

GERMANY: A BALANCED PLANNING SYSTEM



Summary

Germany: A Balanced Planning System

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Background

The Universities of Glasgow and Liverpool were commissioned to assess experience from other European countries in the role of housing land allocation and assembly in enabling the delivery of high-quality affordable housing and placemaking. This report has been prepared as part of the project 'Housing land allocation, assembly and delivery: Lessons from Europe.'

Main findings

- Germany has a well-established and relatively stable planning system, which provides a balanced set of land policy instruments to deliver affordable housing and placemaking.
- Local authorities generally work collaboratively with market actors on land allocation, assembly and delivery, including mandatory land readjustment. Local authorities are in a strong position because of their exclusive right to approve land use plans which is required for most developments.
- Placemaking quality and land value capture are part and parcel of the land use planning process and often secured via public contracts, including in some cases implementation.
- Increasing housing market pressures in metropolitan areas has clearly stimulated a debate about a more proactive use of the existing land use policy instruments for housing land allocation, assembly and delivery.

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¹ <https://germanlawarchive.iuscomp.org> (accessed 15 May 2020).

1. INTRODUCTION

Germany is characterised by a decentralised urban spatial structure with a number of large urban centres (Figure 1). This is partly the result of the political structure, which aimed to deconcentrate power after World War II. More than 30 years after Reunification, divisions between East and West Germany persist, with states in the former East economically still lagging behind. To a lesser extent this also applies to small and medium towns and rural areas in the periphery (BBSR, 2017).

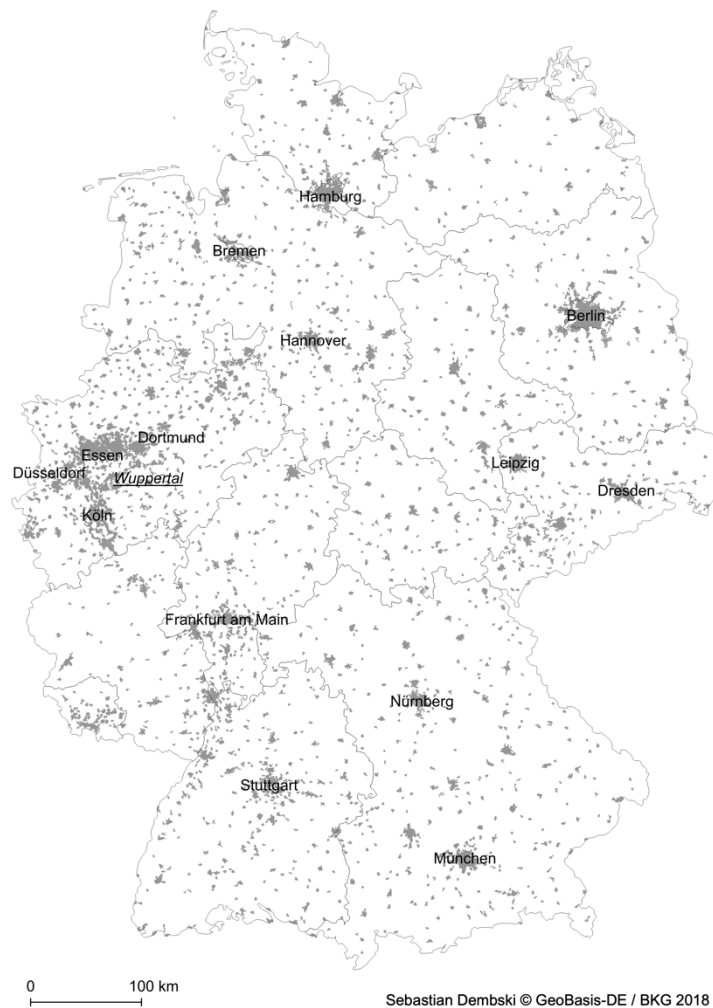


Figure 1. Spatial Structure of Germany with main cities and exemplary case study (underlined).

Germany has a comprehensive planning system and is frequently mentioned as an exemplar country, albeit perhaps not to the same degree as the Netherlands. It has a remarkably stable planning system (Schmidt, 2009). The International Building Exhibition Emscher Park serves as a shining example for the regeneration of old-industrial regions. Freiburg is frequently cited in textbooks on eco-urbanism for its continued efforts, producing neighbourhoods such as the celebrated Vauban development (Falk, 2011). More recently, Hafencity Hamburg has featured in international studies as inspiration for planners (Lord et

al., 2015). Others have highlighted the strength of the planning system in creating mixed-use neighbourhoods (Hirt, 2007).

In the following the report will briefly sketch the main trends of the planning debate in relation to housing and placemaking. The subsequent section outlines the main features of Germany in terms of administration, legal frameworks and system of plans and other instruments. The next section will shed light on housing land allocation, assembly and delivery in practice. This is illustrated in an example case study of a residential project in the city of Wuppertal. The report ends with a summary of the main features of German planning and identifies potential lessons for Scotland.

2. HOUSING DELIVERY AND PLACEMAKING

The German planning debate has changed significantly over the past decade. In the 2000s Germany was still debating urban regeneration and shrinking cities, in particular how to deal with depopulated cities in the former East Germany (Bernt, 2019). Rents were low and the state discontinued investment in social housing (Kirchner, 2007). The German housing market was also largely unaffected by the 2008 Global Financial Crisis (Kofner, 2008). Within a few years, discourse shifted radically, driven by reurbanisation and the increasing pressure on urban housing markets (Brake & Herfert, 2012). This has since led to a vivid debate on affordable housing, land policy and inward urban development (Die Unterzeichnenden 'Für eine wirklich soziale Wohnungspolitik', 2018; Difu & VHW, 2017; Voigtländer, 2017; Reiß-Schmidt, 2019).

Germany has pursued several policies in parallel, which involved promoting homeownership, social housing and free market rental housing. Germany has been characterised as a country with a unitary rental market, meaning that social and private rental markets are integrated (Kemeny, 1995; Balchin, 1996). This is different from the UK, where social housing is residualised. This assessment still holds more than two decades later.

Germany distinguishes dwellings according to the number of dwellings within the building, which makes it difficult to compare with other countries using a different categorisation. More than half of the German housing stock consists of dwellings in buildings with multiple dwellings, which can be translated as flats. On average there are 6.7 dwellings per residential building in this class. The remainder consists of dwellings in buildings with one (31%) or two (15%) dwellings (Figure 2).

Germany has a comparatively low homeownership rate and a large private rental sector (Figure 3). Only 43% of dwellings are owner-occupied of which approximately 25% are flats. Homeownership has increased, but only slowly. The rental market is split between professional and private landlords. Professional landlords, which together hold 21% of the housing stock, is divided equally into the not-for-profit sector, consisting chiefly of co-operatives and public housing corporations and commercial real estate companies. Most flats are in the hands of private landlords with mostly a small portfolio of flats.

After years of relative stagnation, the German housing market has come under pressure. Housing has become one of the leading political issues due to a number of factors. While population growth is not an issue per se, the attractiveness of cities has been one of the major drivers of rent and house price increases since 2010 (Dembski et al., 2020). In particular younger population groups are 'swarming' into the cities (Simons & Weiden, 2016). This was reinforced by an increasing net immigration of an often highly qualified labour force. Rents in major cities have increased between 5 and 25% in Germany's largest cities, which has resulted in new, even stricter, rent regulations coming into force in 2015 (Deschermeier et al., 2016). At the same time in some rural areas there are high vacancy rates (BBSR, 2017). Low mortgage rates have driven the owner-occupier market as buying became relatively cheaper in spite of increasing house prices (Voigtländer, 2017). Housing

experts agree that the German housing market is still far removed from a bubble (Voigtländer, 2017).

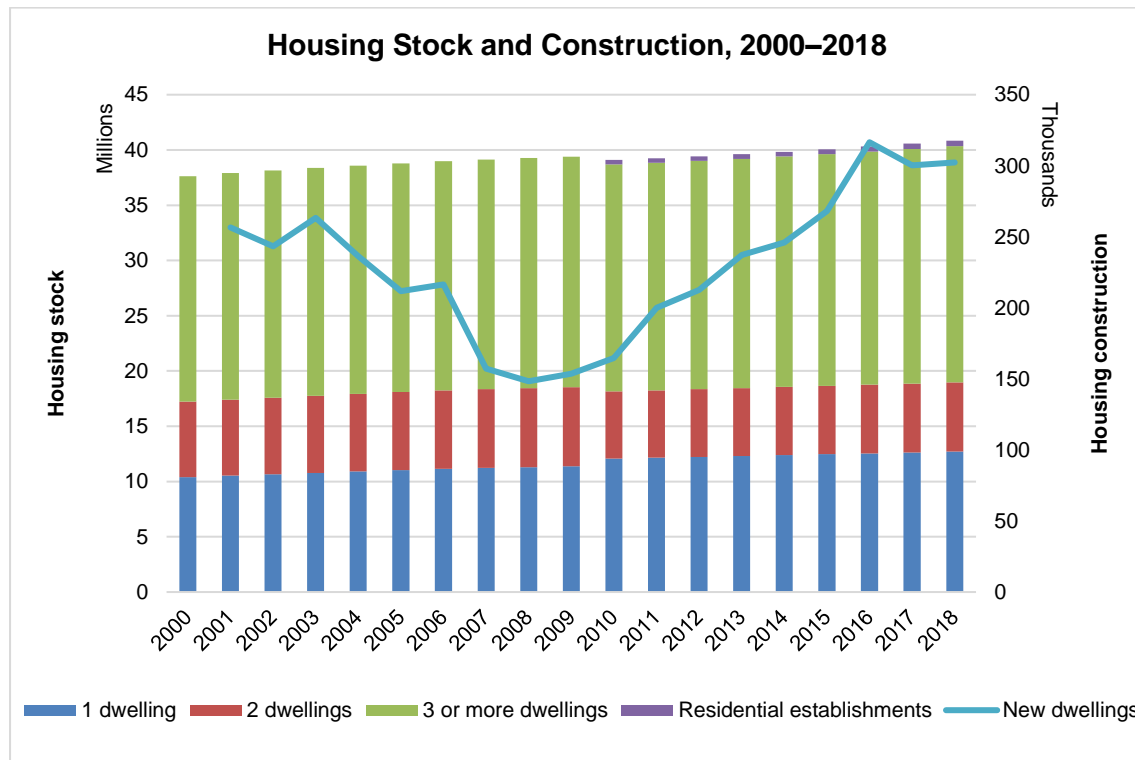


Figure 2. Dwelling stock and construction, 2000–2018 (Source: Federal Statistical Office Germany)

