

## **Ambities voor verdere integratie van ruimte en infrastructuur in het MIRT; sluiten strategie en structuur op elkaar aan?**

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### **Samenvatting**

De Nederlandse infrastructuurplanning verandert. In beleid en praktijk wordt steeds nadrukkelijker de koppeling gezocht met ruimtelijke ordening. Het in onderlinge samenhang oppakken van ruimtelijke opgaven lijkt daarbij de achterliggende strategische doelstelling. Samenhang omvat in dit geval de samenhang tussen sectoren, tussen gebieden, tussen schalen en in de tijd. De invoering van de Omgevingswet, de Nationale Omgevingsvisie en het vernieuwde MIRT spelregelkader zullen belangrijk zijn voor mate waarin de strategie daadwerkelijk wordt geïmplementeerd. Dit paper biedt een theoretisch perspectief waarmee op de implementatie van beleid worden gereflecteerd. Het theoretische uitgangspunt is dat de mate van fit tussen strategie en structuur bepalend is voor performance (de realisatie van strategisch doelstellingen), en dus de implementatie van beleid. Zodoende wordt gesteld dat de Omgevingswet en het Spelregelkader MIRT, als structurele elementen in fit moeten zijn met de strategie van de NOVI. Dit Engelstalige paper is een work in progress. Het is de verwachting dat tijdens de presentatie de eerste resultaten kunnen worden gepresenteerd over de onderlinge afstemming (fit) tussen Omgevingwet, NOVI en MIRT.

## **1. Planning and strategic management.**

The way we use and plan our environment is strongly influenced by societal trends. Dynamics in economic, cultural, technological, social and political contexts influence not only the decisions made with regard to land use planning but also the design of the decision making process itself. This makes planning a discipline which is in constant flux. Spatial plans and their underlying decision making processes have to be adjusted to the dynamics and different contexts within society. This also means that there is not one best way to plan in practice. After all, plans need to fit the leading location specific contextual characteristics. In practical terms this implies that policies need to be responsive to societal contexts (external environment) and institutionalized into daily practice to be implemented. As such, planning is strongly associated with, what organizational theory defines as strategic management. Strategic management can be viewed as the blend of strategic planning (policy development) and implementation (Bryson, 2010).

This dynamic interplay between contextual change and strategic adaptation is currently witnessed in Dutch infrastructure planning. Recently, for example, we see a policy shift towards a more area-oriented and adaptive infrastructure planning approach. The multi-level integration of transport and land-use planning and more room to adapt plans to unknown developments seem to be the two main objectives. This is said to better fit the complex, interrelated, unpredictable context, infrastructure planning is embedded in. And a more integrated planning approach is thought to enhance the performance of infrastructure planning by producing better plans and faster realization. Although the potential benefits of this new planning strategy is widely acknowledged, its implementation is proving to be a struggle. Earlier attempts to couple transport and land-use planning had limited success (Lamberigts et al, 2016). Now with the introduction of a new spatial planning act (Omgevingswet), adoption of a new national policy strategy (NOVI), and the revision of current infrastructure planning programming budgeting system (Vernieuwing MIRT) the implementation of a new style of infrastructure planning is getting a good push.

This paper formulates a strategy-structure framework, introduced from organizational literature, which could be used as a framework to reflect on this policy shift in infrastructure planning practice. The framework can be used to assess and reflect on policy implementation. The organizational theoretical principle that strategy and structure should be in fit to achieve strategic goals is used as theoretical principle. The goal of this paper is to elaborate and motivate the theoretical foundation upon which the model is built and orient upon its applicability in context of Dutch infrastructure planning. During the presentation the researchers will elaborate on this in more detail and connecting it with empirical data.

## **2. Towards an area oriented infrastructure planning.**

Transport infrastructure has an important, defining influence on our living environment. Infrastructure facilitates the transport of people and goods, thereby enabling the spatial

dispersion of functions and activities we see around (Wegener & Füst, 2004). As such infrastructure planning is key for shaping our future society and economy. Furthermore, the integration of transport and land use planning has been widely recognized as an essential, but often neglected, precondition of sustainable development (e.g. Wegener and Fürst, 1999; Priemus et al., 2001; Meyer & Miller, 2001). As EU commissioner Violeta Bulc accurately formulated it "If transport stops everything stops" (Bulc, 2015). Transport infrastructure is therefore much more than asphalt, concrete or steel; it is the backbone of national economy, providing connections for people and goods, access to jobs and services, and enabling trade and economic growth (International Transport Forum, 2013, p.32). Despite this cross sectoral influence of transport, the planning of transport infrastructure (hereafter referred to as infrastructure) is characterized by a sectoral, line-oriented planning approach. This infers that mobility interest and network performance are dominant influences in defining infrastructure projects. Cross sectoral influences of infrastructure planning receive minimal attention in current infrastructure planning and decision making processes.

