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Edited by Roberto Rocco, Gregory Bracken, Caroline Newton & Marcin Dąbrowski







Teaching, Learning & Researching Spatial Planning

TOOLS, CONCEPTS AND IDEAS TAUGHT AT THE SECTION OF SPATIAL PLANNING AND STRATEGY OF THE OF URBANISM, FACULTY OF ARCHITECTURE AND THE BUILT ENVIRONMENT DELFT UNIVERSITY OF TECHNOLOGY, THE NETHERLANDS.

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Spatial Planning Policy Tools A conceptual model*

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This chapter outlines a conceptual model for understanding the range of policy tools which can be used in spatial planning. The classification of tools builds on the NATO model (nodality, authority, treasure, and organisation) proposed by Christopher Hood (1986) and differentiates between two separate functions of policy tools: substantive and procedural. Substantive policy tools refer to those which directly affect the delivery of the goals of a plan, while procedural policy tools refer to those which affect the process and procedure of developing or reviewing a plan. A further distinction is made between tools used for the activities of plan-making (and review), development control and plan enforcement, since these activities make use of different types of tools.

SPATIAL PLANNING, POLICY TOOLS, PLAN-MAKING, DEVELOPMENT CONTROL, PLAN ENFORCEMENT

* This chapter is an abridged version of an article published in the Journal of Planning Literature (Stead, 2021).

1. Introduction

The governance of spatial planning has been analysed and compared in several recent publications (e.g. Knapp et al, 2015; Reimer et al, 2014; Schmitt & Van Well, 2016; Nadin et al, 2018). Each of these studies illustrates the diversity of planning practices and approaches depending on specific social, economic, environmental, and social contexts. A relatively underdeveloped feature of this literature is the types of policy tools that are used (or could potentially be used) for spatial planning. In general, conceptual thinking about policy tools used in spatial planning is relatively limited and not always consistent (Stead, 2021).

While the policy studies literature contains a number of extensive accounts of public policy tools (e.g. Hood, 1986; Howlett, 2000; Salamon, 2002), this literature has largely been overlooked in studies of spatial planning. Many of the most frequently cited tools of spatial planning are regulatory (e.g. conservation orders, land appropriation, environmental impact assessment). In practice, however, spatial planning involves a much wider range of policy tools than regulation alone, as proponents of communicative and collaborative planning theory have recognised for some time (e.g. Forester, 1993; Healey, 1997; Innes & Booher, 2010). Nevertheless, there is still a general tendency in planning literature to emphasise regulatory tools above most others. According to Rydin (1998), regulation is the 'fundamental policy tool available to the planning system [operating] at different levels and on different aspects of the built environment' (754). At the same time, Rydin explicitly recognises that achieving planning goals such as sustainability and social cohesion requires

more than regulation alone: these goals demand additional policy tools. This chapter sets out a framework for categorising, analysing, and comparing spatial planning policy tools. It does so by building on literature from policy studies which has been applied to other areas of decision-making, including energy and urban policy (Acciai & Capano, 2021).

2. Understanding policy tools

Various taxonomies for categorising policy tools were developed and proposed during the 1980s and 1990s (see for example Hood, 1986; Vedung1998; Howlett, 1991). Of the various taxonomies of policy tools that were proposed, one of the most wellknown is the model developed by Hood (1986) which classified policy tools into four sets using the NATO mnemonic: 1) nodality (i.e. information-based), 2) authority (i.e. regulatory), 3) treasure (i.e. fiscal), and 4) organisation (i.e. direct action by government). Hood also distinguished between policy tools designed to effect change in a policy environment and those designed to detect changes in it, which he termed 'effectors' and 'detectors' respectively (see Table 1). This model has since gained widespread use in many areas of public policy-making, although Hood's classification of policy tools has seldom appeared in spatial planning literature to date. Meanwhile, Hood's 'effectors' and 'detectors' have largely been replaced by the distinction between substantive and procedural tools (Howlett, 2000). Substantive policy tools refer to those which directly affect the delivery of policy goals while procedural policy tools refer to those which affect the process and

	Nodality	Authority	Treasure	Organisation
Detectors	Surveys	Registers	Consultancy ser-	Coastguard
(to detect change)	Information colla-	Censuses	vices	Public archives
	tion	Inspections	Paid informers	
	Registration			
Effectors	Advice	Certification	Grants	Quarantines
(to effect change)	Promotion	Licences	Loans	Bonded ware-
	Reminders	Prohibitions	Subsidies	houses
	Training	Patents	Taxes	Customs

Table 1: Hood's taxonomy of policy tools with selected examples.

procedures of developing policy. These two types of tools are closely interlinked: procedural policy tools support the functioning of substantive policy tools. For example, procedural policy tools structure how policies are formulated, implemented, and evaluated by government actors and agents (Howlett, 2000). In the context of spatial planning, procedural policy tools can be utilised to facilitate interaction and consensus-building between stakeholders in order to generate or strengthen support for policy goals or initiatives (Runhaar et al, 2009; Macintosh et al, 2015).

