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Flexibility in planning through frequent amendments. The practice of land use planning in Germany

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ABSTRACT

How can formal planning deal with uncertainty and rapid change while maintaining high standards of procedural certainty? This paper, using Germany as an example, examines how municipalities handle this dilemma within their existing planning systems. Municipalities use different approaches, ranging from regular redrafting to comprehensive changes or regular amendments. Amendments and complementary informal plans are important components of flexibility in planning. We argue that the choice to make frequent amendments instead of redrafting the preparatory land-use plan does not necessarily lead to a loss of a city-wide, long-term perspective, provided amendments are prepared and justified using informal concepts.

KEYWORDS

Land use planning; planning systems; flexibility; Germany

1. Introduction

Land use planning is based on long-range forecasts of future developments such as population growth, economic development and local impacts of climate change; such forecasts, however, are highly uncertain. As Booth puts it (Booth, 1996, p. 143), ‘Absolute certainty about future development is an impossibility and in effect much of the work of development control systems is about grappling with future uncertainty.’ Moroni (2015) even claims that in complex socio-spatial systems such as cities, we can only make qualitative predictions and explain principles instead of making quantitative predictions of the trajectories of change. Uncertainty also arises from the limited knowledge regarding future value judgements and preferences due to the plurality and diversity of society (Virtanen, 1992, p. 87; Buitelaar, 2016). Thus, there is a need for flexible, adaptive plans to guide land use for the next 15 to 20 years. Flexibility means ‘the ability of a land use plan to cope with unforeseen events’ (van den Hoek *et al.*, 2020, p. 2) and ‘leaving options open instead of prescribing directions in detail’ (Buitelaar, 2016, p. 209). Despite openness and adaptability, many challenges require a long-term perspective for the entire city. On the other hand, procedural demands for public participation and environmental assessment lead to longer planning processes, and legal requirements arising from environmental law favour detailed plans (Buitelaar, 2016). Thus, there is a tension

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between legal certainty and more flexible, open-ended planning processes (Buitelaar & Sorel, 2010, p. 988; Dembski, 2020).

How can land use planning cope with these opposing demands? Adaptation of planning systems takes place via legal changes and innovations in planning practice. Some countries, such as the Netherlands, France and Denmark, have experienced significant changes in their planning systems over the past 20 years (Smas & Schmitt, 2020, p. 4). Formal planning instruments have, in part, been redesigned and are now flanked by numerous informal planning instruments (Münter & Reimer, 2020). Informal instruments can meet some of the needs of contemporary planning processes in terms of open content, flexibility and dialogue orientation (Blotevogel *et al.*, 2014, p. 102).

Against the fundamental challenges calling for a transformation or redesign of spatial planning, Germany appears as an interesting case because of the stability of its planning system. Changes tend to occur within the framework of the planning system and rely on the learning capacity of existing arrangements rather than on the creation of new institutional arrangements (Schmidt, 2009, p. 1919).

Our starting point, however, is the remarkably long life of formal plans in Germany and the reluctance there to entirely redraft them due to the long and increasingly complex planning processes. At first, this appears to be a contradiction to flexible planning approaches. In contrast to many other countries, e.g. the Netherlands (Buitelaar *et al.*, 2011), planning documents are not considered obsolete after a specific time span and remain legally binding. We focus on preparatory land use plans (FNPs) at the local level and the planning practice of German cities consisting of frequent updates by amendments. The research question of this contribution is: How can the German planning instrument FNP respond to needs for flexibility and still provide a city-wide, long-term perspective whilst maintaining high standards of procedural certainty?

The last comprehensive study of FNPs was conducted by Bunzel & Meyer (1996). We fill this gap with an empirical study on current practice, designed as a research approach consisting of a quantitative study of current planning practice and complementary qualitative analysis. The quantitative study of current planning practice includes a full survey of the preparatory land use plans of German cities with more than 50,000 inhabitants, the amendment procedures of these plans, and the ongoing redrafting procedures. In selected cities, current planning practice is examined in depth using a qualitative content analysis of the explanatory reports and, in some cases, interviews with planning departments. These empirical results are enhanced by observations based on the practical and research experience of the authors, acquired since the mid-2000s. Secondary analysis of empirical studies of FNP practice by Allin (2009), Bunzel *et al.* (2012) and Wolf (2020) support our own empirical findings.

We begin by specifying the tension between certainty, a city-wide, long-term perspective, and flexibility, followed by an analysis of the planning practice in Germany. After a brief explanation of the German planning system, we explain the methodological approach and outline the structure of the German planning system, focussing on the role of FNPs as well as on change within the system. We then present our empirical results regarding the current practice of preparatory land use

planning in Germany and draw conclusions related to the flexibilisation of land use planning.