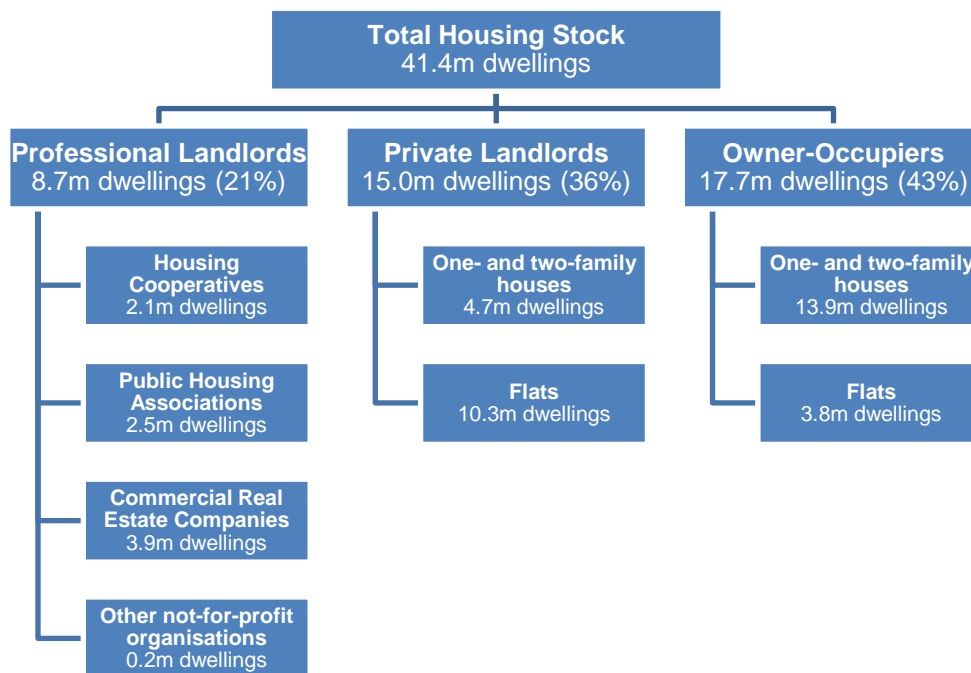


Figure 3. Housing tenure in Germany, 2018 (Source: GdW)

In particular in urban areas, construction has not met demand. At the national level, housing production was at 250,000 dwellings per annum, which is roughly in line with the identified housing need, but there was a strong regional imbalance with an overproduction in rural and less prosperous areas while there was a shortage in the metropolitan areas and major university towns (Voigtländer, 2017). The two main reasons for the shortfall in housing delivery are building land supply and construction costs (Voigtländer, 2017). The shortage of building land has resulted in dramatic price increases which in turn encouraged speculation (Voigtländer, 2017). Bringing new sites forward has become increasingly challenging due to nimby-behaviour and a shortage of town planners (Voigtländer, 2017). Suburban local authorities have often little interest in releasing additional building land because of the necessary infrastructure investments (Voigtländer, 2017). Construction costs for new builds have increased significantly, partly due to increased standards (e.g. energy efficiency, fire safety) and developer contributions to local infrastructure, which in turn make affordable housing less attractive (Voigtländer, 2017).

While the cost of housing has increased, the social housing stock has decreased continuously since the 1960s and makes up a very small percentage of the total housing stock (Kirchner, 2007). This is partly due to the nature of social housing in Germany, which is time limited. The provider of social housing receives subsidies for providing housing that is subject to rent control and access restrictions (Kirchner, 2007). After a period of usually 20-30 years the subsidy conditions elapse and the dwellings transfer into the private rental market. As construction of new social housing fell behind, the stock has reduced.

National policy is clearly in favour of promoting development within the existing built-up area, in Germany referred to as inward development (*Innenentwicklung*). Since the early 2000s, the Federal Government has the ambition to reduce new land uptake to below 30ha per day until 2030 (The Federal Government, 2017). Although it has significantly reduced land uptake since the mid-2000s, with 56ha per day in 2018 it is still well above the target.² There is sufficient potential for densification to accommodate the predicted household growth (Schiller et al., 2013). One problem is also the continued increase of the living space per capita from 39.5sqm in 2000 to 46.5 sqm in 2017.³

² <https://www.bmu.de/themen/nachhaltigkeit-internationales/nachhaltige-entwicklung/strategie-und-umsetzung/reduzierung-des-flaechenverbrauchs/> [Accessed 15 May 2020]

³ <https://www.inkar.de> [Accessed 15 May 2020]

3. THE GERMAN PLANNING SYSTEM

Germany's planning system is classified as part of the comprehensive-integrated family, though also exhibiting some features of the regional economic family (Berisha et al. 2020). In a recent classification, the system has been identified as more market-led and more performative (Berisha et al. 2020).

3.1 Administrative structure

Germany is a federal country consisting of 16 states (*Bundesländer* or *Länder* in short), including three cities (Berlin, Bremen and Hamburg) with the status of a *Land*. Most *Länder* have a regional tier, which is usually not directly elected. Germany has a two-tier local government consisting of 294 counties (*Landkreise*) and nearly 10,000 communities (*Gemeinden*), while 107 large cities are unitary authorities (*kreisfreie Städte*). There is strong variation between the *Länder* in terms of average population size and boundary changes. The median population size is around 1,700 but varies between less than 600 in Rhineland-Palatine and more than 20,000 in North Rhine-Westphalia, which had a municipal reform in the 1970s. In particular in the *Länder* that formed the GDR, the number of municipalities has declined rapidly over the past decades, whereas in most other *Länder* the numbers remained remarkably stable since the 1970s independent of their size.

The municipal right to self-government is an important feature of the German constitution (Art. 28 Basic Law) and is particularly important to planning. The degree of municipal independence depends on the municipal status, which is by and large the result of population size. Many smaller municipalities form a statutory corporation (*Gemeindeverband*) to be able to carry out their statutory duties. Nevertheless, a large number of municipalities and statutory corporations are very small and have therefore only a small planning service.

Municipalities are funded through a mix of national, state and local sources, though their financial position has come under pressure. Taxes account for approx. 30% of municipal revenues. Land tax (*Grundsteuer*) and business tax (*Gewerbesteuer*) are the most important locally raised taxes, which account for more than half of the tax revenues. That makes municipalities keen to develop and oversupply land in particular for industrial and commercial development (Schmidt, 2009, p. 1911). Only 25% of municipal revenues comes directly from the *Länder*, of which approximately half are earmarked subsidies (Schmidt-Eichstaedt et al., 2019). About 45% stems from fees and obligations as well as municipal revenues from economic activities and loans. Although the financial position of municipalities has greatly improved as a result of the positive economic development since the mid-2000s, there are huge regional disparities (Deutscher Städtetag, 2018)

3.2 Main legislative frameworks

Planning Law is part of competing legislation (*konkurrierende Gesetzgebung*), that is areas where the *Länder* are responsible until the Federal level makes laws. This was the case with the Federal Building Act in 1960 and the Spatial Planning Act in 1965 (Pahl-Weber &

Henckel, 2008). Planning is known as *Raumordnung* (regional planning) at the federal and state level, and *Bauleitplanung* (urban land use planning) at the local authority level, each with their own legal framework. This division is also reflected in the laws that guide planning in Germany: the Federal Regional Planning Act (*Raumordnungsgesetz – ROG*) deals with the general aims and objectives of planning and provides some basic rules for state and regional plans (supra-local planning), while the Federal Building Code (*Baugesetzbuch – BauGB*) is primarily responsible for planning at the local level. Housing land allocation, assembly and delivery is mainly regulated through urban land use planning, which is why the focus is on the Federal Building Code and related legislation.

The Federal Building Code is the result of a merger of the Federal Building Act and the Urban Development Act (*Städtebauförderungsgesetz – StBauFG*) in 1987, which has since been amended and revised several times: faster procedures (1997), Environmental Impact Assessment (2001) and Strategic Environmental Assessment (2004), urban densification (2007), energy transition and climate change (2011) to name just a few. The intervals between revisions have shortened (Krautzberger, 2007; Schmidt-Eichstaedt et al., 2019). Since 2007 the BauGB includes an environmental paragraph promoting sustainable development (§1a). Despite numerous reforms since its inception, the core of the legislative framework has been remarkably stable.

The Federal Building Code authorises the Federal Government to draft a number of statutes. The most important is the Federal Land Use Statute (*Baunutzungsverordnung – BauNVO*), which establishes a common system of use classes. Furthermore, the Plan Notation Statute (*Planzeichenverordnung – PlanZV*) establishes a common system of symbols for the land use plans. Together with the Federal Building Code they ensure that local planning practices are very similar across Germany and that land use plans look uniform across Germany.

In addition, there are numerous sectoral laws influencing planning decision, of which we shall briefly mention the most relevant. The Federal Nature Conservation Act (*Bundesnaturschutzgesetz – BNatSchG*) requires compensation for most spatial intervention, which is known in German as *Eingriffs-Ausgleichsregelung*. The Federal Immissions Control Act (*Bundesimmissionsschutzgesetz – BImSchG*) is very influential due to the principle of functional separation of conflicting land use (§ 50 BImSchG). In particular ambient noise is a perennial problem in mixed-use areas and poses challenges for urban densification. The Technical Guidance on Ambient Noise (*Technische Anleitung Lärm*) defines permissible ambient noise levels for each use class.