In several countries infrastructure planning is slowly moving away from a sectoral, line-oriented style of planning towards more integrated approach. This shift has two main drivers. (1) Sectoral infrastructure planning has shown to lead to intersectoral conflicts and social resistance, contributing to budget and time overruns. (2) Due to a narrow, single scale, line-oriented focus, potential social and economic revenue is missed. Horizontal (across disciplines) and vertical (across scales) integration of infrastructure plans is thought to lead to more efficient planning processes and enhance the public value of projects (e.g. Arts et al, 12; Arts et al, 2014; Hull, 2010). By finding synergies across sectors and coupling ambitions between administrative layers, integrated infrastructure planning projects can contribute to diverging policy goals (e.g. social cohesion, economic growth, urban development, public health, safety, ecological quality and a sustainability).

This study focus on the Dutch planning context, where the integration of infrastructure and land-use planning across scales is currently high on the political agenda (MinIenM, 2016). In addition to the perceived benefits, mentioned before, the implementation of a new Spatial Planning Act (Omgevingswet) is a strong stimulus for implementing a more area-oriented infrastructure planning approach. The Omgevingswet and its associated national environmental policy strategy (NOVI) focus on approaching land-use planning related challenges in an integrated way. Currently, along the revision of the infrastructure planning, programming and budgeting system (MIRT) such a new decision making process is being constructed along the principles; broad scope, custom-fit and collaboration. The implementation of this new infrastructure planning strategy, is proving to be a challenging task (Lamberigts et al, 2016). Existing formal and informal institutional context are considered one of the main bottlenecks impeding the implementing of this new approach. These are still oriented on formulating infrastructure projects based on mobility targets and focus on managing project outputs in time, budget and scope. This institutional structure fits awkwardly with the principles of adaptive and integrated infrastructure planning approach which are oriented on achieving wider social goals (public value) through flexible governance networks structures and emphasize on front-end involvement of diverse actors (Elverding, 2008). This misfit needs to be overcome for enhance the flexibility the broader societal value of

infrastructure projects. This will be discussed in more depth in §4, after an theoretical reflection.

### **3. The strategy – structure- performance contingency model**

Contingency theory has been developed within the broad domain of organizational theory. Put very simplistically, contingency theory states that the effect of variable X on variable Y is depending on the influence of a third variable (W) (Donaldson, 2001), a so called moderator, conditioning or contingency variable (Galtung, 1967). In general organizational theory is focused on explaining and enhancing organizational performance. Performance is therefore taken as the outcome variable (Y). A contingency is any variable that moderates the effect of an organizational characteristic on organizational performance. Contingency theory has shown to be much encompassing, allowing for a diverse way of specific interpretations. All of which share the fundamental principle that there is no single best way to manage an organization. The ideal course of action is contingent upon the extent to which external and internal attributes are in fit, as that will benefit organizational performance (Burton & Obel, 2004). This fit-performance relationship is at the core of the contingency theory paradigm (Donaldson, 2001).

#### *3.1 Structural contingency.*

Structural contingency focusses on organizational structures as moderator variable, and is considered as one of the dominant, and most researched contingency paradigms. In line with general contingency thinking its central argument contingency theory is that there is no 'one best way' to structure an organization. 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 corporations whereby changes in strategy eventually were followed by changes in organizational structures. So internal organizational structures need to fit the adopted strategy (Burton & Obel, 2004). And strategy is the leading variable here, structure follows. In response, a counter proposition of hypothetical nature, is introduced by Hall & Saias (1980), suggesting that strategy follows structure. They argue that strategic choices are determined by structural attributes. Mintzberg (1990) offers a synthesizing perspective, arguing that the relationship between strategy and structure is reciprocal: "structure follow strategy...as the left foot follows the right"( p. 183). Amburgey and Dacin (1994) elaborate on this and argue that strategy is more significant in forming structure than structure is in forming strategy. Regardless of this discussion it is widely acknowledged that must be a fit (Naman & Slevin, 1993). The degree of fit can be positively linked to performance (Donaldson, 1987). As such strategy and structure should be symbiotic, and fit between the two attributes is deemed to be very important for successful strategy implementation (Burton & Obel 2004; Ketchen et al, 1997).