2. Planning between certainty, a city-wide, long-term perspective, and flexibility

Many of the current challenges require long-term, city-wide planning. For example, fresh-air corridors for adaptation to climate change need to be secured on a long-term, city-wide basis. In practice, this often requires legally binding protection of the space. Legal certainty is composed of material and procedural certainty (van Damme *et al.*, 1997; Buitelaar & Sorel, 2010; van den Hoek *et al.*, 2020). The material certainty of a land-use plan relates to the substantive aspects and consists of normative rules defining how landowners can use their given plot. The content of a plan with high material certainty is specific and detailed. The more specific it is, the more it narrows down possible future activities. Thus, a specific plan is less flexible in terms of its material content than an open plan, which gives room for different future developments. However, if a plan is too specific, it can lead to frequent deviations, reducing its material certainty as well: ‘Whenever a land use plan is specific and precise, it cannot regulate future activities in a certain way. The plan might give the impression that one is protected, but deviations from the plan are frequently needed. The planning practice in an area planned by a (to) [*sic*] precise land use plan consists of planning deviations, amendments and permit-planning. With such a precise plan the only certainty is that a deviation will follow’ (van den Hoek *et al.*, 2020, p. 3). Thus, van den Hoek *et al.* (2020, p. 3) conclude that ‘(t)he optimal value for the material certainty lies somewhere around the middle of the axis between a specific and open land use plan.’

The second component of legal certainty is procedural certainty. Procedural certainty describes the legal protection against changes in the land use rights of the owners as well as the rights of participation and objection of the affected stakeholders (Booth, 1996, p. 102). The easier and more rapidly a plan can be changed, i.e. the more adaptable it is, the less procedural certainty it provides. Flexibility in planning can be obtained either by reducing material certainty, i.e. the specificity of the content, or by reducing procedural certainty, which allows for quicker, easier adaptations but entails the risk of losing the steering function.

Formal planning tends to be seen as specific and rigid. In contrast, strategic planning is seen in the literature as open and adaptable (Albrechts & Balducci, 2013). As van den Broeck (2013) and Mäntysalo (2013) have pointed out, since both informal planning and formal planning are needed they should be strategically combined rather than positioned in opposition to each other.

This paper fits within a body of literature that discusses the tension between flexibility and the legal certainty of formal planning (Virtanen, 1992; Booth, 1996; Buitelaar & Sorel, 2010; Buitelaar, 2016; Dembski, 2020; van den Hoek *et al.*, 2020). Further strands of literature that this paper draws on are strategic planning literature (e.g. Healey, 2007; Albrechts & Balducci, 2013) including the critical discussion on the relationship between the formal and informal instruments of strategic spatial planning (Mäntysalo, 2013; van den Broeck, 2013; Mäntysalo *et al.*, 2015, 2019), as well as performance literature

questioning the assessment of plan implementation solely based on the conformance of development to plan directives (Mastop & Faludi, 1997; van Damme *et al.*, 1997; Feitelson *et al.*, 2017).

2.1 The need for flexibility

Planning is always an uncertain process that needs to accommodate the unforeseen (Booth, 1996, p. 109). The need for flexibility arises from uncertainty about the needs and wants of future generations as well as the unpredictability of complex systems such as cities (Virtanen, 1992, p. 87). To deviate from a land use plan is not exceptional but endemic; this non-conformance to the plan does not necessarily imply a lack of effectiveness from a performance perspective but points to the need for deviation and amendment procedures in the planning system (Mastop & Faludi, 1997, p. 825; van Damme *et al.*, 1997, p. 835; Feitelson *et al.*, 2017).

Forecasting population growth has become more uncertain because the demographic change in most European countries is characterised by both shrinkage and growth (Wolff & Wiechmann, 2018, pp. 127–129). After suburbanisation and de-urbanisation, processes of re-urbanisation, meaning the centralisation of the population into the urban core of city regions, are observable (Dembski *et al.*, 2019). Fundamental population changes within a short period (e.g. in Berlin, Leipzig or Dresden) mean that in some city regions the attempt to predict future demand for settlement areas by linear trend extrapolation is entirely misleading. Thus, there is a need for ‘flexibility and open-ended, collective learning processes’ (Wiechmann, 2008, p. 444).

This argument is reinforced by the need for climate adaptation because of the uncertainty of climate projections (van Buuren *et al.*, 2013, p. 31). Climate change does not lead to direct claims on land use itself, but is ‘a changing condition to which existing patterns of land use and activity patterns have to adapt’ (van Buuren *et al.*, 2013, p. 51). What is particularly challenging for spatial planning is the uncertainty and multifaceted character of climate change impacts as well as the controversy around the urgency to act (van Buuren *et al.*, 2013, p. 31). Further uncertainties, such as the impact of the COVID-19 pandemic and changes in socio-economic conditions due to digitalisation and economic structural developments, can arise at any time.

On the other hand, many planning solutions in this context also require a long-term perspective, so long-term planning and flexibility must be balanced.

2.2 Appropriate material certainty for different scales

The legal framework defines topics that have to be included in formal plans. The number of topics has increased over the decades due to changed conditions and knowledge about impacts. However, how specific or open a land use plan should be largely depends on the choices of the planning body.