Three of the four main types of tool (i.e. nodality, authority, and treasure) contained in the NATO model require little further explanation. However, a short explanation is provided about the tool of organisation since its meaning is not straightforward to fully understand from its name alone. The tool has less to do with how government is organised or structured (as might be implied by the name) and more to do with the agencies, services, amenities, facilities, or infrastructure which governments provide directly. While recognising that these types of tools often require a combination of nodality, authority, and/or treasure tools, to put organisation tools in place, Hood classifies them as separate and distinct tools and describes them in terms of the 'stock of land, buildings and equipment, and [...] individuals with whatever skills they may have, in the government's direct possession' (72) which 'enables government to act directly on its subjects, their property or their environment' (73). Hood also refers to some examples of organisation tools that are particularly relevant to spatial planning, stating that government 'may provide for the welfare of its subjects in general by facilities such as parks, gardens, bridges, dykes and dams' (80). In addition to these different forms of physical capital or infrastructure, it is also important to note that organisation tools related to spatial planning can also include the stock of human capital and skills in the government's possession, notably the stock of public officials involved in developing, implementing, or enforcing spatial planning policy. In a number of contexts, the stock of human capital involved in spatial planning under the direct employment of government has been in decline in recent years and/or has been redistributed across public, private, and voluntary sectors as part of the hollowing-out, contractualisation, and outsourcing of government (Grijzen, 2010; Raco, 2013; Lennon, 2019).

Hood's taxonomy, and others developed around the same time, generated a new academic literature on policy tools (Howlett, 2000). Initially, the majority of this literature focused on substantive tools – those that directly affect the production and delivery of goods and services in society. Less attention was devoted to the systematic analysis of procedural tools – those intended to support substantive policy tools by for example managing state-societal interactions in order to assure general support for government aims and initiatives – despite the fact that they can be categorised in a similar way to their substantive counterparts, and have an equally important role in determining outcomes. Even now, attention to procedural policy tools in the academic literature is less prevalent than attention to substantive tools. This is true for the policy studies literature in general as well as the spatial planning literature in specific (discussed below). However, this is not to say that procedural policy tools have been completely neglected. Bressers and Klok (1988), for example, describe how various procedural policy tools involving the creation, provision, and diffusion of information to policy actors can affect the level of support for policy. Their work helps to identify a range of procedural policy tools, such as education, training, institution creation, the provision of information, formal evaluations, and hearings.

Literature on spatial planning and governance contains very few explicit references to the literature from policy studies (see above). Moreover, there are very few definitions or taxonomies of policy tools in the spatial planning literature. The situation is summarised by Van den Broeck (2008) who states that although 'planning theory is basically all about planning tools, there is, however, hardly any literature that theorizes the concept of planning tools' (262). A recent review of literature on spatial planning policy tools reveals substantial variations in how policy tools themselves are understood (Stead, 2021). To date, most discussions of spatial planning policy tools place more emphasis on substantive rather than procedural tools.

3. Categorising policy tools in spatial planning

When considering procedural policy tools for spatial planning, a distinction can be made between the tools used by public officials for distinct parts of the process since different types of tools are required. In this paper, a distinction is made between three parts of the planning process:

- 1. plan-making (and review)
- 2. development control
- 3. plan enforcement

Plan-making refers to the genesis, approval, and subsequent evaluation and revision of a spatial plan – the document which specifies the desired type, scale, and location of future development, and which may also specify the policies or rules to be adopted in order to achieve this desired vision. Development control refers to the granting of permission for development, a process involving the assessment of the compatibility of the proposed development (e.g. residence, office, shopping centre) with the aims and policies of the plan. Plan enforcement is concerned with ensuring that urban development takes place in line with a plan and, in cases where it does not, taking action to address the situation. In other words, there is one set of tools which can be used to influence the process of plan-making, a second set which can be used in the process of fulfilling or realising a plan's ambitions, and a third set which can be used to detect and act against contraventions to the plan. To date, such a distinction has not been made in the literature on spatial planning policy tools. Examples of procedural and substantive policy tools for plan-making (and

