised. These enabled for strategic discussions between the different layers of government.

In addition, although it primarily contains structure, the MIRT also contains some strategical elements. This MIRT strategy is largely influenced by the policy in the SVIR (now) and NOVI (later): to flexibly deal with area-oriented and integral assessment of spatial challenges and objectives. Besides these two instruments of NOVI and MIRT, the broader Environmental Law also has minor strategic elements. However, these elements can be considered to be reflected in the NOVI and will therefore not be discussed here in detail.

Structure

The structure of infrastructure planning is mainly determined by the MIRT (the Dutch national PPB System for infrastructure). The MIRT structure comprises of MIRT rules, which facilitate the national internal processes of decision-making. These rules include a definition of roles and responsibilities and requirements for decision-making. The MIRT structure works as a funnel: it works from broad so-called Area Agendas towards narrow project-based decisions. It includes a Bestuurlijk Overleg MIRT (BO MIRT, "administrative meetings") in which the national government negotiates with regional governments on regional investment agenda where national interests are at stake.

Over the last couple of years, the focus of the MIRT planning process has been shifting from the narrow project-based approach towards a more adaptive and area-oriented approach in programmes and project in which there is more focus on the broader societal challenges. This shift in the approach is deemed necessary in order to deal with the complexity of the issues in current society, the interrelatedness of these issues and the fact the developments in society are harder to predict (e.g. the uncertainties regarding climate change or technological innovations).

The MIRT also facilitates the budgeting of national infrastructure planning. Most of the finances are still sectoral of character, in the sense that they are arranged for by the Infrastructure Fund (for mobility and accessibility issues) or the Delta fund (for water safety issues). These sectoral funds make for sharply bounded projects with narrowly defined goals. This seems to be in contrast with the more area-oriented approach that is advocated in the process of the MIRT.

Besides strategy, the NOVI also provides some elements of structure. Or, more precisely, the Environmental Law dictates some structural characteristics that should be part of the NOVI. First, the NOVI has to provide a long-term approach to the broader

environmental challenges. Secondly, the NOVI has to be formulated in accordance to the subsidiarity principle. This means that national involvement in planning is only justified if (1) lower levels of government cannot come to a solution, (2) if there is a clear added value to national involvement, or (3) if national involvement leads to better valorisation of previous national investments. Thirdly, the NOVI has to offer a coordinated approach in dealing with several spatial claims. A fifth and final structural characteristic of the NOVI is that it the national government is responsible for the performance of the complete planning and policy system, including the NOVI.

Further elements of structure are provided by the organization of infrastructure planning at the national level. In Dutch practice, the Ministry of Infrastructure and the Environment is the main actor for formulation and implementation of national policy. However, it does so through three main departments, so-called directorate-generals. These are the Directorate General for Accessibility (DGB), which is responsible for formulating and developing transportation planning policy, the Directorate General for Space and Water (DGRW), which is responsible for formulating and developing spatial planning policy, and the executive agency of the Directorate General of Rijkswaterstaat (RWS), which takes care of the implementation of water and transportation planning policy through programmes and projects.

Table 1: Horizontal and vertical integration at the national level

	Horizontal integration (between sectors)	Vertical integration (between levels of scale)
Strategy		
<i>Policy</i>	One integrated national strategic spatial policy, with LUTI as an important element.	Through NOVI Werkplaatsen, regional input is gathered. However, NOVI largely has to remain a rather abstract and generic national effort.
Structure		
<i>Planning</i>	Separate spatial (DGRW) and transport (DGB) policy departments at Ministry I&M. Separate planning procedures (Wro vs. Tracéwet) and cultures, but one dominant planning process (MIRT rules).	The MIRT process is structuring the vertical relations throughout the planning process. The area agendas coordinate national and provincial planning efforts. Vertical relations mainly on a sectoral basis.
<i>Programming</i>	MIRT as a multisectoral and multimodal programme, with primarily sectoral projects.	Through Gebiedsagenda's and BO MIRT programmes and projects are prioritized, to ensure coordinated implementation efforts.
<i>Budgeting</i>	Two main funds for MIRT projects: Infrastructure Fund and Delta Fund. Both strongly connected to infrastructure, and not land use.	Through BO MIRT, budgets are decided, including national and regional funding.
Fitting		
<i>Fitting process</i>	Strategy is more aimed towards horizontal integration than structure is: MIRT programming and budgeting is primarily based on transport and one-modality projects; Through broader applied MIRT rules integration in planning can be achieved.	Structure is more tuned towards vertical integration than strategy is: Expliciting LUTI as part of the strategy could be conflicting with decentral nature of the Environment and Planning Act. Icon projects and implementation mechanisms can further direct strategy and improve fitting.