Long-term plans for large areas need to be more flexible than a detailed town plan drawn up shortly before the actual development (Virtanen, 1992, p. 88). In other words, the material certainty of a plan should be higher the smaller the area and the more directly it is linked to the decision on building permits. Formal planning covering a whole city or region needs to be open enough to allow for different possible futures without

losing the city- or region-wide steering function of the plan. The spatial delimitation and type of allowed activity is specified in the binding land use plan. This step of detailed planning is largely project-led in many planning systems and offers security concerning the activities allowed on a plot to both landowners and other stakeholders.

How specific a plan is depends on the intention of the planning body, and can vary for different land uses within one planning document. If the intention is to achieve a high protection of the status quo, it is appropriate to be specific about what is *not* allowed in an area. If the intention is to enable future activities that have not yet been clearly defined, it is appropriate to leave the regulative framework more open. As an example, the French city-regional plans *Schéma de cohérence territoriale* (SCoT) are highly specific regarding protected green corridors, whereas potential areas for large-scale retail are only roughly located (Pôle métropolitain Nantes Saint-Nazaire, 2016; Demazière, 2018; Zimmermann & Feiertag, 2022). What is already certain (protection of the status quo and enabling concrete projects) can be specific, whereas making room for what is still uncertain needs more openness – or reactivity – at the expense of procedural certainty.

2.3 Drivers of procedural certainty

Procedural rules for formal planning are meant to increase the quality of planning and are defined by national as well as European legislation. In all European countries, procedural demands include legal requirements to assess the impacts of a planned development on the environment. Since 2004, plans and programmes have been subject to strategic environmental assessment, and this assessment must also examine planning alternatives (Geißler & Rehhausen, 2014, p. 119). Elaborate expert assessments, complex political decision-making processes, and opposition from the public can contribute to the extension of planning procedures (Baulandkommission, 2019, p. 56).

Spatial planning has evolved over the past decades towards a more collaborative, participatory process. Opportunities for citizen engagement have increased all over Europe, from passive forms of consultation (such as the mere provision of information to citizens) to active citizen participation in certain parts of the planning process or even in all stages of the preparation and adoption of planning instruments (Nadin *et al.*, 2021, pp. 797–799). Participation of both the interested parties and citizens is required by the planning legislation. In Germany, early participation in land use planning has been a legal requirement since 1976, although the requirement has been adapted slightly due to European Directives (EU Directive 2003/35/EC). In many cases, the planning practice goes beyond the legally required citizen participation, with the aim of facilitating the implementation of building projects by reducing appeals at later stages.

Judicial reviews may prevent planning documents from coming into force and can delay the process considerably (Mäntysalo *et al.*, 2015, p. 171). In a democratic state under the rule of the law, citizens who are directly affected have the right to challenge political decisions and can demand that an independent court review whether the given plan complies with applicable law. This right is essential because reliance on the law, and the possibility to make appeals, is the basis of legitimacy (Mäntysalo *et al.*, 2015, p. 174). A judicial review relates in particular to compliance with procedural requirements, including participation. Formal errors can prevent legal validity. A judicial review also delays the planning process, no matter what the final decision is. According to Schmidt-

Eichstaedt (2019, p. 156), a judicial review in Germany is more extensive than in neighbouring countries as it concerns not only compliance with all procedural steps and the completeness of the factual information provided prior to the planning decision, but also the decision itself.

Overall, the legislation aims to set high standards of procedural certainty and favours specific plans – and thus material certainty – rather than open plans (Buitelaar, 2016, p. 207). The increased legal complexity of land use planning (Dembski, 2020) means that the ability to produce a formally correct plan has become a key qualification of planners in public administrations. They have to keep up to date with legislative changes, juristic interpretations, and fundamental decisions of the courts.

2.5 Complementary informal planning

Producing a formal plan for strategic urban development is less attractive than producing informal planning instruments. The ‘burdensome statutory planning process’ (Mäntysalo *et al.*, 2015, p. 172), with all its stages of analysis, drafting, participation and political decision-making, lasts several years, ties up capacities in the administration, and requires considerable effort in terms of additional staff and support from external planning offices. There is a risk that the plan will already be outdated and in need of amendments by the time it officially enters into force. Statutory planning processes are worth the effort because they provide legal clarity and ‘a law-based guarantee for certain inclusiveness, impartiality and accountability in planning’ (Mäntysalo, 2013, p. 51). We argue, in line with Fritsch and Eskelinen (2018, p. 148) as well as Mäntysalo *et al.* (2015, p. 170), that it is beneficial to complement formal land use planning with informal planning to meet some of the limitations, such as rapid change.

This also provides the opportunity to strengthen strategic planning. However, strategic planning is not synonymous with informal planning. Although strategic planning cannot be uniformly defined, it is usually seen as a social process in which long-term visions are developed, and action and project orientation are in the foreground (Albrechts & Balducci, 2013). Informal planning often includes many of these characteristics, but comprehensive strategic planning is rarely found in practice (van den Broeck, 2013).