3.3 System of plans

Similar to the legislative framework, the system clearly distinguishes between supra-local and local plans. Planning in Germany is characterised by vertical coordination rather than a strictly hierarchical decision making; this is referred to as the counter-current principle (*Gegenstromprinzip*) in which the lower level influences decision-making. Nevertheless, once approved, there is a clear plan hierarchy. In the following the main plans for each of the three administrative tiers are outlined (Table 1).

Table 1. Overview of the German planning system (Source: adapted from Pahl-Weber & Henckel, 2008, p. 41)

Level	Instrument	Legal basis	Policy maker
Federal Planning (<i>Bundesraumordnung</i>)	Concepts and Strategies for Spatial Development	Federal Regional Planning Act (<i>Raumordnungsgesetz</i>)	Standing Conference of Ministers of Spatial Planning (MKRO)
State Planning (<i>Landesplanung</i>)	State Development Plan (<i>Landesentwicklungsplan</i>)	Federal Regional Planning Act and State Planning Acts	State Government
Regional Planning (<i>Regionalplanung</i>)	Regional Plan (Regionalplan)	Federal Regional Planning Act and State Planning Acts (<i>Landesplanungsgesetze</i>)	Regional Planning Authority*
Local Planning (<i>Bauleitplanung</i>)	Preparatory Land-Use Plan (<i>Flächennutzungsplan</i>) Binding Land-Use Plan (<i>Bebauungsplan</i>)	Federal Building Code (<i>Baugesetzbuch</i>)	Municipal Council (<i>Gemeinderat</i>)

* In Lower Saxony, the counties are responsible for regional planning, which means that no regional plan exists in cities with a unitary local government. In the city states the local preparatory land use plan is also a regional plan.

Planning remains largely a decentralised affair and there are no national comprehensive spatial plans, with the exception of marine spatial planning in the exclusive economic zone. Federal spatial planning occurs mainly through sectoral plans, mainly in the field of technical infrastructure, and informal instruments. Yet even some of the important sectoral plans, such as the Federal Transport Infrastructure Plan (*Bundesverkehrswegeplan*) have a strong input from the Länder. The Standing Conference of Ministers responsible for Spatial Planning (*Ministerkonferenz für Raumordnung – MKRO*), consisting of the federal and state ministers, formulates guidelines for spatial development mainly at federal and state level planning, the latest dating from 2016 (BMVI, 2016).

There is huge variation in regional planning, as it is strictly a matter for the *Länder*. Most Länder⁴ have a two-tier system of a state-wide plan (*Raumordnungsplan*) and regional plans for the subregions (*Regionalplan*), with slightly different names in each *Land*. The state-wide plan defines the aims and objectives of spatial planning and often includes provisions on spatial categories, central places and corridors. Regional planning is usually delegated to

⁴ The city states (Berlin, Bremen and Hamburg) and the Saarland have a single-tier system due to small size. In the city states, the preparatory land use plan may serve as a regional plan.

regional planning associations (*Regionale Planungsverbände*) or state administrative authorities (*Regierungsbezirke*).⁵ Most regional plans have in common that they define the spatial structure in terms of built-up area, open space and infrastructure (Pahl-Weber and Henckel, 2008; Wickel, 2018). They specify the objective of spatial planning and as such are binding on local authorities. Some regional plans include for instance enforceable minimum densities for new development.

Local planning is referred to as *Bauleitplanung* and also consist of a two-tier system of plans: the preparatory land use plan (*Flächennutzungsplan*) and the binding land use plan (*Bebauungsplan*). The preparatory land use plan outlines the future spatial development of the entire city for the next 15–20 years. It provides a framework for the legally binding land use plans, which are drawn up for areas where it is considered necessary for urban development. Many areas in German cities are not covered by a binding land use plan and are therefore directly regulated by §34 BauGB, which gives planning permission if the scheme blends in with their surroundings (Hirt, 2007).

3.4 The instruments for local planning authorities

In the following, the focus will be on local plans and main land policy instruments that are relevant for housing land allocation, assembly and delivery.

3.4.1 The Preparatory Land Use Plan

The preparatory land use plan outlines the future spatial development of the entire territory of a municipality, by indicating the general land uses and important (social, technical and transport) infrastructures. It is intended for a period of 15–20 years, although there is no end date. Many municipalities have plans that are dated. In practice it is a relatively dynamic plan which will be amended several times during its lifespan. It is not unusual that a preparatory land use plan has been amended more than a hundred times in a large local authority. The preparatory land use plan has no formal legal status and provides no direct property rights to landowners. Nevertheless, it is an important document, as the local planning authority is bound by it, as well as other sectoral plans. The regional preparatory land use plan introduced in 1998 is a specific form, as it combines the function of a regional plan and a preparator land use plan, but has not yet been applied widely.

3.4.2 The Binding Land Use Plan

The binding land use plan (*Bebauungsplan*) was initially intended to cover the whole territory of a city (similar to the Dutch *bestemmingsplan*), but in practice this turned out to be unrealistic because of the costly and lengthy procedures (Schmidt-Eichstaedt et al., 2019). This is the only plan which is legally binding, and the rules remain in force until amended or lifted. Binding land use plans are usually but not necessarily connected to concrete development projects, because of the significant efforts that have to go into plan approval. A binding land use plan is required for all developments that cannot be realised via §34 BauGB in built-up areas or where public local infrastructure is not secured.

⁵ The exception is Lower Saxony where the counties are responsible for regional planning.

The local planning authority has great freedom of how much it wishes to regulate in a land use plan, depending on the purpose of the plan. Land use plans are distinguished in terms of content and process (Table 2). In terms of content, land use plans are distinguished into qualified and non-qualified plans. Only a qualified land use plan directly provides building rights. In order to be considered a qualified plan, i.e. provide building rights, it needs as a minimum include rules on the “type and extent of use for building, the land on which built development may take place and spaces dedicated as public thoroughfares” (§30 BauGB). Non-qualified or simple land use plans only regulate certain aspects, e.g. as retail planning, leisure, climate change, green infrastructure (Schmidt-Eichstaedt et al., 2019). In terms of process, a distinction is made between a simplified and a standard process.

Table 2. Typology of land use plans

		Process	
		Simplified	Standard
Content	<i>non-qualified</i>	§13 Simplified Procedure	§12 Project and Development Plan §13 Simplified Procedure §13a Built-Up Area Plans §13b Small-Scale Residential Extensions
		§9 Binding Land Use Plan	§9 Binding Land Use Plan
			<i>qualified</i>

An important element of a binding land use plan is the designation of the type of land use or use class (*Art der baulichen Nutzung*). The four main use classes of the preparatory land use plan (residential, mixed, commercial and special) are subdivided into 12 detailed use classes, which are uniform across the county, though local planning authorities are allowed to enable or prohibit some uses as long as the character of an areas is not changed). Recently Mixed-Use Urban Areas have been added as a new category to reflect the increased demand for housing in inner-city areas without having to adhere to the environmental restrictions of residential areas and the cap on housing in mixed-use areas (Baumgart, 2019). All use classes, except special uses, are quite broad and allow for some

degree of mixing, with mixed-use classes even mandating it (Hirt, 2007). By definition, these use classes allow for different dwelling types (with the exception of the in an urban context little used Small-Scale Residential (*Kleinsiedlungsgebiet*), which is limited to one- or two-family dwellings) (Hirt, 2007). German planning has a positive attitude towards mixed-use development and change of use is relatively easy with broadly defined use classes (Hirt, 2007).

Furthermore, most binding land use plans will include provisions regarding the extent of land use (*Maß der baulichen Nutzung*), such as floor-space ratio, building height or number of storeys; land on which built development may take place (*überbaubare Grundstücksfläche*), such as lot lines and setbacks; and public thoroughfares (*örtliche Verkehrsfächen*) required for access. Beyond these minimum requirements for a qualified binding land use plans the municipality is free to regulate other aspects of land use.

The Project and Infrastructure Plan (*Vorhaben- und Erschließungsplan*) (§12 BauGB) is not dissimilar to a planning application in the UK. A landowner approaches the municipality with a concrete plan for development, including servicing the land, within a mutually agreed time frame which will then be translated into a proper B-Plan or even only be attached in its original form to the municipal ordinance. This has the advantage that the servicing costs will be entirely covered by the developer. The municipality is free to accept, require amendments or refuse the project. This instrument also has the advantage that it requires the investor to realise the plan within a certain timeframe, otherwise it can be lifted. Some local authorities also started to use this plan to test the seriousness of a proposal – an investor who is not prepared to pay for a B-Plan is likely to postpone construction.

Since 2007, it is possible to use the simplified procedure (*vereinfachtes Verfahren*, §13 BauGB), which until then was limited to minor amendments or extensions of existing BPlans, for small and medium-sized projects (up to 7ha of land on which built development may take place) in the built-up area as long as they help reduce land consumption (§13a BauGB). This included simplified procedures for public participation and stakeholder engagement, no need for an environmental statement (up to 2ha of land on which built development may take place)/assessment so long as there is no indication of significant impacts, correction of F-Plan, as well as no nature compensation for small projects. This instrument was clearly designed to speed up planning procedures and promote urban development within the existing built-up area. With the increased housing market pressures, the instrument was also extended to small-scale residential urban extension (up to 1ha of land on which built development may take place) for a limited time (§13b BauGB). In practice, the main benefits of these amendments seem to be related to the waving of the environmental reporting and nature compensation (Jehling et al., 2019). In particular the §13b BauGB was criticised as the aims are in direct contradiction with §13a BauGB and it is undermining the role of the preparatory land use plan. Also, the waiving of nature compensation weighs particularly heavy in the outer area (Jehling et al., 2019).