Analysis of the fitting process

With regard to the fitting process at the national level, the following can be concluded concerning horizontal and vertical integration (see Table 1):

- Horizontal integration is fostered in strategy by the formulation of the NOVI, but in structure it remains difficult due to the programming and budgeting being heavily transport-oriented. Programming and budgeting largely remain focused on sectoral, one-modality projects.
- Vertical integration is stimulated by the MIRT and its rules, but is difficult to achieve in policy due to the fact that policy remains rather abstract at the national level unless clear and specific national interests are at stake. Moreover, with the 2008 Spatial Planning Act national policy is primarily self-binding for national government, not for provincial and municipal government (this will also be true under the Environment and Planning Act).

With regard to the national level, the following can be concluded concerning strategy, structure and fitting (see Table 1):

- With regard to strategy, the fitting is strong when it comes to horizontal integration. The different policy documents at the national level seem to be well adjusted to each other. Vertical integration in policy is more difficult to achieve as policy formulation seems to remain, at large, a national effort only.
- With regards to structure, the PPB of the MIRT seems to be well equipped to deal with vertical integration, but is less able to come to horizontal integration, due to its transport focus.
- Regarding the fitting, the existing MIRT frameworks and guidances as part of the PPB are largely kept in place, although the strategy is changing. The strategy of the NOVI has a wider scope, making structural changes necessary to broaden the scope of the MIRT or introduce a parallel PPB system. Area Agendas are considered the main instruments to stimulate a better fit between structure and strategy at the national level.

5.2 Provinces of Noord-Brabant and Overijssel

Especially the regional authorities (i.e. provinces) are considered to be important actors in this vertical integration as they may bridge the general national policy formulation with the specific local implementation. In this section we will discuss the strategy (policy) and structure (PPB system) of the provinces of Noord-Brabant and Overijssel.

Strategy

At the regional level the strategy is primarily laid out in the Provinciale Omgevingsvisie (POVI, Provincial Strategic Spatial Policy). The POVI's are still in development, and differ per province, with regard to the contents, the process in which they are formulated (e.g. the coordination with municipalities), and whether they are finished (the case of Overijssel) or still in development (the case of Noord-Brabant). With regard to the content, the POVI's are expected to provide a coordinated strategy on spatial planning, including water quality and quantity, environmental management, traffic and transportation, nature, and soil and surface concerns. The investigated provinces have started by defining a broad strategic goal to work towards. This strategy links the sectors

for which the provinces are responsible, including economy, transport, nature and well-being. For example, the POVI of Overijssel aims for “sustainability, social quality and spatial quality (Provincie Overijssel, 2017) and the POVI Noord-Brabant will center around four themes (Provincie Noord-Brabant, 2016): Brabant connected (strengthening the physical and social networks), Brabant climate-proof (accelerating the energy transition and adapting the living environment to climate change to ensure safety and quality), Brabant prospering (utilize knowledge and innovation, also to reach closed-loop systems) and Brabant renews together (with a government that provides opportunities for initiatives and innovation).

Both investigated provinces acknowledge that formulating the POVI primarily is an internal affair: the POVI lays down the *provincial* spatial strategy – also POVI’s are only self-binding plans. However, the POVI’s are expected to relate to both the national and the municipal strategic spatial policy documents. The relation with the national level strategy could be found in the area agendas. However, these are perceived to be static one-time efforts that result in paper products. The interviewees therefore regard the area agendas not as a platform in which policy implementation is actively given shape. Input from municipalities and interest groups is therefore more than welcome: albeit that it will only serve as inspiration to the provincial strategy. The province of Overijssel has organized a participation process in which more than 1000 inhabitants have joined, either through participation in round table discussions and town hall meetings or by providing essays, advices and photographs (Provincie Overijssel, 2017). Now that the strategy is complete, the relations with the municipalities are maintained by account holders in the province organization. Noord-Brabant is also looking for municipal and broader societal involvement in the POVI. Regarding the municipal input, the province of Noord-Brabant provides the municipalities with the choice whether they provide such input individually or work together with other municipalities to formulate a joint input to the POVI. The broader society is engaged through a broad forum of Brabant Pioniers, which consists of all kind of engaged actors with sometimes conflicting interests.