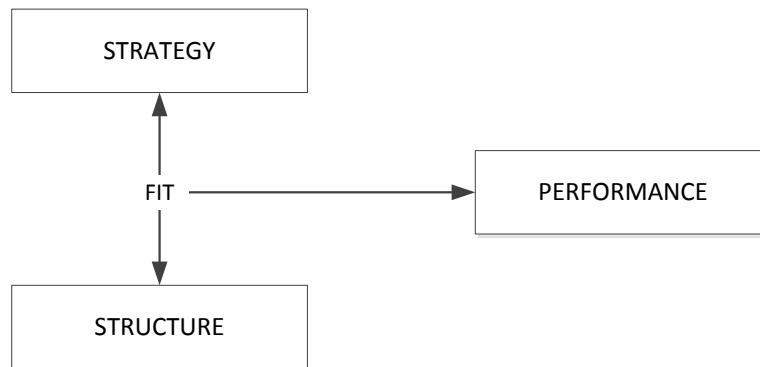


Figure 1. The strategy – structure – performance contingency model.

### 3.2 Strategy.

Throughout literature many different definitions can be found for strategy. In general they are in line with Olsen & Eadie's (1982) conceptualization. They define strategy as "decisions and actions that shape and guide what an organization (or other entity) is, what it does, and why it does it" (p.4). A strategy defines long-term goals and objectives and formulates a course of action necessary for carrying out these goals (Chandler, 1962). A strategy is constructed during what Bryson (2010) refers to as process of strategic planning "a deliberative, disciplined effort to produce fundamental decisions and actions that shape and guide what an organization (or other entity) is (its identity), what it does (strategies and actions), and why it does it (mandates, mission, goals)" (p.256). During this process of strategic planning strategic choices are made by individuals and groups of individuals. Child's (1972) work on strategic choice helps to conceptualize the role of strategy in relation to context and structure. Strategic choice theory describes a critical role of decision-makers in interpreting the organization's position in contextual conditions. 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. In this context, strategic management is about adjusting the relationship between an organization and its environment, and that internal structures and processes in turn must fit the strategy of this adjustment is to be successful (Andrews et al, 2009).

### 3.3 Structure

Structure is hard to pinpoint in an explicit definition. Hall (1991) uses building structures as an analogy which helps in understanding and explaining structure: "Buildings have structures, in the form of beams, interior walls, passageways, roofs, and so on. The structure of a building is a major determinant of the movements and activities of the people within it. Buildings are supposed to have structures that fit the activities that go on within them. An office building is different from a factory. Factories where automobiles are made are different from those where computers are made.... Buildings in Minnesota are different from those in Arizona...Buildings also reflect the value and ideologies of the

persons in control” . Although this analogy is not perfect, it does reflect the basic conception of what is referred to in this paper as structure. Structure is seen as a vital tools to undertow strategy implementation and achieving the intended performance (Potts et al, 2014). This is because structures are largely responsible for running operations, and therefore key in producing outcomes (Dauber et al 2012). Structures can for example help in the channeling of collaborations and specific modes of coordination (Miller, 1987).

Organizational structures can take a wide variety of different forms. Elements which are traditionally included in the concept of organizational structure (division of labour, formalization, centralization etc.) represent only a small share of the structural traits that are relevant for influencing operations of action and interaction (Bouchikhi, 1998). Therefore this paper relates to a broad interpretation of structure. Structures are considered to be elements which have a structuring (enabling or constraining) influence on operations. Structures can be both formal (e.g. legislation, policies, formal rules) and informal (e.g. cultural habits, attitudes etc.). Especially these cultural patterns; the form, beliefs, norms, social patterns, the way things are done, which are included in organizational (Burton et al, 2004) structure are challenging to apprehend.

### *Performance*

Organizational performance is in itself a broad notion including a variety of measurements such as resource efficiency, profitability, customer satisfaction etc. A suiting appellation for performance is ‘the ability to attain self-set goals’ (Parsons, 1961). Traditionally organizational literature defines performance as conformance. Conformance to predetermined, specific, measurable goals, usually in terms of economic output. This measure does not fit the nature of planning, which relates to the domain of public management. Since, as Allistons (1983) puts it: “public and private organizations are different in key aspects”. Public organizations have multifunctional considerations (unlike private organizations, having profit or economic surplus as superior consideration) (Christensen, 2007). The public sector should not have one specific interest, but must serve society as a whole, performance should then be a measure of the total achieved value for society (Jørgensen & Bozeman, 2007). This more qualitative approach to performance is the outcome of an intersubjective evaluation reflecting on for who policy resulted in which gains and losses (Barrett, 2004).