All type of binding land use plans can be combined with an Urban Development Contract (§12 BauGB). This covers a range of contracts under public law which safeguard public policy objectives that cannot be regulated via a binding land use plan, including the costs of planning and servicing. Proportionality is an important principle.

3.4.3 Other Land policy instruments

Land assembly and land value capture are considered important element of a planning system. In terms of land assembly, planning law provides a range of instruments to support the public sector in providing building land in terms of pre-emption rights, land readjustment and compulsory purchase. Land value capture refers to the attempt of the state to capture the increase in land value, originating from planning decisions, public works or the general development of the land market. We shall outline the relevant instruments in planning law.

Germany is well known for mandatory land readjustment (Crook, 2018), which is a key instrument in creating land parcels that are suitable for development in terms of location, shape and size (§45 BauGB). Landowners will own a different and often smaller plot of land than before, but their land is at least as valuable as before (Davy, 2007). It means that fragmented landownership no longer impedes development – be it because of unwilling landowners or high transaction costs – while the heavier instrument of compulsory purchase can be avoided. It is beneficial to landowners, as they receive building land that is developable and to the local authority as it can realise public policy objectives. It can only be applied within the built-up area or in conjunction with a binding land use plan.

The process for mandatory land readjustment is a well-established but also complex procedure (Davy, 2007; Crook, 2018; Kötter, 2018; Schmidt-Eichstaedt et al., 2019). Once the decision for mandatory land readjustment is taken, it is taken forward by the Independent Readjustment Authority (*Umlegungsstelle*) within the local authority. Once land is pooled virtually (*Umlegungsmasse*), land for public infrastructure, including land for environmental compensation that is mainly required for the area is removed. In so doing, it captures the land costs for servicing the land. The remaining land (*Verteilungsmasse*) will be redistributed based on the standard of relative price or relative size. This also involves land value capture, as the local authority keeps the readjustment gain, but not the planning gain (Davy, 2007; Schmidt-Eichstaedt et al., 2019). If the value method is used, landowners need to pay the difference in price. If the standard of relative size is used, the municipality can claim up to 30% of the land (or 10% if previously developed). There is also a simplified procedure for direct exchanges of land without any deductions of land for public infrastructure.

There is broad agreement that mandatory land readjustment has many benefits, as it respects a number of fundamental principles (Davy, 2007; Kötter, 2018; Schmidt-Eichstaedt et al., 2019). Land readjustment protects private property; it is not a taking of property as each landowner receives a plot of equal or higher value. It is fair in the sense that landowners pay for improvements to their property. At the same time, landowners benefit as their property increases in value. The Constitutional Court has confirmed in 2001, that land readjustment primarily serves private interests and is not a regulatory taking (Davy, 2007;

Kötter, 2018). Finally, it underlines the primacy of planning by adjusting land for the public good (Davy, 2007; Kötter, 2018).

Mandatory land readjustment is a powerful instrument to mobilise building land (Davy, 2007; Kötter, 2018). It is also less costly than compulsory purchase, while still allowing for some land value capture. While voluntary land readjustment is the preferred procedure by law, in practice mandatory land readjustment is often faster, provides more certainty and despite the deduction of the readjustment gain not more costly as landowners will need to pay all costs in a voluntary procedure (Kötter, 2018). In effect, many mandatory land readjustment procedures are effectively instigated voluntarily to benefit from these advantages (Davy, 2007).

The urban development measure (*städtebauliche Entwicklungsmaßnahme*) is a heavy-handed instrument for the development of unused or underutilised land in which the municipality designates an urban development zone, acquires the land at use value, services the land before the land is sold off to future residents. Similar to mandatory land readjustment, the municipality recoups all planning and public local infrastructure costs. One of the main differences with land readjustment is the focus on implementation, which is a legal requirement. Furthermore, other instruments have to be exhausted to achieve public policy goals (Frießecke and Weitkamp 2019).

Expropriation is an instrument of last resort. Despite the far-reaching legal text of §85(1) BauGB referring to the implementation of a land use plan, §87(2) BauGB restricts expropriation to “individual cases where this is required for the general good and the purpose to be served by expropriation cannot reasonably be achieved by any other means”. The owner is compensated at market value of the current use, which explicitly excludes any speculative gains due to expected changes in land use. While a very effective instrument in specific circumstances, the restrictions to its application and the procedural hurdles mean that expropriation is not a suitable strategic instrument for urban development (Albrecht, 2018).

In terms of land value capture, the distinction into the cause of land value increases is important. The BauGB formulates a general expectation that local planning authorities recoup up to 90% of the cost for public works that are directly related to the plan from the landowner, irrespective whether they plan to build or not. The 10% share for the local planning authority reflects the benefits of new infrastructure for the wider public and also prevents the construction of excessive local public infrastructure (Schmidt-Eichstaedt et al. 2019).

Land value capture beyond local public infrastructure is not an explicit goal of planning law. The default position is that the public sector pays for the costs of planning and the landowner enjoys the increased value of the land (planning gain). However, the Project and Infrastructure Plan and the Urban Development Contract allow the public sector to recoup planning costs and wider contributions to public infrastructure than the narrower stipulations

regarding the Provision of Local Public Infrastructure (*Erschließungsbeiträge*). Mandatory land readjustment even captures the part of the planning gain (Davy, 2007; Crook, 2017), but only land value increases directly related to the readjustment process (Schmidt-Eichstaedt et al., 2019). Planning is therefore not regarded as an activity to generate additional municipal income.

3.5 Summary

The German planning system has remained very stable since its inception. It has seen numerous amendments, some more substantive than others, but the core of the system did not change. More recently, the frequency of amendments has increased, and it seems that the Government has become more responsive to specific policy problems. Overall, the planning system offers a complete range of instruments that address all aspects of land policy.

4. HOUSING LAND ALLOCATION, ASSEMBLY AND DELIVERY IN GERMANY

The following section shall outline how German planning operates in practice. It highlights important trends in the application of different instruments and reflects on their usefulness. The structure follows the process of housing delivery, which begins with the allocation of building land, assembly and land value capture, and delivery.

4.1 Land allocation

Building land is officially identified in a two-tier process. The regional planning authority outlines the spatial structure based on population and economic projections. From a housing perspective, the areas designated as general settlement areas (ASB) are most relevant for local planning authorities. The regional level designations are very coarse and will be further specified in the local preparatory land-use plan, providing a framework for the development of binding land-use plans.

There is a fine power balance between the regional and the local level. The Regional Plan is prepared in consultation with municipalities according to the so-called 'counter-current principle' (*Gegenstromprinzip*), but overriding regional interests prevail and as such the regional plan is an important element of development control (Siedentop et al., 2016). It also helps that regional planning is less politically exposed than other tiers of government (Wickel, 2018). Regional planning is a typical example of land-use planning based on the conformance principle (cf. Mastop & Faludi, 1997). The regional planning authority can designate land for residential development, but it cannot enforce housing land allocation in local land use plans (see also Schmidt, 2009). An increasing number of municipalities in particular in metropolitan areas refuses allocation of new building land. Regional planning authorities can only persuade municipalities by using sound evidence to allocate building land. In some cases, in particular where the regional planning authority is officially part of the state government, withholding of urban development funds will enforce cooperation of most municipalities, but will be futile with the wealthiest of municipalities.

While the German planning system is by definition comprehensive and plan-led, landowners and the availability of land for development will have an impact on housing land allocation. Certainly at the local level, the availability of sites is crucial in the planning process. The preparatory land use plan has a recommended time horizon of 15-20 years, but in practice plans can be much older. During its lifespan it will be amended numerous times, but usually in response to development proposals.

The fact that there is not enough building land is not simply the fault of local authorities. Most local planning authorities are generally willing to allocate sufficient housing land, but the devil is often in the detail. The costs of development, in particular long-term costs relating to social and technical infrastructure, may sometimes be higher than the returns from development in terms of additional tax income (Preuß & Floeting, 2009). There is also increasing resistance to new development prolonging planning process further (Voigtländer, 2017). Many municipalities experience a situation of too much building land and not enough, which has

been described by Davy (2000) as the building land paradox. Many landowners have decided not to use their building rights, although municipalities have since moved towards project planning with a clearer focus on implementation (Krautzberger, 2010).

Access to the land market in Germany has been relatively open in the past but has increasingly become subject to speculative investment (Deutscher Bundestag, 2017). The land market is relatively transparent and land values and house prices can be clearly separated. The Boards of Expert Valuers (*Gutachterausschüsse für Grundstückswerte*) produce small-scale reference land values (*Bodenrichtwerte*) for different land uses, providing important orientation on the land market. These were introduced with the first Federal Building Code in 1960. These are publicly available via an online platform (BORIS) for the whole of Germany. Although creating market transparency, reference values do not counteract price increases and can be considered a minimum value (Voß & Bannert, 2018).

4.2 Land assembly

Strategies vary greatly between local planning authorities, depending on size, market context, urban morphology, planning traditions, etc. Some municipalities have a very active land policy, while others leave land assembly almost exclusively to the market. As a general rule of thumb, municipalities with a more buoyant real estate market are in a better position to pursue an active land policy. Traditionally, planning has been heavily supply-driven by allocating land for development and providing building rights (Schmidt, 2009). This has become the exception rather than the rule and most municipalities have adopted a more development-led strategy responding to private initiatives or public-sector led initiatives. Increasingly, municipalities have become more proactive in providing building land for specific dwelling populations groups.

This element of the planning process has been partially documented in the earlier study for the Scottish Land Commission by Crook (2016). It is important to note that land assembly itself is insufficient, as building rights can only be conferred if the provision of local public infrastructure has been secured (§30 BauGB). Many instruments and strategies therefore also address land value capture to put the required local public infrastructure in place to transform unserviced land into fully serviced building land. The key instruments of the Federal Building Code have been outlined above, but the practice of land assembly involves numerous strategies that are beyond the scope of planning law (Figure 4).