We expect that municipalities will link formal land use planning with informal planning through frequent amendments instead of entirely redrafting their formal land use plans until they are forced to do the last by national law. Cities, as well as the approving authorities, have to decide at what point modifications are so far-reaching that the overall development strategy needs to be revised, be it by a formal or informal planning process. This may be necessary not only for new areas, but also for adaptation within the settlement area. To sum up, finding the balance between flexibility, legal certainty, and a guiding function for future urban development is the key problem for planning practice.

3. The current practice of preparatory land use planning in Germany

The German planning system is characterized by a high degree of stability, in particular at the level of local land use planning. Legal adjustments have been made with

regard to the details of the planning procedures or the matters to be dealt with in the plans. The objectives in § 1(5) BauGB and the issues to be taken into account in § 1(6) BauGB have been successively expanded over the decades, e.g. the accommodation of refugees in 2014. But the basic principles of the planning system have been retained since the first Federal Building Code [BauGB] in 1960, including the hierarchy of formal planning instruments and the responsible jurisdictions. Schmidt (2009,) argues that changes tend to occur within the planning framework because of the learning capacity of existing arrangements and the high transaction costs of new institutional arrangements.

Whereas, in some other countries, the initial classification to an ideal type or planning family has to be debated (Stead, 2012; Roodbol-Mekkes & van den Brink, 2015; Nadin *et al.*, 2021; see also Galland, 2020, p. 104, for Denmark, and Desjardins & Geppert, 2020, pp. 125–126, for France), Germany still adheres to the integrated, comprehensive approach (Blotevogel *et al.*, 2014, p. 83). According to the recent typology of European spatial governance and planning systems proposed by Berisha *et al.* (2021), Germany is characterized as neo-performative model along with 15 other countries (e.g. the Netherlands, Denmark and Sweden). In other words, although land use rights are established by general urban plans, binding plans that assign spatial development rights are specific for small areas and are issued after development projects have been controlled and approved by the public authority. This model provides more flexibility to public and private decisions than the conformative model.

3.1 Methodical approach

Within the framework of the project "Rechtsanwendung in der Bauleitplanung - Umgang mit Zielkonflikten im Bereich der Innenentwicklung", a comprehensive analysis of FNPs was undertaken using a mixed research design. The main objective of the study was to describe the procedures in current planning practice and to analyse how existing instruments are used. The focus of the study was on the larger cities, as they are particularly confronted with challenges such as climate adaptation or housing demand, and they have a greater development dynamic with a higher number of planning projects. In an initial quantitative study, all 79 large cities (over 100,000 inhabitants) and all 108 medium-sized cities (50,000–100,000 inhabitants) were examined. The aim of the survey was to get an overall view of the current planning practice, as there is little knowledge about this on a broad basis.

In order to record the general status of the FNPs, information on the year in which the given plan was drawn up, the current redrafting procedures and, if available, the number of changes made was extracted from the municipal websites.

In order to analyse the planning practice of the individual municipalities in more detail, supplementary qualitative analyses were carried out in two opposite groups: cities that have recently redrafted their FNPs and cities that have very old FNPs. In order to examine the practice of the redrafting procedures in more detail for the first group, a document analysis of the explanatory reports was carried out for all nine large cities that had redrafted an FNP between 2007 and the beginning of 2018. Cities that belong to a regional land use plan were not included in the analysis, as these plans differ greatly in content. Qualitative interviews with the planning departments in five municipalities

complement the analyses in order to capture the assessment of the planning actors. In the interviews, the assessment of the instrument and the response to current challenges were discussed. In order to analyse the planning practices of the municipalities in the second group with very old FNP, a document analysis of the 2017/2018 amendment procedures was conducted in six of the eight municipalities whose plans were more than 40 years old in 2017. Two municipalities could not be included in the analysis because their planning documents were not fully available online.

In order to determine how often binding land use planning leads to changes of the FNP, supplementary data from another study of 86 *Bebauungspläne* [binding land use plans] for inner development in 23 different cities with FNPs of different ages were used.

In addition, supplementary findings from interviews with planning officers in the city regions of Stuttgart and Frankfurt/Main that were conducted in 2019–2020 as part of a parallel research project (grant ZI 1164/8-1 from Deutsche Forschungsgemeinschaft; for a list of interviews and further information, see Zimmermann and Feiertag 2022) were taken into account.

3.2. The FNP in the German planning system

Local land use planning in Germany consists of the zoning plan FNP for the whole given territory (usual scale, 1:10,000 or 1:15,000) and several binding land use plans for smaller areas (*Bebauungsplan*, 1:1,000), which define the exact land use and plot coverage, as well as aspects of urban design. The building permission is issued in accordance with the *Bebauungsplan*. In line with the neo-performative model, it is common practice to adopt the *Bebauungsplan* only after a concrete development project is defined and negotiations with landowners or developers have taken place.