Regardless of the type of performance an organization is pursuing. Organizational structures and strategy-making are highly interdependent. And multiple scholars claim they be should be in fit to achieve good performance (e.g. Miller, 1987). A key aspect of implementing strategy is to institutionalize that strategy to determine that operational decisions and actions occur in accordance with the long term strategic objectives. As such processes defining strategies and structures should be mutually supportive of each other. This perspective is used to reflect on current developments in Dutch infrastructure planning.

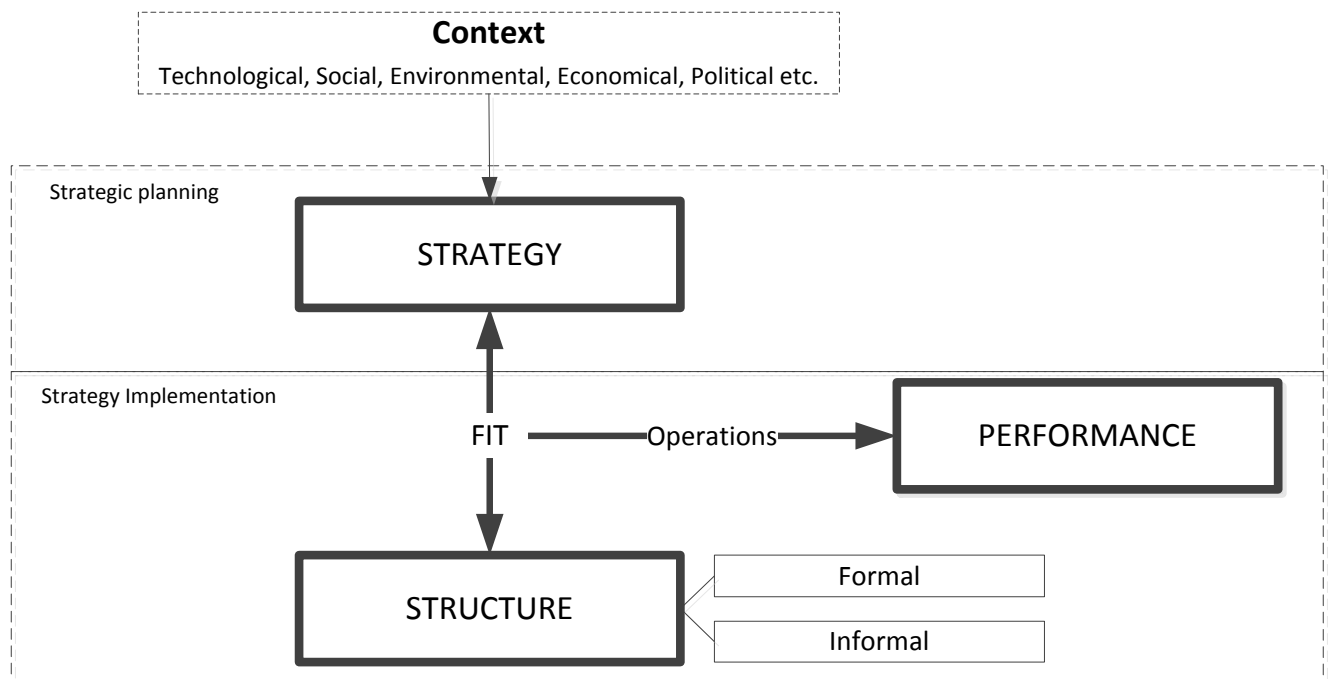


Figure 2 the strategy-structure-performance framework.

#### 4. Reinterpreting the model in context of Dutch infrastructure planning.

Inspired by the above mentioned move toward more area-oriented infrastructure planning, the field of Dutch infrastructure planning now transforming. Three distinctive processes can be defined which will be influential in shaping this transforming and determining its future practice. First; the introduction of the Omgevingswet as the new comprehensive law for spatial planning. Second; the introduction of the Nationale Omgevingsvisie (NOVI) as the new national, long-term, national integrated spatial planning policy strategy. Third; the renewal of the Dutch infrastructure planning programming and budgeting system (MIRT). Each will be discussed below and linked to the strategy-structure performance framework above.