Land assembly is possible via private or public actors. Public landownership provides more options to realise public policy goals, but the instruments of the BauGB put municipalities in a relatively strong position even under private landownership. Traditional supply-led planning in which the municipality provides fully serviced building land for development have become the exception due to the high planning cost. Many municipalities use a mix of instruments to assemble land and achieve public policy goals.

Many municipalities may have sites where development is permissible because they are covered by a binding land use plan (§30 BauGB) or are situated within built-up areas (§34

BauGB) and already fully serviced, but landowners are unable or unwilling to develop. Although the municipality cannot claim any planning or service costs as planning permission and infrastructure is already in place, these sites form a huge potential in growing cities. The city of Tübingen for instance, produced an inventory for all infill sites and evaluated their suitability for development. Subsequently, landowners have been contacted directly asking to build or sell off (to an investor or to the municipality at market value), but with moderate success. Recently, the municipality threatened with a building order (*Baugebot* – §176 BauGB), with expropriation as last resort (*Stuttgarter Nachrichten*, 2019). The mayor justified this heavy-handed instrument with the local housing market pressures and the social obligation of property expressed in the constitution (§14 Basic Law). Kolocek (2018, p. 189) has referred to the building order as “land policy instrument that does not work – to solve a problem that does not exist”, because it is neither efficient nor effective to release building land at the scale currently required.

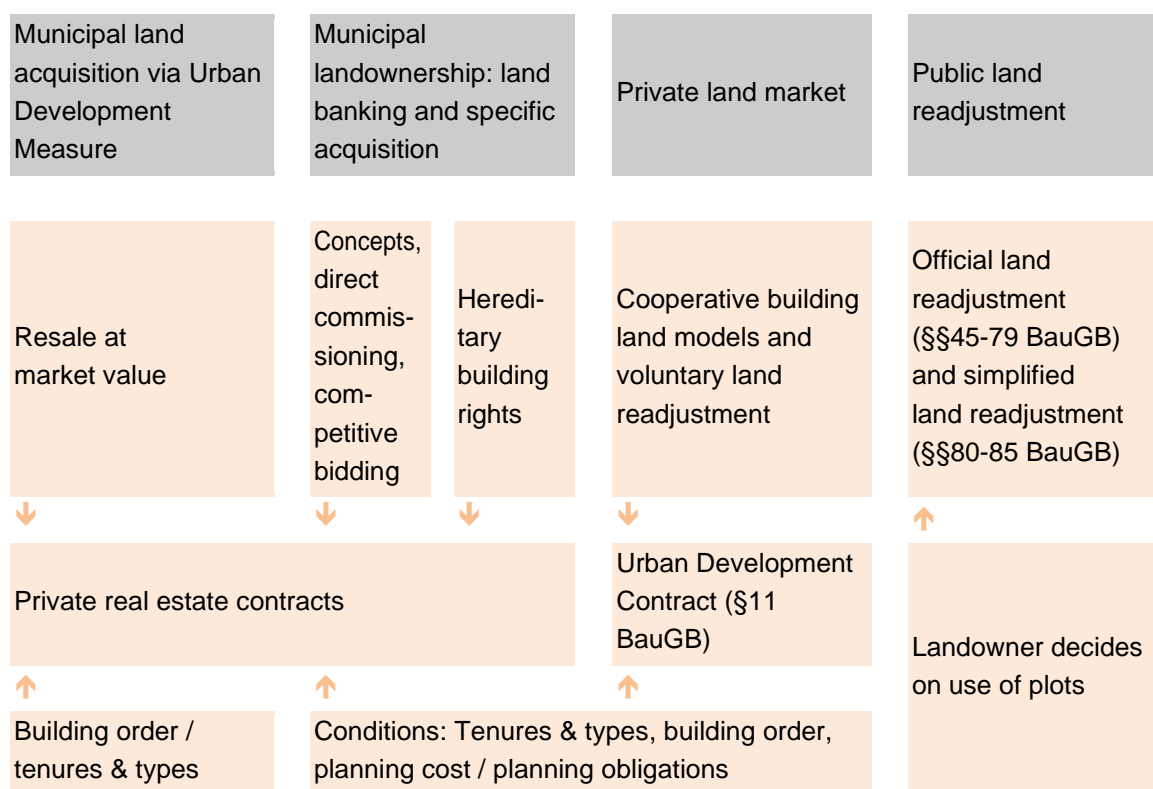


Figure 4. Main land assembly strategies for German municipalities (Source: adapted from *Deutscher Verband für Wohnungswesen, Städtebau und Raumordnung*, 2016, p. 13)

Mandatory land readjustment is an important instrument to deal with fragmented ownership structure. It has the advantage that it creates no costs for the municipality, but it is a lengthy process and implementation is not secured (Hartmann & Spit, 2015). Furthermore, additional instruments are required to fully cover the planning and service costs, which require the voluntary cooperation of the landowners via an Urban Development Contract (§11 BauGB). This also allows land to be diverted for other goods, such as affordable housing, but the legislator has capped the total amount of land that can be diverted (Kötter & Rehorst, 2019). Not every city actually uses mandatory land readjustment. In one case, the readjustment

authority (*Umlegungstelle*), which is part of municipal government, was discontinued due to the high costs and the lack of cases.

Where land has been assembled by the private sector, but a land use plan is required, the municipality it is free to negotiate with the landowner the conditions for development via a Project and Development Plan (§11 BauGB) or Urban Development Contract (§12 BauGB). As stated above, it is nowadays standard practice that the developer covers all planning costs and delivers or pays for local public infrastructure which will be transferred into municipal ownership after completion of the project. Some municipalities also demand developer contributions towards public infrastructure costs beyond the plan area. The local planning authority has the exclusive right to prepare a land use plan, which puts it in a really strong position compared with its British counterparts. The municipality of Offenburg has developed a building land model which is centred on voluntary land readjustment and Urban Development Contracts as the main instrument, which apart from land value capture also includes requirements for dwelling types and tenures and a building order. This has resulted in a comparatively swift development process of an average of only two years and keeps the costs for the public sector low (Deutscher Verband für Wohnungswesen, Städtebau und Raumordnung, 2016).

Municipal landownership is the most powerful strategy to implement public policy goals and many municipalities pursue an active land policy, although that clearly depends on the financial reserves of each local authority. Municipalities can acquire land directly or make use of extensive pre-emption rights at the standardised market value. Others use urban development corporations to acquire and develop land. The city of Ulm is well known for its proactive land policy for more than a century. To counter speculation, Ulm has acquired land to develop affordable housing. Currently, the city refused to approve binding land use plans if the land is not publicly owned. The municipality aims to acquire land at low value to keep prices low while capturing all development costs. The city owns significant landholdings so that it generally can develop sufficient housing units. In some cases, the municipality concludes repurchase agreements with landowners.⁶

Local planning authorities have a range of instruments at hand to recover infrastructure and planning costs. With the increasing financial pressures for local planning authorities, there is more appetite to actually use these instruments. The Building Land Commission (Baulandkommission, 2019) recommends providing land for affordable housing below market prices and the use of hereditary building rights (*Erbbaurecht*).

4.3 Delivery

The local planning authority decides whether to prepare a land use plan or not, which puts it in a really strong position. With the exception of building permits being issued based on the

⁶ <https://www.swr.de/swraktuell/baden-wuerttemberg/ulm/Das-kann-Gemeinde-Ulms-Weg-gegen-Spekulation-mit-Grundstuecken,das-kann-gemeinde-grundstuecke-ulm-100.html> [accessed 23 April 2020]

blend-in rule of §34 BauGB, it means that the local planning authority has almost total discretion, more so than its British counterparts as there is no Planning Inspectorate or similar. The risk for the municipality is that a site will not be developed if it is economically unviable.

The extent to which municipalities use their discretion to push for high-quality developments and affordable housing varies with size and prosperity. It is good practice to demand urban design competitions for larger schemes or important sites. There are different standards for competitions ranging from an open architectural competition with an independent jury to collaborative design workshops.

The making of a binding land use plan is generally a collaborative process between the developer and the municipality. Municipalities will rarely draft new land use plans if there is no investor lined up (Krautzberger, 2010). However, there will be detailed negotiations about the provisions in terms of urban design quality and housing.

Since 2007, the majority of land use plans use the simplified procedure which can be applied to all projects within the built-up area and even small-scale urban extensions. In this sense, the exemption has become the rule (Krautzberger, 2014; Schmidt-Eichstaedt, 2019).

4.4 Summary

Germany's planning system strongly focuses on procedures aiming to balance private and public interests. It offers a relatively complete set of instruments covering all aspects of land allocation and assembly. Municipalities, in particular cities, make full use of these instruments and are proactive in the development process. The costs of development are usually borne by the developer while the land value uplift is for the landowner.

5 EXEMPLARY PROJECT: BAHNHOF HEUBRUCH, WUPPERTAL

The Bahnhof Heubruch is a mixed residential development involving over 300 dwellings on 5.5ha in the city of Wuppertal in the German state of North Rhine-Westphalia. It will be developed on either side of the Nordbahntrasse, a former railway that closed in the early 1990s and has since been converted into a popular cycle path. The actual site is the former Heubruch station, situated a 10-minute walk from the centre of Barmen, which is the secondary centre of Wuppertal. It is currently one of the most important residential projects in Wuppertal (Wirtschaftsförderung Wuppertal, 2017). This project illustrates how planning helps a German city to develop a high-quality residential project with affordable housing in a less prosperous economic context.

5.1 Land allocation

The Bahnhof Heubruch was jointly identified for residential development in the early 2010s in talks between the municipality and the current landowner Aurelis in relation to another development which proved quite successful. Aurelis is a real estate developer founded as a subsidiary of Deutsche Bahn, the national railway company, to manage land and buildings no longer required, which has since been sold off and is now controlled by private equity firm Redwood Grove International.⁷ As such it has substantial landholdings in German cities which it develops and sells off to a building contractor, though the company has since concentrated on asset management of commercial properties.