The FNP is binding for the administration, meaning that *Bebauungspläne* are derived from, and have to conform to, the FNP. Deviations require changes in the FNP, either in advance or in a parallel planning process. Amendments provide high procedural certainty because they have to follow the same procedural steps as a plan draft, including environmental assessment and participation. The steering effect of the FNP is limited by two aspects. Firstly, by the *Bebauungsplan* procedures for development projects within settlement areas (inner development) of up to 70,000-sqm ground area, where the FNP can also be corrected without an amendment procedure (§ 13a BauGB) as long as the orderly urban development of the municipality is not affected. And secondly, it is possible to approve new projects without a *Bebauungsplan* within built-up areas (*Innenbereich*) that have already been coherently developed (Schmidt-Eichstaedt, 2019, p. 153). Without a *Bebauungsplan*, the FNP itself has no binding effect on building permits in the built-up area as a project can be approved according to § 34 BauGB, regardless of what the FNP shows for the area.

Formal plans are often complemented by informal instruments such as urban development visions or concepts. A linkage of formal and informal instruments is already inherent in the BauGB itself. According to § 1(6) No. 11 BauGB, urban development concepts or other urban development plans adopted by the municipality must be taken into account in the FNP. This does not result in a strict, binding effect of informal concepts for urban land use planning, but these concepts are subject to consideration in the planning process. The question of how and exactly when informal instruments are

combined with formal instruments depends on the actors involved and the planning tasks (Klemme & Selle, 2010, p. 327).

The FNP shows the intended type of land use without making a distinction between existing and intended development. Thus, it only becomes outdated when the intended land use changes. There is a long-standing consensus in planning literature that a municipality should redraft its FNP after 10 to 15 years (Wolf, 2020, p. 28), but the building code itself does not prescribe the redrafting of an FNP after a specific time. This legal obligation briefly existed (between 2004 and 2007) but was revoked. From an administrative science perspective, Wolf (2020, pp. 221–225) even recommends extending the validity period of FNPs to 30–35 years for smaller cities due to the high costs for a new version. From an urban planning perspective, however, this period seems to be very long. The building code obliges municipalities to review their FNPs if there is a need related to urban development (§ 1(3) BauGB). Specifically, the aim is to check whether essential framework conditions of urban development have changed, whether new challenges have to be met, and how the development of the plan implementation has progressed (Bunzel *et al.*, 2012, p. 25). Updating can either be done by amendment or by drafting anew from scratch.

Hitherto, legal action was possible only against the *Bebauungsplan*. Due to the new direct rights of action of environmental organisations against FNPs introduced in 2017 (Schlacke, 2017), it can be expected that legal issues in FNPs will also increasingly come into focus.

3.3 Age of plans and number of amendment procedures

The first generation of FNPs came into force in the mid-1960s to the early 1970s, e.g. in West Berlin in 1965 and in Hamburg in 1973. The age of the 187 plans examined ranged from 50 years to newly drawn up (see figure 1). In about half of the medium-sized cities, the FNP is more than 20 years old. Larger cities have more up-to-date land use plans: in 2018, most of their FNPs were 10 to 19 years old (31 plans, or 39%) and 17 were younger than 10. Note that in the 17 eastern German cities analysed, the FNPs were drawn up

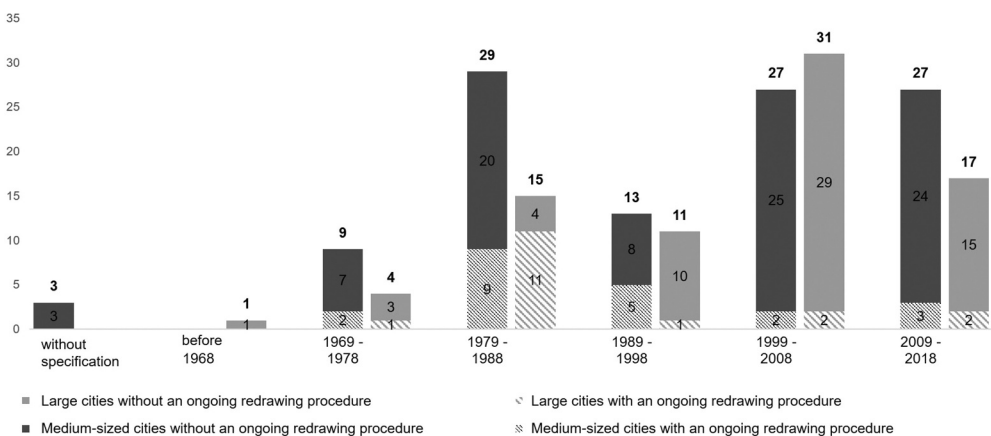


Figure 1. Age of the FNPs of large and medium-sized cities (31.12.2017).

after 1990. In eight of the eastern German cities, the given FNP was drawn up within the first 10 years after reunification; in the remaining nine cities, by 2011. In contrast, many of the FNPs of western German cities were 30 to 39 years old in 2018 (29 of 99 medium-sized western cities, or 29%, and 15 of 71 large western cities, or 21%), though 11 of these large cities and nine of these medium-sized cities had already initiated a new drafting procedure in 2018.