##### 4.1 Omgevingswet, the new spatial planning act stressing the reciprocity between spatial challenges.

In 2019 the Omgevingswet(OW) will replace the currently valid Act Wet ruimtelijke ordening (Wro). The underlying trigger for revising existing spatial planning legislation are the great number of sectoral acts forming a complex, incoherent and dispersed legal framework. Practise has shown this to be a barrier for the development and assessment of integrated spatial policies. The introduction of the Omgevingswet is thought to affect all spatial planning sectors as it will affect the relationship between state, market and civil society, and the orientation of decision-making processes (RLI, 2015). The Act defines three goals which are relevant for infrastructure planning practise.

- Achieving a integrated, coherent approach on the physical living environment in policy, decision making and legislation.

- Enhancing the room for governance dynamics by enabling a more active and flexible approach through which goals for the physical living environment can be achieved.
- Improving the phase and quality of decision making on projects in our physical living environment.

More general, the Omgevingswet aims at striking a new balance between protecting the existing and enabling development (*beschermen en benutten*). This implies the rebalancing of four dimensions.

Government – Society (overheid – samenleving): Due to reducing state investments, and growing involvement of market and civil society, spatial planning and policy making is no longer a governmental endeavour. In contrast, state has become interdependent of state and civil society for successful implementation and realization of plans and policies. In the Netherlands this resulted in the introduction of a planning and policy making approach which aims at inviting state and civil society initiative and innovation (uitnodgingsplanologie). In line with findings of Elverding (2008), the Ministry underlines the importance of front-end involvement of diverse actors. This is considered to be important for generating the broad public support required to speed up the currently often lengthy and expensive decision making processes (Elverding, 2008).

Sectoral – Integrated (sectoraal-integraal): Already for a long time planning research and practise show that the borders between spatial sectors are blurring (e.g. WRR, 1998). Spatial challenges transcend sectoral borders. As such the demand for an integrating framework with which the broad nature of spatial challenges can be approached. An integrated approach can be beneficial if the complexity of the situation requires it (RLI, 2015).

Decentral – Central (Decentraal-centraal): This dimension relates to the concept of multi-level governance. Multi-level governance describes how decision making competences are shared amongst actors at different government levels (national, regional and local) (Marks et al, 1996). Spatial challenges cross governmental levels and borders, therefore requiring a collaborative approach. The regional scale is considered to be an appropriate level at which this horizontal and vertical integration can occur (Rli, 2015).

Legal certainty – Flexibility (Rechtszekerheid – flexibiliteit); Legal certainty has always been fundamental principle in Dutch spatial legislation. Due to the growing dynamics and complexity of society a need arises for more flexibility to enable a more context specific approach. Flexibility is need content wise, the legal certainty should focus on setting planning and decision-making procedures and formulating clear policy assessment criteria's (Rli, 2015).

#### *4.2 NOVI a new national strategic framework for the physical environment.*

The Nationale Omgevingsvisie (NOVI) is a prominent figure in the Omgevingswet. In the grounds of the law it is defined that the NOVI is, amongst other things, establishing integration between space, water, environment, nature, landscape, traffic and transport, infrastructure and cultural heritage on national level. In practice these policy domains



still operate independent of each other (PBL, 2016). The conception of the Government is that this integration is a condition for achieving sustainable development of the physical living environment. The NOVI, as an overarching strategic perspective, is important for giving guidance content to this integration (Parliamentary Papers II 2013-14, 30 578, nr. 3). Achieving an integrated perspective on spatial development in which several elements of space is approached in coherence is a central goal for the NOVI. PBL (2016) state this strategic goal has four main dimensions; integration between sectors, areas, across scales, and in time (figure...). The NOVI is currently under development and will replace current The National Policy Strategy for Infrastructure and Spatial Planning (SVIR).

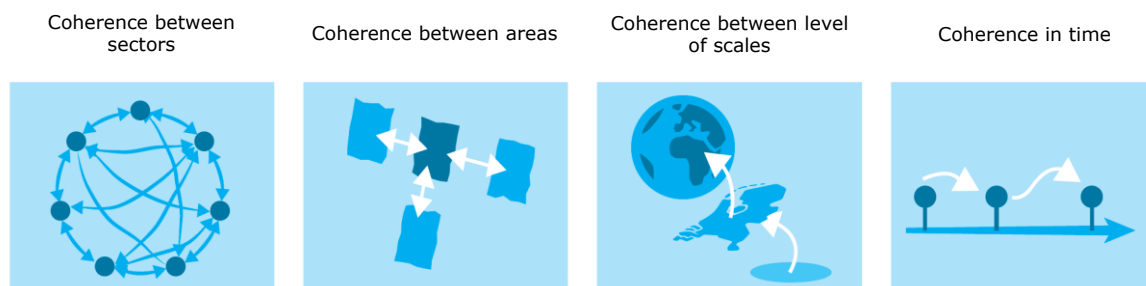


Figure 3: The four dimensions of coherence.