Structure

The structure in which the provincial governments are implementing their strategy has changed over the last couple of years. The provinces seemingly have a longer experience with integral policy formulation and implementation than the national government. Their focus seems to be on the implementation of provincial policy, especially in coordination with the municipalities. The relation to the national structure of the MIRT is not prominent in realizing the provincial strategy. The BO MIRT structures the PPB negotiation of provinces with the national government, but seems to be primarily driven by the national strategy and structure. It is almost regarded as an arena that is separated from provincial policy formulation and implementation.

In order to make the implementation of integral strategy successful, the structure of the provincial PPB system has been revised. One striking example is the complete organisational overhaul that has been performed in the province of Overijssel in the years before the introduction of the POVI. It has led to cross-sectoral teams, which the daily exchange of insights and perspectives between the specialists from the land use and transportation disciplines. The province of Noord-Brabant has not applied such major organizational changes (perhaps due to the fact that the POVI is still in development): the PPB structure is sector-based (e.g. with teams for mobility, for economy and for nature).

Noord-Brabant does, however, identify some avenues along which the structure could be improved to come to more successful LUTI implementation. A first step is the adjustment of the Gebiedsgerichte Aanpak (GGA) and Regionaal Ruimtelijk Overleg (RRO). The GGA is the region-based formulation of policy on transport and infrastructure, for which 5 regions are identified: Metropole Region Eindhoven, Region West-Brabant, GGA Heart of Brabant, GGA 's-Hertogenbosch and GGA Northeast. The RRO is the platform for region-based discussions between province, municipalities and water boards on land use planning, for which 4 regions are identified: West-Brabant, Middle-Brabant, Northeast Brabant and Southeast Brabant. At so-called Ontwikkeldagen ("Development Days"), the RRO and GGA are adjusted to each other, with involvement from provincial policy formulation and policy implementation, and both provincial and municipal decision-makers. The interviewed experts feel that in the future, the Ontwikkeldagen could result in further integrated regional implementation agenda's.

For Noord-Brabant the financing is organized in sectors, and for the infrastructure planning projects also further specified to the separate modalities (e.g. road infrastructure, public transport infrastructure, public transport services). Over the coming years the province acknowledges that it aims to integrate this budget to a multimodal mobility budget, but that establishing a broad LUTI budget is, for now, a step too far. The province of Overijssel does not seem to have changed the budgeting: the funds are (still) arranged around sectoral interests. The provinces do however, seem to be more flexible in putting the budgets into use. This could be partly due because they act more on the basis of business cases. Another explanation is that there are less political and legal restrictions imposed to using the funds.

Analysis – the fitting process

With regard to the fitting process at the provincial level, the following can be concluded concerning horizontal and vertical integration (see Table 2):

- Horizontal integration is strongly present in strategy, but not as dominant in structure. However, the implementation does not seem to suffer, because (political) pragmatism, organisational flexibility and culture enable for a more flexible use of planning, programming and budgeting.
- Vertical integration is, in both strategy and structure, more aimed towards the municipal level. The integration with the national level is limited to the BO MIRT and Area Agendas, which seem to be more driven by the national interests (and the national PPB system). This can probably be attributed to the fact that relation with the national level is focused primarily on attaining (sectoral) funding, while relations with municipalities directly affects the success of projects through e.g. improved project control and public support.

With regard to the provincial level, the following can be concluded concerning strategy, structure and fitting (see Table 1):

- With regard to strategy, LUTI is an integral part of the provincial policy. However, the connection with the national level seems less dominant in the provincial policy formulation.
- With regard to structure, the provinces are keeping a sectoral focus in their policy programming and budgeting, but this seems not to affect the integral implementation of policy because of the direct and strong connection between policy and planning.