		Nodality	Authority	Treasure	Organisation
Procedural	Plan-making (and re-	Public exhibi-	Strategic envi-	Reward/ incen-	'Urban experi-
tools	view): to secure pub-	tion and con-	ronmental as-	tive for in-	ment' (e.g. tem-
	lic/political support	sultation	sessment	volvement of	porary
	for a spatial plan and			interest groups	parklet[1])
	any revisions to it				
	Development control:	Public consul-	Environmental	Commissioned	Aesthetic con-
	to test the fit between	tation and	impact assess-	independent	trol committee
	the proposed develop-	scrutiny	ment	assessment	
	ment (e.g. residence,	-			
	factory, office, shop-				
	ping centre) and the				
	aims of the spatial				
	plan				
	Plan enforcement: to	Public infor-	Enforcement	Fines	Imprisonment
	address cases of non-	mation about	notice		
	conformance between	reporting non-			
	development and the	compliance			
	aims of the spatial				
	plan				
Substan-	To deliver the ambi-	Non-binding	Greenbelt;	Tax relief for	Provision of fa-
tive tools	tions of the plan (i.e.	policy advice	Urban growth	land remedia-	cilities (as a
	to deliver develop-	or guidance	boundary;	tion; Tax cred-	catalyst for ur-
	ment congruent with	5	Zoning ordi-	its for rehabili-	ban develop-
	the plan)		nance	tation of his-	ment)
				toric buildings	/

Note: [1] A parklet is a sidewalk extension that provides more space for public street amenities (e.g. green space, seating, art works). Parklets are typically created by using parking lanes.

Table 2: Categorisation of procedural and substantive tools for spatial planning with selected examples.

review), development control, and plan-enforcement are presented in Table 2.

It should be noted here that the distinction made here between three aspects of the planning process (plan-making, development control, and plan enforcement) is separate to a distinction based on the main stages of the policy cycle (see, for example, Howlett, 2019). The relationship between the three aspects of the planning process is illustrated in Figure 1. All three aspects of the planning process have their own distinct policy cycles, involving different starting points, stakeholders, and timescales. In the process of plan-making (concerned with the genesis, approval, and revision of a spatial plan), decisions are made regarding the content of a spatial plan (and accompanying policies) which typically has a time horizon of 10-20 years. This decision-making process can involve several iterations before a plan is approved and may involve multiple inputs from a wide set of stakeholders, including citizens, businesses, and NGOs. This process may also involve inputs not only at the plan approval stage but also when a plan is periodically evaluated and revised (Alexander, 2006). Meanwhile, the process of development control (concerned with granting permission for development proposals) is shorter in duration than plan-making, typically within a prescribed number of weeks after the submission



Figure 1: Relation between plan-making, development control and plan enforcement.

of a planning application. Decision-making is instigated by the submission of a planning application: no decision is needed if no proposal is submitted. In this case, decision-making involves inputs from a less diverse set of stakeholders than the process of plan-making, often limited to those with a direct interest in the development being proposed (e.g. land-owners and residents directly adjacent to the proposed development). Thirdly, the process of plan enforcement is either instigated by the planning authority's own monitoring activities (e.g. on-site checks) or via information from third parties (e.g. NGOs, neighbours). No decision about plan enforcement needs to be made until a policy breach is noticed and reported. Decision-making about plan enforcement involves relatively few inputs from stakeholders.

3.1 Procedural tools for plan-making

Procedural tools for plan-making refer to the tools which can be used to influence public or political support in the genesis and approval of a spatial plan (and any subsequent amendment). A range of nodality, authority, treasure, and organisation tools, as outlined below, can be used for this purpose.

• Nodality. There are several tools of nodality to secure public or political support for a plan, such as outreach activities to consult, inform, and persuade. Public consultations and exhibitions are typical examples where information can be gathered from stakeholders to generate (or co-create) the ambitions of the plan before or during its formulation, or where information can be presented to stakeholders to convince them about the content and direction of the plan. Clearly, the number and type of stakeholders involved in these processes, as well as the stage of decision-making during which they are involved, has an important impact on the level of support which can be achieved for the plan. Also crucial for the level of support for a spatial plan is the way in which the benefits or advantages of a plan are formulated and communicated to different stakeholders.