Most municipalities react to current requirements by regularly making changes to their FNPs. As expected, the number of amendments increases with age (see [figure 2](#)). In the case of Koblenz, 325 amendments were recorded for a 36-year-old plan. The size of the city also has an effect on the number of amendments, with only the large cities having more than 200 amendments per plan and an average number of 2.9 amendments per year (versus 1.55 average per year in medium-sized cities). The age and size of the city, however, is not the only influence on the average amount of changes, as number differs significantly between similarly sized cities. For the large cities, the average ranges from less than one change per year (e.g. in Nürnberg and Leipzig) to 9.5 in Berlin. It is not surprising that Berlin, as the largest city, makes the most changes per year, but there are also smaller cities, such as Koblenz, that carry out nine changes on average per year. Additional corrections to the plans of inner development projects like those previously described are not included.

Amendments can be carried out both independently and in parallel with a *Bebauungsplan* that deviates from the FNP. The latter case is more frequent in practice. The analysis of the amendment procedures in the cities with plans more than 40 years old shows that of 15 amendments made in 2017/2018, only three plans were not amended in a parallel procedure. This is also confirmed in other empirical studies on German

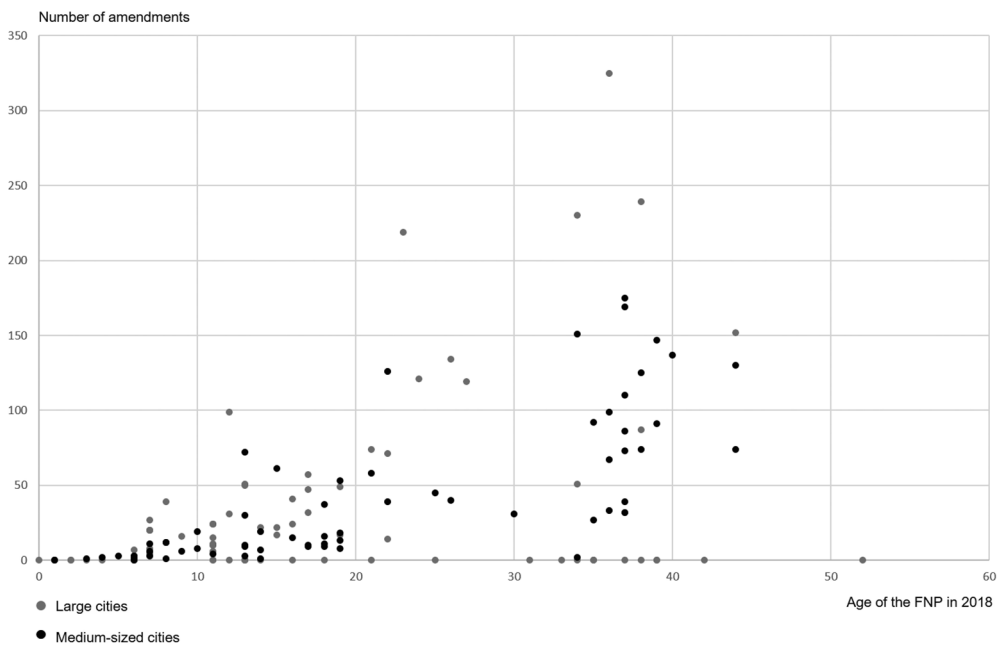


Figure 2. Number of amendments by age.

planning practice (Allin, 2009, pp. 24–25). Wolf (2020, p. 144 f.) shows that in Bavaria from 2007 to 2016, even in the first five years after the FNPs were drawn up, 20% of the *Bebauungspläne* were drawn up in a parallel procedure. Settlement expansions or the reorganisation of larger areas in the settlement stock can be processed via amendment procedures (Bunzel *et al.*, 2012, p. 24). There is no upper limit on permissible changes. However, the supervisory authority has the possibility to refuse them and insist on a new draft if there is a planning requirement.

Referring to van den Hoek *et al.* (2020), these plan amendments can lead to adaptable plans. The formal amendment procedure also gives a certain degree of procedural certainty. Amendment procedures can therefore be an instrument for flexibility in the sense of reviewing and updating the content of the plan. However, they can undermine the steering effect if the amendments merely trace decisions at the small-scale development plan level (Allin, 2009, pp. 23–26). In the following section, we analyse in more detail how municipalities (can) implement city-wide, long-term planning in their FNPs, and whether this is also possible within the framework of amendment procedures.

3.4 Different planning strategies and the importance of informal concepts

Amendment procedures differ significantly in their scope. According to Bunzel and Meyer (1996), three different strategies can be identified for how municipalities act in the context of land use planning:

- Regular redrafting (every 15–25 years)
- Comprehensive changes
- Regular amendments

Regular redrafting represents the procedure originally intended by the planning system, and can be found, for example, in the city of Leverkusen, which redrafted its FNP in 1983 and 2006. As a second strategy, there are municipalities that carry out extensive amendment procedures in which a package of amendments is bundled together. The content of these comprehensive amendment procedures is often prepared within the framework of informal concepts so that long-term strategic issues can be taken into account. This was the approach followed, for example, by the city of Leipzig in 2015, which may be one reason why comparatively few amendment procedures per year have been carried out there: many adjustments are simply made together in one amendment procedure.