After the closure of the railway in 1992, the site was underutilised for more than two decades. In the 1990s and 2000s, Wuppertal lost nearly 9% of its population, resulting in a weak real estate market. Based on the successful development of another site in Wuppertal and positive market signals, the local authority and the developer organised a workshop in 2013 with housing market actors to explore the potential for development but was met with scepticism. It took a further two years until all parties were convinced that the site could be developed, which was helped by potential solutions for soil remediation and the relocation of the recycling centre, and the increased attractiveness of the location due to the opening of the Nordbahntrasse.

Although the site has been identified as an important site for residential development (e.g. Stadt Wuppertal, 2016), until this date land has not been officially allocated. This is partly the result of the specific nature of the site as former railway, but also common practice in German land use planning where land allocation is often reactive to private initiative. Despite its central location, the area is located in the undesignated outlying area (*Außenbereich*), notwithstanding that it was designated as general settlement area (ASB) built-up area in the current Regional Plan and its predecessor (Bezirksregierung Düsseldorf, 1999, 2018). This is because in the current preparatory land use plan, dating from 2005, the site is still designated for railways and therefore not part of the built-up area. Land for railways is governed by sectoral law (General Railway Act) and needs to be formally released

⁷ <https://www.aurelis-real-estate.de/aurelis/presse/pressemitteilungen/2014/aurelis-begruesst-neue-shareholder-struk> [accessed 14 April 2020].

(*entwidmet*) by the Federal Railway Authority, which happened in 2010 on request of the landowner, Aurelis. In parallel with the preparation of the legally binding land use plan, the municipality will also amend its preparatory land use plan.

In terms of bringing the site forward, the project is typical in a sense that it is the result of a close cooperation between the private and the public sector. There is strong interdependence and allocation of the site is mutually beneficial. Although the site was not yet allocated in the preparatory land use plan for housing, mainly because it was still determined under the General Railway Act at this time, the site had been on the radar of local planners for a long time. Equally, without signals of the landowner wanting to develop, the local planning authority is unlikely to prepare a land use plan.

5.2 Land assembly

As the land was in single ownership, with the exception of the cycle path owned by the local authority and a small privately-owned plot at the edge of the plan area, land assembly posed no major problem. Aurelis, as the major landowner, was keen in bringing the site forward, and also the owner of the private plot agreed to participate in the process. The goods buildings on site were leased on a temporary basis and included a municipal recycling centre and parking ground for employees of a large manufacturer, which needed new locations.

However, soil and groundwater pollution in some parts of Bahnhof Heubruch area jeopardised development. There was known groundwater pollution in the northern part, which was already treated for many years through a specific installation which would need to remain for the foreseeable future. This initially prevented development, but technical innovations would allow for a smaller installation that could be integrated in the plan. The additional costs had to be covered by the developer. Soil pollution in the southern part due to oil storage proved more complex and prevents development to date. The necessary research is currently being carried out and remediation measures need to be clear before the plan can be approved.

In terms of land value capture, the developer covered all planning and local public infrastructure costs. This included commissioning the urban design competition and a planning consultancy, all in coordination with the local authority, ahead of the formal planning process. This is a common practice and was never debated. This was agreed early on in the process and will be finally regulated in an Urban Development Contract (§11 BauGB). This option was chosen because Aurelis acts only as developer, not as builder, therefore ruling out the option of a Project and Development Plan (§12 BauGB) as implementation of the plan could not be secured. In essence though, this is a semantic difference, with the exception that the Project and Development Plan includes an implicit building order. The Urban Development Contract (§11 BauGB) regulates the realisation of public thoroughfares and public/green spaces and water retention through and paid for by the developer, which once completed will be transferred into the local authority ownership free of charge; the realisation of 60–70 units in the subsidised rental sector; and the implementation of the design guidelines. Developer contributions to wider infrastructure

costs were not included and also the costs for the playground, which also serves the wider neighbourhood, were largely funded by the public sector via a general urban development grant from the state (*Städtebauförderung*).

5.3 Delivery

The local planning authority insisted on an urban design competition by invitation to ensure a high-quality development. Five respected urban design consultancies were invited. The submissions were evaluated by a committee consisting of the three representatives of the municipality and the developer respectively and two members of the *Gestaltungsbeirat*, an independent advisory design committee that exists since 2001. The total costs of the design competition were less than €50,000, which is a small sum within the overall budget. The design competition proved very valuable, not just because of the high-quality results but also because it provided a mutually agreed direction for the planning process.

The conditions for the competition were developed in partnership between the private and the public sector, following an initial draft by the developer. The ideas were not far apart. The developer needed a certain amount of developable land to make the scheme financially viable, while the local planning authority had some requirements regarding public space. The design specifications demanded an inner-city residential neighbourhood with appropriate density with different dwelling types, including town houses (30-50%). The latter were to be realised by a single contractor or to be realised individually by the future occupier. Flats were both for rent and sale, of which 20% would be in the subsidised rental sector (social housing). The plan needed to include suitable subdivisions of plots that can be developed independently. The design needed to accommodate 1.5 parking places per dwelling with additional parking for visitors. Furthermore, it needed to include space for a nursery and a large playground. In terms of design guidelines, it required to accentuate entrance situations to the area, take advantage of the topography of the area in the design, and integrate the historic Konsum building in the plan.

The winning design by HGMB Architekten in cooperation with KLA was agreed unanimously and proposed a neighbourhood with up to 350 dwellings in 3-4 storey buildings which embrace a series of public spaces and semi-private courtyards (Figure 5). All buildings will be built with green roofs. Motorised traffic has been kept outside, creating a safe environment for children. The playground integrates a natural rock formation in the design. The plan convinced both from an economic and a design perspective.

The results of the urban design competition and subsequent negotiations between the developer and the local authority have been translated into a qualified binding land use plan that is currently out for consultation (Figure 6). The B-Plan was prepared by a specialist planning consultancy. Although it is a classical land use plan that only confers building rights (*Angebotsplan*), an Urban Development Contract (§11 BauGB) ensures that all direct planning and development costs will be realised and paid for by the developer.

When completed, the land use planning process will have lasted more than four years. Once approved, the binding land use plan will regulate important aspects of the urban design, in particular the type and extent of use for building, the land on which built development may take place and spaces dedicated as public thoroughfares. The whole area is designated as General Residential (WA); only the privately-owned parcel and adjacent lands are designated as Urban (MU). The distinction is more symbolic and underpins the plans for mix-use, including food and drink, on the privately-owned plot. The flexibility of the use classes in German planning law is demonstrated as the municipality clearly exceeds the upper limits of the BauNVO (see also Eichholz & Schoppengerd, 2019) and some uses have been excluded (garden centres, any activities related to sex and betting, tank stations). All other aspects are regulated in the Urban Development Contract, including the realisation of 20% of the units in the subsidised rental sector.

Following the planning application by the developer in late 2016, it took more three years until the draft land use plan went out for public consultation in early 2020, which was two years later than planned. The remediation of soil and traffic management proved more challenging than anticipated and needed to be addressed before the plan could go out for consultation. The urban design was also amended and, once an investor was lined up, further changes to some aspects of the urban design were required. The final design included more town houses and an additional floor on some plots. The final land use plan can also only be approved once the exact need for soil remediation on the whole area to the south of the Nordbahntrasse has been revealed. It is possible that minor amendments to the plan might be required once an investor is lined up for the remaining building plots.



Figure 5. Left: Masterplan Bahnhof Heubruch and Artist impressions of Bahnhof Heubruch. Top right: view from the Nordbahntrasse towards the Konsum building. Bottom right: view along Nordbahntrasse (Source: HGMB Architekten).