• Authority. Strategic environmental assessment (SEA) is a statutory planning tool in many countries (including all European countries) which is designed to ensure that the environmental consequences of strategic decisions are identified and assessed during the plan preparation process and before plan adoption (Sadler et al, 2011). A key idea behind SEA is that the technique improves the information basis for planning by providing insights into possible consequences, as well as identifying alternative options and measures that can avoid negative impacts. Clearly, the statutory requirement to conduct an SEA can lead to amendments during the plan-making process, thereby affecting the content of a spatial plan.

• Treasure. Policy tools which provide rewards or incentives to promote the involvement of certain interest groups in plan-making can be classified as procedural policy tools related to treasure (i.e. fiscal tools). The state-funded Landcare Australia programme is an example of this type of tool, to which Curtis and Lockwood (2000) refer as a state-sponsored (i.e. state funded) mode of community participation. Landcare Australia is a government funded programme which supports local Landcare groups, community not-for-profit organisations involving groups of volunteers who work on projects to repair and improve the natural environment. Representatives from these local Landcare groups are represented on regional Catchment Management Committees and other important fora and make significant contributions to natural resource management decision-making (Curtis et al, 1995). Other fiscal tools that can be used to affect procedural aspects of plan-making include the hiring of planning consultants to organize citizen participation processes for urban planning (see, for example, Grijzen, 2010; Stapper et al, 2020), and the use of financial incentives (e.g. prize draws) to encourage public responses to draft plans. These tools not only influence the number and type of stakeholders involved in the plan-making procedure but also potentially influence the spectrum of responses that are submitted (as a consequence of who is included and excluded, or supported and unsupported) in the participation process.

• Organisation. An organisation tool 'enables government to act directly on its subjects, their property or their environment' (Hood, 1986: 73). This type of tool encompasses a range of possible interventions, including 'urban experiments' - temporary physical structures that could be used to demonstrate the benefits or advantages of proposals contained in the plan and, as such, influence public or political opinion and support during the process of plan-making. One specific example of a temporary experiment is a parklet where new space for public street amenities (e.g. green space, seating, art) is created by removing existing carriageway or car parking spaces. This could be used to physically demonstrate the impact of extending pedestrianised areas and/or removing car parking. A separate example of an organisation tool which can affect the plan-making process is the creation of new organisational structure or entity in government. For example, interdepartmental commissions have been employed alongside informal processes

of consensus-building in the Netherlands as means of influencing and persuading ministers from other government departments to support national spatial plans (Grijzen, 2010).

3.2 Procedural tools for development control

Procedural tools for realising the ambitions of the plan refer to the tools which can be used to test public or political acceptability of a new development proposal.

• Nodality. Public consultation in spatial planning is generally not only limited to the process of plan-making: it also extends to the development control process. In most countries, the nodality tool of public consultation forms an important part of the process in which planning authorities (usually local governments) decide whether to grant permission for development. Applications for planning permission typically involve consultation with neighbouring residents and businesses as well as statutory consultees (e.g. authorities responsible for environment, transport, archaeology). Seemingly simple rules about which residents and businesses are allowed to express their views about proposed development, and the way in which they are informed, can potentially have important impacts on the overall level of public or political support and acceptability for a development proposal. In the United Kingdom, for example, local planning authorities have some choice in deciding how to notify neighbours for certain types of development (e.g. site notice or letter), which can potentially affect the number of responses.

• Authority. Environmental impact assessment (EIA) is applied to development control in a similar way that strategic environmental assessment is applied to plan-making (see above). It is an example of a procedural policy tool of authority that can potentially influence public or political support in the development control process. EIA is used to identify the environmental impacts of a development (during all its phases – construction, operation, and decommissioning) prior to decision-making. The tool seeks to predict environmental impacts before development starts, to identify ways of mitigating potentially adverse impacts, and to present the predictions and options to decision-makers. In Europe, EIA is a statutory planning tool for development proposals of large projects such as power stations, refineries, chemical plants, airports, motorways, waste disposal installations, dams, guarries, and major power lines. While the content of EIAs is prescribed by regulation, the way in which the impacts and mitigation measures are presented can vary. Clearly, EIA is an important tool in shaping the public or political acceptability of a new development proposal.

• Treasure. An example of a treasure-related procedural policy tool which can be used in the development control process is the commissioning of independent reports or assessments from specialist consultants on the impacts (economic, social, environmental) of proposed development. These assessments may be externally commissioned by planning authorities for several reasons. One reason could be the lack in-house capacity (expertise and/ or time). Another reason could be the objective of reaching a more independent, trusted assessment, particularly in the case of more contested development proposals where certain parties stand to gain or lose substantially from the development. A third reason could be that an independent assessment is commissioned as a way of reducing the likelihood of legal challenges (by the developer or the opposing party) after a decision has been made by the planning authority to grant or deny planning permission. Whatever the reason for commissioning these independent reports or assessments, their content is likely to sway public or political opinions to some degree about the acceptability of a new development proposal.