While the first two strategies allow long-term planning goals to be taken into account, the last strategy must be examined more closely. In principle, it is also possible to supplement the amendment procedures with informal concepts and thus ensure coordination across the entire city. Such a procedure was already identified in earlier studies by Bunzel and Meyer (1996, p. 101 ff.). This strategy is partly classified by the municipalities as more flexible and is also justified by the limited resources within the planning administrations (Bunzel & Meyer, 1996, p. 102).

The current evaluation of the amendment procedures in the municipalities with an FNP that is more than 40 years old shows that this kind of a combination with informal

plans for city-wide, long-term perspective is still used. In six out of 15 studied amendment procedures, reference was made to an informal concept. In the *Bebauungspläne* examined, an amendment procedure of the corresponding FNP was carried out in 20 of the 86 plans, with references to informal planning 16 times. In many cases, however, they referred to specific concepts such as a retail or housing concept. A particularly extensive strategic control via informal concepts was observed in the city of Munich, for example. The amendment procedures refer to the comprehensive strategic plan ‘*Perspektive München*’ and additional informal concepts. Despite an old land use plan, in this case from 1965, a city-wide, long-term perspective can be ensured through a combination of informal plans and amendment procedures. Similar strategies can be found in other cities. For example, the city of Oldenburg deliberately decided, in 2009, to not redraft the FNP and, instead, to deal with the city-wide, long-term perspective within the framework of an urban development concept and to amend the FNP on an ad hoc basis. In procedures of this kind, however, Bunzel and Meyer see the difficulty that long-term planning strategies are not always visible in the formal plan and thus confidence in planning specifications cannot be guaranteed to the same extent (Bunzel & Meyer, 1996, p. 103).

The analysis of the plans shows that there are also cities with numerous amendment procedures that are not integrated in a city-wide, long-term perspective. In the case of event-related changes, there is then a danger that city-wide concerns and coordination requirements are not sufficiently taken into account (Bunzel & Meyer, 1996, p. 67).

Even in the cities that completely redrafted their FNPs, the FNPs have been supplemented by informal plans. In the plans examined in the document analysis, in seven of the nine cities reference was made to comprehensive urban development concepts or guiding principles for urban development. In all cities, reference was also made to plans for green and open space development. In addition, depending on the city there were various specialized concepts for residential or commercial development, for cycling, for school development, etc.

3.5 Reasons for redrafting land use plans

The municipalities that have redrafted their FNPs in recent years underline advantages in replacing the patchwork of numerous amendments and see a stronger binding force in a coordinated formal plan. One planner summed it up as follows: *The argument that colleagues always use is that, one, an FNP is a lot of work (they are right about that); two, it may trigger unresolvable conflicts (they are also right about that); [and] three, the FNP is too much work compared to an informal instrument (they are right about that, too). But I would say the work is worth it. You just have a whole different authority with a formal planning instrument.* (Own translation.)

Reasons to revisit the FNP include socio-economic, political and administrative changes, concrete urban planning deficits and changed planning objectives, and state planning requirements. A key issue is whether the plan is up to date from a programmatic point of view. The decision against urban extensions is occasionally used as an argument against a need for redrafting (e.g. Stuttgart), but some cities (e.g. Bremen) see the reorganisation of existing areas as sufficient reason for redrafting. The benefits of redrafting can be the revisiting of outdated representations and area designations (e.g.

Göttingen, Bremen) or the reduction of superfluous land reserves that do not correspond to the guiding principle of inner development (e.g. Recklinghausen, Bremen). Whether these aspects lead to redrafting or amendment procedures partly depends on the assessment of the steering effect of the FNP in the respective municipalities (see also Bunzel & Meyer, 1996, p. 71) and the external pressure from the supervisory authority. One planner described how the district government had demanded a new plan: *If you continue to act in this way, you run the risk that we will no longer approve another FNP amendment. And that was the yellow card that told us we had to draw up a new FNP.* (Own translation.)

3.6 Possibilities of flexibilisation within the existing planning system

In addition to the complexity of the procedures, the necessary flexibility of planning is a challenge for the municipalities. The interviewees emphasized that even in cities where the given FNP is comparatively up to date, amendment procedures must be carried out regularly since urban development should be understood as a dynamic process. Amendment procedures are thus a possibility to make the rigid instrument of the land use plan more flexible.

In addition to adaptability via amendment procedures, flexibility through open regulations in line with van den Hoek *et al.*, 2020 can also be found. Municipalities have a certain amount of freedom in regard to additional topics and their own supplementary plan symbols. Building codes offer possibilities to deal with uncertainty, such as *Weißflächen* [white areas] (§ 5(1) BauGB) and *Vorbehaltsflächen* [reserved areas]. In practice, they were each used in only one of the nine plans examined (Bremen and Recklinghausen). Areas where the development direction could not yet be clearly determined at the time of the preparation of the FNP are designated as *Weißflächen*. A planner from Bremen describes this as a new planning approach that is not well known and that so far has been used in only a few other cities for single issues such as wind power and compensatory measures: *No one has ever used Weißflächen the way I have. But it has proven itself to the highest degree.* (Own translation.)