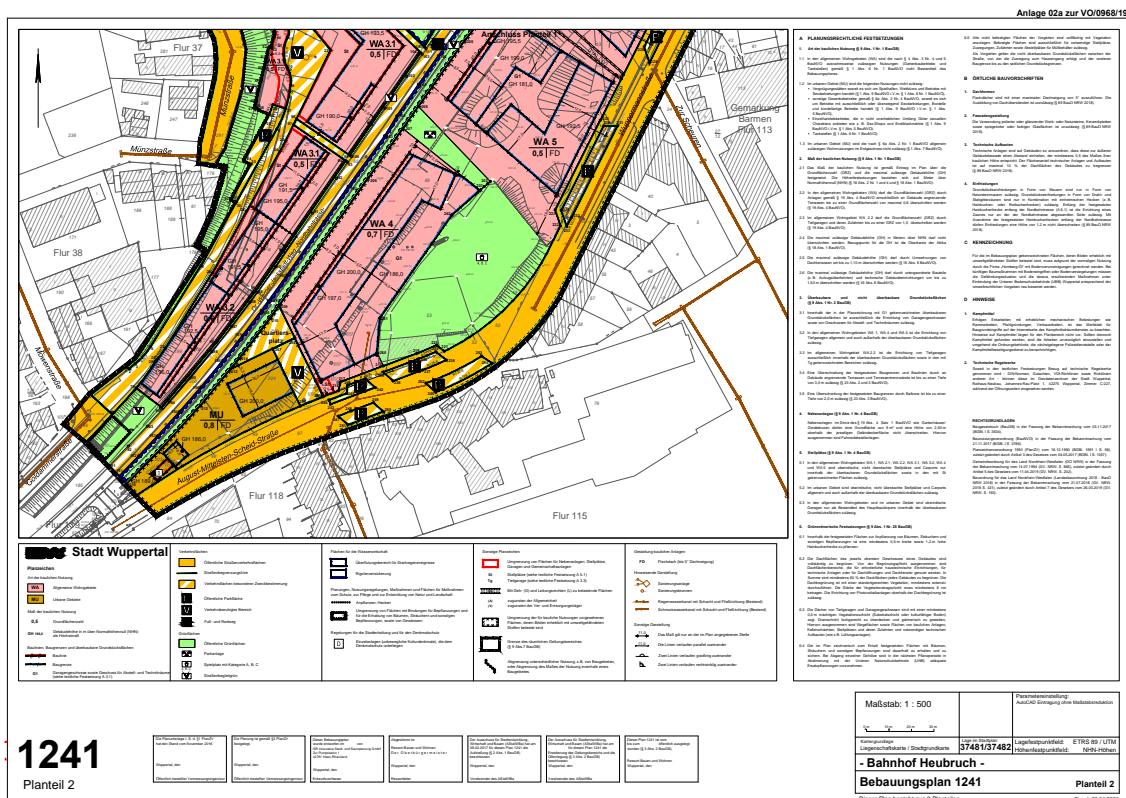
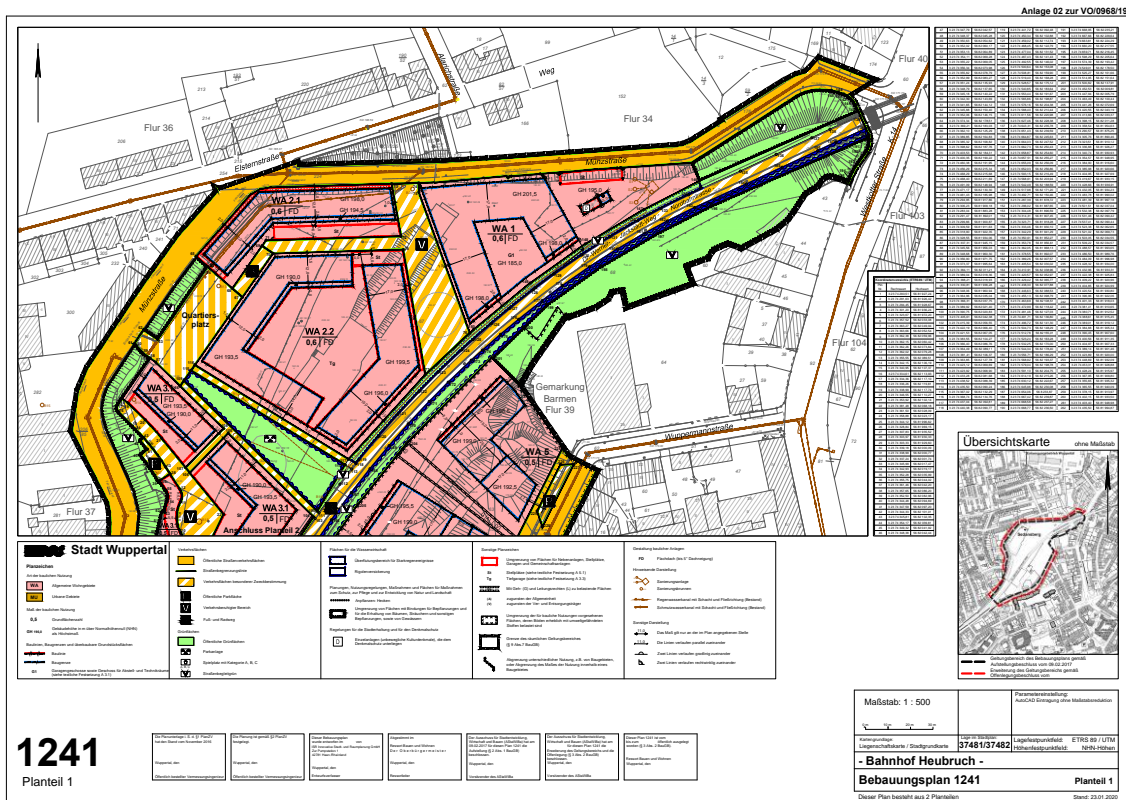


Figure 6. Draft binding land use plan for the Bahnhof Heubruch in two parts (Source: Stadt Wuppertal)

5.4 Summary

The case of Bahnhof Heubruch demonstrates the approach of securing affordable housing and design quality in a city in a less prosperous market context. It demonstrates the close collaboration between the private and the public sector in the planning process, which is partly due to strong interdependence. Although final conclusions are not possible as the land use plan has not been approved and construction is not to begin before 2021, the project shows how it is possible to secure the implementation of public policy.

6 LESSONS FOR SCOTLAND

Similar to Scotland, Germany currently experiences a housing affordability crisis, which is starkest in metropolitan areas. However, the increasing housing market pressures have led municipalities to use the instruments of planning law more extensively to deliver affordable housing and placemaking. Examining the German planning system, we identify potential lessons for Scotland.

German planners are generally satisfied with the planning system and instruments provided in planning and building law. The system is well established and relatively stable, which provides certainty to both public and private actors. Most reforms were considered useful additions relating to certain aspects of planning or clarifications, while the core of the planning system remained untouched. The main problem is the application of these instruments, which varies greatly between local planning authorities, with many not exhausting the potential. Planning is generally perceived as a collaborative process between state and market actors with a mutual respect for their interests. It is perceived as legitimate that the public sector makes demands and that developers fund public infrastructure required for development.

Germany has a well-functioning strategic planning system at the regional and local level that controls development. At the regional level, strategic plans outline the desired settlement structure in collaboration with municipalities. Local planning authorities are mostly cooperative and willing to allocate land for development, though the devil is sometimes in the detail (e.g. costs of new development or nimby behaviour of citizens) and a few local authorities refuse to cooperate altogether. Nevertheless, it would be naïve to assume that the system is strictly plan-led. Which sites are brought forward is often the result of market dynamics. Both the regional plan and the preparatory land use plan are not static and are regularly amended. However, the local planning authority has the exclusive right to refuse any development due to non-conformity, i.e. there is no entitlement to a land use plan or even the provision of local public infrastructure if land is already designated as building land. This puts the local authority potentially in an extremely powerful position.

German local authorities have many opportunities to mobilise building land, though constitutional protection of private property means there are limits. Mandatory land readjustment remains an important instrument but becomes less relevant in times where densification and implementation are paramount. Active land policy and hereditary building rights are back again but depend on the financial potency of local authority. German municipalities have ample opportunities for public land value capture, but any costs need to be in a direct relationship to the scheme and cannot include costs the local authority is obliged to provide anyway. The only way to directly capture the planning gain is through public landownership.

Local planning authorities can potentially regulate all aspects of land use and urban design. Whilst there is no direct possibility to support affordable housing via binding land use plans, municipalities have plenty of steering opportunities via public contracts or by pursuing an

active land policy. The fact that there is no legal obligation for municipalities to provide building rights puts them in a powerful negotiation position with developers, in particular in a buoyant real estate market. Most urban municipalities with high housing need, have established or prepare local policies that demand a minimum percentage of affordable housing for developments above a certain threshold. The time-limited nature of publicly subsidised housing also means that the housing quality is not different from market housing. In order to secure a more permanent affordable housing stock, some local authorities still have public housing companies.

The German planning systems guarantees a strong role for local planning authorities, as most projects required a binding land use plan. Portraying Germany as a planning system with little discretion is correct in so far as once plans are approved (or the norms of BauGB for unplanned areas are met) a building permit can only be refused based on non-conformity. However, the binding land use plan forms the end piece of a long process during which the local authority has ample discretion. The extent to which a local planning authority makes uses of this discretion to realise affordable housing and placemaking depends on political will and market context.

The following potential lessons for Scotland have been identified:

- An active land policy has proven a powerful instrument to deliver affordable housing and placemaking. It provides municipalities with the opportunity to demand certain concepts, e.g. co-operative or not-for-profit housing, and design quality. Financially healthy local governments are a necessary condition as well as instruments to acquire land for development.
- Mandatory land readjustment is a proven method if fragmentation of ownership and therefore land assembly is a barrier to development. This well-known method has the advantage that land can be assembled into suitable plots and serviced without any additional costs for the public. Given the discretionary nature of the Scottish planning system, the challenge is how planning permission can be granted in anticipation of an actual planning application. It is mainly useful for urban extensions without high development pressures where an orderly development is desirable.
- In terms of land value capture the German system provides very clear rules that ensure developer contributions to public infrastructure on the one hand while also protecting developers from excessive demands. Furthermore, it means that developer contributions are earmarked for specific interventions rather than generate income for the municipal budget.

7. REFERENCES

- Albrecht, J. 2018. Expropriation for urban development purposes in Germany: consider very carefully before using it. In: Gerber, J.-D., Hartmann, T. & Hengstermann, A. (eds) *Instruments of Land Policy: Dealing with Scarcity of Land*. Abingdon: Routledge, pp. 294-306.
- Baulandkommission. 2019. Empfehlungen auf Grundlage der Beratungen in der Kommission für "Nachhaltige Baulandmobilisierung und Bodenpolitik" (Baulandkommission). Berlin: Federal Ministry of the Interior, Building and Community.
- Baumgart, S. 2019. Das Urbane Gebiet: Perspektiven auf und für eine neue Gebietskategorie. In: Wehrhahn, R., Pohlen, J., Hannemann, C., Othengrafen, F. & Schmidt-Lauber, B. (eds) *Housing and Housing Politics in European Metropolises* (Jahrbuch StadtRegion). Wiesbaden: Springer VS, pp. 129-144.
- BBSR (Bundesinstitut für Bau-, Stadt- und Raumforschung). 2017. *Raumordnungsbericht 2017: Daseinsvorsorge sichern*. Bonn: BBR.
- Berisha, E., Cotella, G., Janin Rivolin, U. & Solly, A. 2020. Spatial governance and planning systems and the public control of spatial development: a European typology. *European Planning Studies*, DOI: 10.1080/09654313.2020.1726295.
- Bernt, M. 2019. The emergence of "Stadtumbau Ost". *Urban Geography*, 40, 174-191.
- Bezirksregierung Düsseldorf. 1999. *Gebietsentwicklungsplan für den Regierungsbezirk Düsseldorf*. Düsseldorf: Bezirksregierung Düsseldorf.
- Bezirksregierung Düsseldorf. 2018. *Regionalplan Düsseldorf*. Düsseldorf: Bezirksregierung Düsseldorf.
- BMVI (Federal Ministry of Transport and Digital Infrastructure) 2016. *Concepts and Strategies for Spatial Development in Germany*. Berlin: BMVI.
- Brake, K. & Herfert, G. (eds). 2012. *Reurbanisierung: Materialität und Diskurs*. Wiesbaden: Springer VS.
- Crook, T. 2018. Local authority land acquisition in Germany and the Netherlands: are there lessons for Scotland? Inverness: Scottish Land Commission.
- Davy, B. 2000. Das Bauland-Paradoxon: Wie planbar sind Bodenmärkte? In: Einig, K. (ed.) *Regionale Koordination der Baulandausweisung*. Berlin: VWF, pp. 61-68.