Table 2: Horizontal and vertical integration at the provincial level

	Horizontal integration (other sectors)	Vertical integration (other levels of scale)
Strategy		
<i>Policy</i>	Provincial policy has traditionally been more LUTI oriented than national policy. The introduction of the new Environment and Planning Act has stimulated this further, both in Noord-Brabant and in Overijssel.	The POVI formulation is strongly oriented on coordination with municipal interests. The integration with national level is less prominent: Area Agendas are considered static one-time efforts that cannot help to formulate a working policy.
Structure		
<i>Planning</i>	The provinces seem to be able to relate policy formulation and implementation in a more direct fashion because of the relative small organisations with short lines to decision-makers. Initiatives such as Ontwikkeldagen in Noord-Brabant help further this horizontal integration and broaden the scope of strategy and structure.	The BO MIRT provides a separate structure to discuss integration with national interests. The RRO (land-use) and GGA (transport) in Noord-Brabant enable vertical integration with municipalities and water boards.
<i>Programming</i>	With regard to programming, the implementation could be either region-oriented (Noord-Brabant) or more along dominant themes at the provincial level (Overijssel).	In the BO MIRT the programming of investments with national interests is arranged. Separately the implementation of provincial and municipal interests is based on regional development agendas. These serve more on the basis of business cases.
<i>Budgeting</i>	Provinces still work with separate land use and transport funds. The transport funds are further distributed per modality. Integration within the sectoral funds is deemed likely, while integration between sectoral funds is currently a step too far.	The vertical relations on budgeting seem not to go along lines of LUTI. Instead policies are mainly financed through sectoral funded projects. Budgeting is coordinated with the national level through the BO MIRT. Coordination with local levels is ensured continuously, e.g. by account holders in Overijssel.
Fitting		
<i>Fitting process</i>	The horizontal fitting seems good as provinces are seemingly able to effectively connect policy formulation, decision-making and policy implementation. This is not only due to the PPB system, because budgeting remains sectoral. Explanations could also be culture and experience, as horizontal integration has longer been central to the provincial policy and practice.	The vertical integration seems to be focused downwards, at the involvement of municipalities and water boards especially. The upwards integration with national interests does not seem to fit provincial strategy and structure.

- Regarding the fitting the way in which strategy and structure of the provincial land use and transportation planning are implemented seems to adequate. However, especially the budgeting is still sectoral. This finding is confirmed by the positive experiences with integrated projects, which even originate before the introduction of the new Environment and Planning Act and the POVI. It seems that the positive

experiences play an important role in the cultural and organisational changes that are helping to fit strategy and structure.

6. Preliminary findings for discussion

In this section, we describe the preliminary findings from the research. These findings specifically pertain to the comparison of the national and provincial strategy and structure for land use and infrastructure planning. However, first we have to provide some nuances regarding these findings. The first is that the fit between strategy and structure is dynamic (that is why we adopt the term fitting process). Both strategy and structure are still in development, at both the provincial and the national level). The findings are based on documents that are in development, on laws that are not enacted yet, by organisation that are in constant change.

Formally, the national government seems to be some steps ahead in making structural changes by establishing integral funds to finance programs and projects. In theory, these funds would better fit the LUTI strategy laid down in policy. However, our findings suggest that the province seems to be better able to make use of their sectoral funds to reach integral LUTI-based goals. They do so by linking them in an effective and pragmatic way. Several explanations could be given.

First there is more direct political involvement in making the connection between strategy and structure. Policy (strategy) seems to take a more central throughout the provincial planning process. At the national level, the goal of the planning process is often not primarily based on policy goals, but more on problem-solving (e.g. dealing with traffic jams). Secondly, also, the fact that both strategy and structure are less specific, less legalized and less prone to public political discussion could make it easier fit strategy and structure an enable for better LUTI-performance. At the national level, both the programming and the budgeting are vulnerable to short-term political interference, which could hinder to reaching long-term strategic policy goals. Thirdly, the policy cycle seems to be shorter at the provincial level. This enables the provinces to connect societal developments faster to policy formulation and implementation and make better use of opportunities that are provided. Finally, related to the policy cycle, it could be that structural changes simply take more time at the national level.

As stressed above, the fit is dynamic and both strategy and structure are changing. This also means that we could identify some developments at the national level that may help to catch up with the longer standing practice of integrated development of provinces. A clear example is offered by the Area Agendas. These Agendas appear to be important means to link NOVI and MIRT at the national level. In addition, they are believed to play a crucial role in the vertical integration: linking the national to the provincial strategy and structure. In order to enable the Area Agendas to improve the link between strategy and structure, the structural monitoring and evaluation performance is essential. Only this enables to have a benchmark and subsequently a way to measure the success of the fitting.

Finally, the proof of the pudding is in the eating. This study is not finished, and the development of strategy and structure certainly also is not. Perhaps the only strong indicator for fit is the performance in practice: the degree to which LUTI goals are achieved in projects and programs. Therefore, we would suggest to follow-up this 'paper study' with an analysis of policy implementation in practice.

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