Reserved areas are subject to restrictions that can be lifted at a later date; for example, potential new residential development areas that cannot be developed at present due to existing exposure (e.g. noise). In the explanatory report for the specific area, it is pointed out that development is only possible after the restriction has been lifted. This enables the city to react to changing conditions without amending the FNP.

Another way to achieve flexibility is to adjust the level of detail in the plan. In the past, FNPs sometimes showed very detailed land uses. For example, designated plots for kindergartens, which are generally permissible in a residential area, were specified in the plan. In such cases, if the specific locations are subsequently changed, the plan must be amended. In order to make this more flexible, it can make sense to adjust the degree of detail. For example, in 2011 Wolfsburg decided to make a refinement in the plan designs to allow, for example, that smaller public facilities could be included in the surrounding development areas (e.g. in residential developments). This approach is in line with the legal requirements, as § 8 BauGB only requires the basic features of urban development to be presented.

The qualitative studies of the new FNPs also show that the municipalities have a great deal of creative freedom in regard to the content of the plans, and they use it in practice. Although the law in § 1 BauGB specifies objectives and concerns that must be taken into account in planning, the municipalities can adapt how this is done to the respective on-site planning situation. This becomes very clear when analysing the criteria used for new settlement areas, which are individually adapted by the cities and have been significantly expanded in recent years, for example in the area of climate adaptation (Schoppengerd & Schubert, 2021, p. 11).

The content analysis of the new FNPs of the large cities has shown that there are hardly any areas to be found that are not subject to planning restrictions, and that in many cases complex decisions have to be weighed and made for each specific area. In contrast, an approach based on abstract rules reaches its limit when no more development sites can be found that comply with the formulated rules and an individual adaptation has to be discussed (Schoppengerd & Schubert, 2021).

4. Conclusion

The conventional wisdom that a new FNP should be drafted every 10 to 15 years does not correspond to the current planning practice in Germany. Especially among medium-sized towns, valid FNPs lasting 30 years or more are no rarity. This is possible because the planning system has remained stable and municipalities have no legal obligation to redraft their plans at specific intervals. The assumption that the long, demanding planning process to some extent drives municipalities to redraft their given formal land use plan less frequently has been confirmed by the empirical findings. German municipalities tend to simply update their FNPs through frequent amendments. Expanding the lifespan of the plan is partly a matter of cost efficiency. If a significant steering effect is attributed to the land use plan, this is an important argument for municipalities to nevertheless redraft the plan.

Flexibility can either be obtained by an open plan formulation (degree of material certainty) or by having high adaptability instead of rigid plans (degree of procedural certainty). Both elements have been detected in the German planning practice, though the adaptability via amendment procedures is the most important one. Amendments provide the possibility to deal with uncertainties and the lack of predictability of land requirements and to react to changing conditions, and they occur as early as within the first year after an FNP is drawn up. The adaptability of the general plan is in line with a neo-performative planning model. However, we would argue that despite the adaptability of FNPs, German land use planning provides fairly high procedural certainty because of the procedural requirements for amendments. Such requirements remain an important element of development control, because any changes are reviewed and can be challenged. As Booth (1996) argues, planning systems need some power of discretion to deviate from the fixed rules, but accountability by transparent decision-making and procedural rules should nevertheless be ensured.

Whether land use plans that are regularly amended still control city-wide development depends on how they are embedded in an informal city-wide strategy, and on the nature of the amendments. In particular, if the land use plan is only reactive, i.e. amended or corrected as a reaction to development projects, the steering effect is undermined. In

contrast, comprehensive amendments offer better opportunities to maintain a city-wide perspective in combination with informal instruments. At the municipal level, informal instruments are closely interlinked with the formal instruments, especially for preparation and justification. We argue in line with Blotevogel *et al.* (2014, p. 102) and Mäntysalo *et al.* (2019) that the combination of formal and informal planning can provide flexibility in planning and helps to maintain the functionality of formal planning. When this happens, however, it should be a conscious choice and communicated transparently as such. Formal planning instruments can then become part of a strategic planning approach. Cities that have redrafted their FNPs use them to formulate a long-term strategy. In other cities, they serve to provide a formal basis for informal strategic planning. Further research would be required to assess exactly how well strategic control of amendments works through such combinations. It is also remarkable that despite the same formal conditions, very different approaches could be identified in the cities. The reasons for this could not be fully understood within the study and should be investigated further.

Overall, an FNP offers scope for action to respond to current challenges. The fundamental problem of the increasing complexity of planning is not so much due to the instrument itself, but rather to the increased demands on the content of planning. From the point of view of the municipalities, however, the real need right now is for land-policy reform, as the availability of land is often an obstacle to municipal planning (Zur Nedden, 2021, p. 11). A fundamental reform of the planning system would presumably not resolve the contradiction between flexibility in planning and high content-related and process-related requirements, and comes with high transaction costs. The current stability of the planning system, however, can be seen as a relief for the municipalities, since time resources are not tied up in developing completely new plans and procedures, but can be used for the further development of content within the existing system.

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