- Davy, B. 2007. Mandatory happiness? Land readjustment and property in Germany. In: Hong, Y.-H. & Needham, B. (eds) *Analyzing Land Readjustment: Economics, Law, and Collective Action*. Cambridge, MA: Lincoln Institute of Land Policy, pp. 37-56.
- Deschermeier, P., Haas, H., Hude, M. & Voigtländer, M. 2016. A first analysis of the new German rent regulation. *International Journal of Housing Policy*, 16, 293-315.
- Deutscher Bundestag. 2017. Maßnahmen gegen Baulandspekulation. <https://www.bundestag.de/resource/blob/514870/689e5955a0e678667ed762acdee640e2/W/D-7-060-17-pdf-data.pdf> [accessed 5 June 2020].
- Deutscher Städtetag. 2018. *Stadtfinanzen 2018: Schlaglichter des Deutschen Städtetages* (Beiträge des Deutschen Städtetages zur Stadtpolitik 112). Berlin: Deutscher Städtetag.
- Deutscher Verband für Wohnungswesen, Städtebau und Raumordnung (2016) *Mehr Bauland für bezahlbaren Wohnungsbau: Gute Beispiele kommunaler Boden- und Liegenschaftspolitik*. Berlin: Deutscher Verband für Wohnungswesen, Städtebau und Raumordnung.
- Die Unterzeichnenden 'Für eine wirklich soziale Wohnungspolitik'. 2018. Für eine wirklich soziale Wohnungspolitik: Wissenschaftler_innen fordern Schutz der Bestandsmieten, Gemeinnützigkeit und Demokratisierung. *sublurban*, 6, 205-222.
- Difu (Deutsches Institut für Urbanistik) & VHW (Bundesverband für Wohnen und Stadtentwicklung). 2017. *Bodenpolitische Agenda 2020-2030: Warum wir für eine nachhaltige und sozial gerechte Stadtentwicklungs- und Wohnungspolitik eine andere Bodenpolitik brauchen*. Berlin: Difu.
- Eichholz, A.-K. & Schoppengerd, J. 2020. Nachverdichtung versus Dichteobergrenzen? Zur Anwendung der Überschreitungsmöglichkeiten nach § 17(2) BauNVO. *RaumPlanung*, 206, 16-23.
- Falk, N. 2011. Masterplanning and infrastructure in new communities in Europe. In: Tiesdell, S. & Adams, D. (eds) *Urban Design in the Real Estate Development Process*. Oxford: Wiley-Blackwell, pp. 52-71.
- Friesecke, F. & Weitkamp, A. 2020. Daueraufgabe Stadterneuerung – zwischen Erhaltung und Revitalisierung. In: Kötter, T. (ed.) *Bodenordnung und Landmanagement: Handbuch der Geodäsie, herausgegeben von Willi Freeden und Reiner Rummel*. Berlin: Springer Spektrum.
- Hartmann, T. & Spit, T. 2015. Dilemmas of involvement in land management – comparing an active (Dutch) and a passive (German) approach. *Land Use Policy*, 42, 729-737.

Hirt, S. 2007. The devil is in the definitions: contrasting American and German approaches to zoning. *Journal of the American Planning Association*, 73, 436-450.

Jehling, M., Albrecht, J. & Schaser, C. 2019. Je schneller, desto besser? – Chancen und Risiken beschleunigter Verfahren in der Bauleitplanung. In: Meinel, G., Schumacher, U., Behnisch, M. & Krüger, T. (eds) *Flächennutzungsmonitoring XI: Flächenmanagement – Bodenversiegelung – Stadtgrün* (IÖR Schriften 77). Berlin: Rhombos, pp. 5-16.

Kemeny, J. 1995. *From Public Housing to the Social Market: Rental Policy Strategies in Comparative Perspective*. London: Routledge.

Kirchner, J. 2007. The declining social rental sector in Germany. *European Journal of Housing Policy*, 7, 85-101.

Kofner, S. 2014. The German housing system: fundamentally resilient? *Journal of Housing and the Built Environment*, 29, 255-275.

Kolocek, M. 2018. A German perspective on building obligations: planning professionals try to remember. In: Gerber, J.-D., Hartmann, T. & Hengstermann, A. (eds) *Instruments of Land Policy: Dealing with Scarcity of Land*. Abingdon: Routledge, pp. 189-192.

Kötter, T. 2018. A German perspective on land readjustment: a proper instrument of modern urban governance for efficient land use. In: Gerber, J.-D., Hartmann, T. & Hengstermann, A. (eds) *Instruments of Land Policy: Dealing with Scarcity of Land*. Abingdon: Routledge, pp. 164-169.

Kötter, T. & Rehorst, F. 2019. Die Soziale Umlegung – ein Vorschlag zur Weiterentwicklung der Baulandumlegung zur Flächenbereitstellung für den sozialen Wohnungsbau. *Zeitschrift für Verwaltung*, 144, 57-65.

Krautzberger, M. 2010. Von der Angebotsplanung zur Projektplanung? Tendenzen der jüngeren Städtebaugesetzgebung. *RaumPlanung*, 152, 11-14.

Krautzberger, M. 2014. Der Bebauungsplan der Innenentwicklung (§ 13a BauGB) im Lichte der aktuellen Rechtsprechung. *DVBl*, 5, 270-275.

Lord, A., O'Brien, P., Sykes, O. & Sturzaker, J. 2015. *Planning as 'market maker': how planning is used to stimulate development in Germany, France and the Netherlands* (RTPI Research Report 11). London: RTPI.

Mastop, H. & Faludi, A. 1997. Evaluation of strategic plans: the performance principle. *Environment and Planning B: Planning and Design*, 24, 815-832.

- Pahl-Weber, E. & Henckel, D. (eds) 2008. *The Planning System and Planning Terms in Germany: A Glossary*. Hanover: ARL.
- Preuß, T. & Floeting, H. (eds). 2009. *Folgekosten der Siedlungsentwicklung: Bewertungsansätze, Modelle und Werkzeuge der Kosten-Nutzen-Betrachtung* (Beiträge aus der REFINA-Forschung 3). Berlin: Difu.
- Reiß-Schmidt, S. 2019. Bodenrecht auf dem Prüfstand. *fub – Flächenmanagement und Bodenordnung*, 1/2019, 1-9.
- Schiller, G., Blum, A., Hecht, R., Meinel, G., Oertel, H., Ferber, U. & Petermann, E. 2013. *Innenentwicklungspotenziale in Deutschland: Ergebnisse einer bundesweiten Umfrage und Möglichkeiten einer automatisierten Abschätzung*. Bonn: BBSR.
- Schmidt, S. 2009. Land use planning tools and institutional change in Germany: recent developments in local and regional planning. *European Planning Studies*, 17, 1907-1921.
- Schmidt-Eichstaedt, G., Weyrauch, B. & Zemke, R. 2019. *Städtebaurecht: Einführung und Handbuch* (6th ed). Stuttgart: Kohlhammer.
- Siedentop, S. Fina, S. & Krehl, A. 2016. Greenbelts in Germany's regional plans—an effective growth management policy? *Landscape and Urban Planning*, 145, 71-82.
- Simons, H. & Weiden, L. 2016. Schwarmverhalten, Reurbanisierung und Suburbanisierung. *Informationen zur Raumentwicklung*, 3/2016, 263-273.
- Stadt Wuppertal. 2016. *ISEK Innenstadt Barmen*. Wuppertal: Stadt Wuppertal.
- Stuttgarter Nachrichten*. 2019. Tübingen zwingt Eigentümer zum Bauen. 26 April. Available online via <https://www.stuttgarter-nachrichten.de/inhalt.enteignung-als-letztes-mittel-tuebingen-zwingt-eigentuemer-zum-bauen.b6e34a6b-d36d-4a74-a58c-06fa4fc4b408.html> [accessed 1 May 2020].
- The Federal Government. 2017. *German Sustainable Development Strategy: New Version 2016*. Berlin: The Federal Government.
- Voigtländer, M. 2017. *Luxusgut Wohnen: Warum unsere Städte immer teurer werden und was jetzt zu tun ist*. Wiesbaden: Springer.
- Voß, W. & Bannert, J. 2018. Reference land values in Germany: land policy by market transparency. In: Gerber, J.-D., Hartmann, T. & Hengstermann, A. (eds) *Instruments of Land Policy: Dealing with Scarcity of Land*. Abingdon: Routledge, pp. 35-48.

Wickel, M. 2018. A German perspective on urban growth boundaries: the answer of comprehensive regional planning. In: Gerber, J.-D., Hartmann, T. & Hengstermann, A. (eds) *Instruments of Land Policy: Dealing with Scarcity of Land*. Abingdon: Routledge, pp. 142-145.

Wirtschaftsförderung Wuppertal. 2017. *Wohnungsmarktreport/Housing Market Survey*. Wuppertal: Wirtschaftsförderung Wuppertal.