• Organisation. The inclusion of an aesthetic control committee or a similar body (e.g. architectural advisory panel, design review board, urban design panel) in the development control process can influence the final decision that a planning authority makes about a development proposal. It can also affect the conditions applied to development if planning permission is granted (e.g. building height, orientation, shape, materials). Various forms and remits of aesthetic control committees can be found in countries such as Canada, the Netherlands, New Zealand, United Kingdom, and United States. In the Netherlands, aesthetic control committees, mainly comprising nominated independent experts in architecture and spatial planning, were made statutory by the 1962 Housing Act (up to 2013 when the spatial planning system was decentralised), thereby introducing a new procedure for evaluating planning applications (Nelissen, 2002). As with any committee, its composition (e.g. disciplinary representation; aesthetic preferences; expertise) can play an important role in the type of advice or recommendations that it provides.

3.3 Procedural tools for plan enforcement

Most forms of physical development are subject to prior approval by the responsible planning authority (i.e. the granting of permission to develop). Certain categories of development are exempted, mainly in cases where development is minor (e.g. a small extension to a home). Where development has taken place (or is taking place) without necessary approval (e.g. construction of a building or the change of use of a building without obtaining permission, unauthorised change to a protected building, non-compliance with the conditions attached to planning permission), the planning authority can take action to address the situation. To do so, it can draw on a variety of policy tools that include Nodality, Authority, Treasure, and Organisation. Since effective tools for the enforcement of planning control are generally considered necessary for increasing overall compliance with the planning system, all tools for plan enforcement can be considered as procedural in the sense that they are a pre-condition for substantive planning policy tools to function effectively (c.f. Howlett et al, forthcoming).

• Nodality. One example of a tool of nodality is the provision and promotion of public information about how to report suspected incidences of non-compliance. In some countries, public reporting (rather than official surveys or inspections) is one of the main ways of identifying non-compliance with planning rules.

• Authority. Where development does not conform to the plan, or the conditions attached to planning permission, the planning authority often has statutory powers to take enforcement action, resulting, for example, in obtaining a court ruling requiring a retrospective application for planning permission to be made, or for actions to be undertaken in conformance of the conditions of the permission granted, or for the development to be removed and the site returned to its prior condition.

• Treasure. Fines are also used as a sanction against development taking place without the necessary approval. In some cases, the calibration of the fine is related to the severity and/or frequency of non-compliance (e.g. Ireland – see Department of Environment, Community and Local Government, 2012).

• Organisation. Although an extreme sanction, imprisonment can also be used as a policy tool (in addition to or instead of a fine) in some countries where non-compliance is considered serious. In Ireland, for example, penalties for breaching planning law vary according to the seriousness of the case. Offences involving the construction of unauthorised development carry a maximum penalty of €5000 or six months in prison or both (Department of Environment, Community and Local Government, 2012).

3.4 Substantive tools of spatial planning

Substantive policy tools are more commonly discussed than procedural tools in the spatial planning literature. Although examples can be found which refer to tools of nodality, authority, treasure, and organisation, most of the examples cited in the planning literature refer either to tools of Authority or Treasure. Examples of tools from all four types are presented below.

• Nodality. Higher levels of government in many

countries prepare indicative policy guidance (and/ or good practice guides) as a way of steering the content of lower-level plans. In cases where this guidance is indicative and non-binding (which is implied by the term 'guidance'), they can be classed as a nodality-related procedural policy tool (binding policy advice on the other hand can be classed as tools of authority). Policy guidance related to urban design and planning exists in a variety of forms, amongst which are local design guides, design frameworks, design briefs, development standards, design codes, design protocols, and design charters (Carmona, 2017). It is useful to acknowledge here that these nodality tools cannot usually be relied upon in isolation, particularly where there is a substantial tension between public and private interests, as there often is in the process of urban development (Carmona, 2017). Instead, a key function of these types of instruments is to internalise the desired behaviour into corporate and individual decision-making. As such, policy guidance for spatial planning represents a policy tool that offers the potential to deliver the ambitions of the plan primarily by means of persuading stakeholders and agenda-setting.