#### 4.3 Vernieuwing MIRT, renewing infrastructure planning programming and budgetting system.

The roots of the MIRT can be found in MIT, which was implemented during a period of New Public Management . The MIT (Long-range Infrastructure and Transport programme) was introduced as planning, programming and budgeting control system to operationalize controllability, transparency and output steering. The MIT directed the decision making process of infrastructure projects from initiation to realization in a step-by-step, sector oriented fashion. This line-oriented approach has shown to lead to inter-sectoral conflicts, social resistance, and budget and time overruns (van den Brink, 2009; Heeres et al, 2012). Elverding (2008), reported on the options for revision Dutch infrastructure planning system to improve the speed and quality of infrastructure plans. In line with these findings MIT was transformed to MIRT in 2008 (R stands for 'ruimte': space) to emphasize cross sectoral nature of infrastructure planning and establish a more area-oriented infrastructure planning. Despite multiple efforts, Lamberigts et al (2016) concludes that area oriented infrastructure planning is limited. Current institutional infrastructure planning context is still oriented on the more tradition, project oriented planning approach. The MIRT rules are currently being revised along the principles broad scope, custom-fit and collaboration (brede blik, maatwerk & samenwerking) (MinIenM, 2016).

## 5. Discussion/Conclusion.

In general there is a development towards a more integrated infrastructure planning due to growing recognition of the reciprocity between transport and land-use. Also in Dutch

planning context, where infrastructure planning is at a tipping point, this development can be witnessed. The new national policy strategy (NOVI), new Spatial Act (Omgevingswet) and de revised infrastructure planning, programming and budgeting rules (Vernieuwing MIRT) will be influential in (re)shaping the practise of infrastructure planning. These developments can be interpreted as a change in strategy and structure.

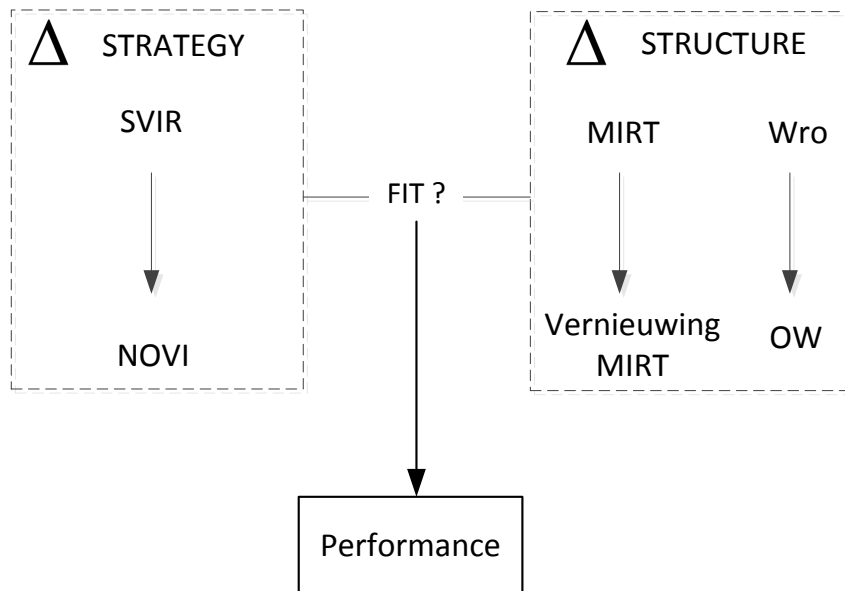


Figure 4. visualises these developments with the strategy-structure framework.

In general it can be stated that it is required that strategy principles are translated into institutional arrangements (structures) which mediate and steer operations. The fit between strategy and structure is deemed an important condition for successful policy implementation. This makes the question: to what extent does the structure of MIRT and Omgevingswet fit the strategic goals of the NOVI. Answering this question will help in assessing the extent to which structures facilitate the implementation of the new strategic principles. This is expected to reveal which structural conditions are hampering and stimulating implementation. To determine to what extent the strategy of NOVI and structural elements associated with the MIRT and Omgevingswet (OW) are in fit requires a more in depth analysis. This will be performed by the researchers in the coming weeks. We expect to present some of our findings during the CVS congress.

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