• Authority. There are many examples of authority-based procedural policy tools that are used in spatial planning. One of the most important regulatory tools in the development management process is the restriction of development in specific areas in order to steer development in preferred locations (e.g. urban cores, new towns, industrial parks). These restrictions can take various forms including greenbelts, urban growth boundaries, and zoning ordinances. A greenbelt is a zone of largely undeveloped, wild, or agricultural land surrounding a city, which in principle enjoys regulatory protection against development. Greenbelts are used to restrict urban development around many cities around the world (e.g. Adelaide, London, Hong Kong, Milan, Ottawa, Seoul, Toronto, Vancouver, and Vienna). Similar to greenbelts, urban growth boundaries delineate the extent to which urban areas are permitted to expand in countries such as New Zealand and the United States. Zoning ordinances are one of the most common regulatory tools contained in urban plans (LeGates, 2004) and are used to distinguish between different types of zones in the city (e.g. residential, industrial) in which certain land uses are permitted or prohibited. While greenbelts, urban growth boundaries, and zoning ordinances primarily regulate the location of development, other authority-based planning policy tools exist to control the scale, height and orientation of development.

• Treasure. Fiscal policy tools in the form of incentives can be used to attract development to locations of strategic interest, and to encourage developers to take actions that improve the conditions of the built environment and protect the natural environment (such as redevelopment, conservation, historic preservation, and rehabilitation). For example, cities may seek to encourage urban regeneration by offering tax relief for land remediation, tax credits for the rehabilitation of historic buildings, or exemptions from local business taxes. Meanwhile, fiscal tools in the form of taxes and penalties can be used to discourage development in less favoured locations. For example, cities may seek to discourage urban sprawl by means of property taxes, financial contributions for local infrastructure costs, or impact fees for development in 'greenfield' locations. Tax incentives are generally more popular and well used than penalties (Adams & Tiesdell, 2013).

· Organisation. Referring to policy tools of organisation, Hood states that government 'may provide for the welfare of its subjects in general by facilities such as parks, gardens, bridges, dykes and dams' (1986: 80). Clearly, many of these types of facilities can be used as a catalyst to promote development in cities to underpin the objectives of a plan. Examples can vary from minor to major in size and impact. Frequently, major flagship projects are credited with significant impacts on urban development and change, such as the urban regeneration effects of the Guggenheim Museum in Bilbao, the Expo site in Seville, or the Olympic Park in Barcelona (Bell & Oakley, 2015). However, direct introduction by government of much smaller facilities or physical urban changes, such as a pedestrianised street, a community garden, or a river walkway can also act as catalysts for new urban development in their immediate vicinity, thereby contributing to the ambitions of the plan in specific locations. This idea is reflected in Lerner's notion of 'urban acupuncture' – projects or initiatives that uplift city life. Lerner states that 'sometimes, a simple, focused intervention can create new energy, demonstrating the possibilities of a space in a way that motivates others to engage with their community. It can even contribute to the planning process' (Lerner, 2014: 4).

4. Conclusions

Studying spatial planning policy tools is important for identifying how to address complex societal goals in planning practice in a systematic and organised way. Meanwhile, from a more theoretical perspective, the classification of spatial planning policy tools is important when making comparisons and assessments of the governance of spatial planning in different contexts, which in turn can add detail to studies of policy styles, professional cultures, and path dependence in spatial planning. In setting out a taxonomy of planning tools, the paper not only differentiates between procedural and substantive issues; it also distinguishes between different groups of procedural tools related to three parts of the process of spatial planning: plan-making, development control, and plan enforcement. Each of these parts of the process require the use of different tools, almost always in combination.

The review and taxonomy presented in this paper can be seen as a new point of departure for more fine-grained empirical research on the governance of spatial planning in the future. At present, detailed empirical information about trajectories of change remains relatively sparse, especially when it comes to recent comparative evidence (Nadin et al, 2021). What is already known is that certain types of policy tools are being increasingly used across many countries while others are not. For example, many countries have witnessed increases in the trends towards a wider use of 'softer' tools related to nodality (e.g. citizen engagement), while 'harder' financial and regulatory tools have often been scaled back either in terms of their number or calibration (Schmitt & Van Well, 2016; Nadin et al, 2018). While the link has already been made between the changing role of spatial planning and the skills that planners need (e.g. Ozawa & Seltzer, 1999; Alexander, 2007), there is still substantial potential in developing new research into the changing use of different types of policy tool and the skills that are required to use them. Ultimately, understanding the full range of policy tools is fundamental to being able to plan effectively.

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