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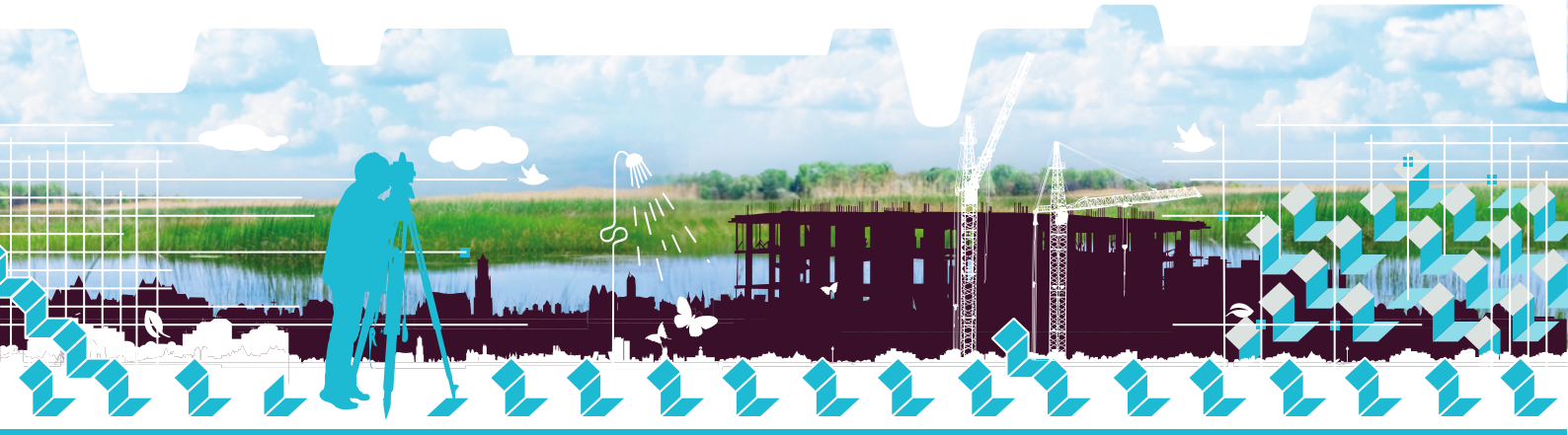
Urban Regions in the Delta



Case Study Amsterdam Buiksloterham, the Netherlands: The Challenge of Planning Organic Transformation

Sebastian Dembski

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Case Study Amsterdam Buiksloterham, the Netherlands: The Challenge of Planning Organic Transformation

Sebastian Dembski

CONTEXT

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Executive summary

The Buiksloterham is an industrial estate in Amsterdam undergoing a gradual transformation into a mixed-use urban area. The innovation of the project is in its different development model. In traditional urban development projects the municipality all land is acquired, cleared/prepared and then released to a select group of developers. In this case the municipality does not clear the land but tries to enable by law and via interactive governance the 'organic' transformation of the Buiksloterham. This leads to additional conflicts, as residential and (heavy) industrial functions will co-exist over a period of time. This interplay between central-level legal norms and local-level interactive governance is investigated in the Buiksloterham project in Amsterdam, the Netherlands. The guiding research question of this report is therefore twofold: first, which central legal norms and policies did affect the project and have how local planners dealt with these regulations?, and second, how have the various claims of public and private actors been aligned, in particular with respect to the conditions of central regulation?

The total area of the Buiksloterham is 100 hectares (net plan area 52 hectares). The investment area of the municipality is 35 hectares large, of which 4,6 hectares green and 3,3 hectares public space. The intention was to allow for a gradual transformation into a mixed-use urban neighbourhood. Mixing should be realised on all levels: area, building block and individual plot. The character of the area should reflect the industrial character of the area. There is a particular emphasis on sustainability that is integrated as a conditional criterion for each building project. The total programme is 1 million square metres floor space, which is an increase of 700,000 square metres to the current situation. The total investment is about €157 million as of 2009. This includes for instance soil rehabilitation, public space and infrastructure, and municipal planning costs. In the Buiksloterham the municipality realises 2,700 dwellings (30 per cent social-rental sector) and legally enables the realisation of another 2,000 dwellings. The intensification results in an increase from 3,000 as of today to up to 10,000 jobs. There is space for 17,500 square metres floor space reserved for community services. The project started in 2005 with a time horizon until 2030. The intention was to allow for a gradual transformation into a mixed-use urban neighbourhood.

The Buiksloterham is a local authority project. In the specific case of Amsterdam that implies the district (*stadsdeel*) Amsterdam-Noord and, since it is a project of wider importance, the central city. These two actors have joined their forces in a coalition called Noordwaarts, including a project office that coordinates planning on behalf of the two. The business sector is the most important stakeholder in the Buiksloterham and was closely involved from the very beginning via its two representative bodies, the VEBAN association and the Amsterdam Chamber of Commerce. The role of project developers was very limited in the planning process up to the approval of the land-use plan as they only just started to acquire land. The role of citizens and civic organisations

in the development process was limited as there were no inhabitants yet except for a few house-boats.

For a long time the northern IJ Banks were below the radar of Amsterdam (central city) as a potential site for urban development. Noord has traditionally been a destination for functions that were regarded undesirable in Amsterdam, in particular large industries. After the decline of the shipyard industry all planning attempts for the northern IJ Banks focussed on industrial redevelopment. The announcement of Shell to restructure its laboratories in 1999 formed a crucial moment. The Shell estate was to be redeveloped as a mixed-use neighbourhood. This has set in motion a series of ambitious planning efforts in Amsterdam-Noord that proposed the restructuring of the Northern IJ Banks into a mixed-use urban zone with a clear orientation towards Amsterdam (*Panorama Noord* and *Masterplan Northern IJ Banks*). The central city never approved the Northern IJ Banks as an integral project due to the enormous financial commitment that would go along with it, but on an area basis the transformation was set in motion. The former Shell area was the first to be redevelopment, now known as Overhoeks. The Buiksloterham followed shortly later in 2005. At the end of 2006 Amsterdam decided to invest in the Buiksloterham. This decision also includes the urban design. It took three years of many setbacks (solving juridical bottlenecks) to finally get the land-use plan approved by the municipal council (December 2009).

The main focus of the research project is on the legal rules and interactive governance. The main ambition was to allow residential functions without removing all industrial functions. That required creative legal solutions and intensive communication and negotiation with the business sector. Often the real question is not whether a plan is legally completely watertight but if there are no appeals against the plan.

The Buiksloterham was a zoned industrial estate with a noise contour on which housing was prohibited by law. The estate has been significantly reduced to cover those businesses that needed to be on a zoned industrial estate. The rest of the Buiksloterham was zoned as mixed-use, limiting the environmental category of businesses and in principle enabling housing. The existing companies within the mixed-use zone have been protected by contours (*milieuzone – zones wet milieubeheer*) within which residential development is prohibited. This zone can be abolished (*wijzigingsbevoegdheid*) if the company moves or has less environmental effects. Noise was the main issue that limited housing development. The maximum noise norm is set to 50 dB(A), with a potential exemption for 55 dB(A). In order to enable sensitive functions, the noise level needed to be reduced. Part of the reduction was realised on paper, as noise is calculated on the basis of the individual environmental permits of companies that were often oversized. Only in a few exceptional cases, companies have been actively removed.

The main problems arose from the need to predict the noise levels (industrial and traffic noise) for the final situation, when the programme that is enabled by the land-use plan is fully realised. Regarding the desire to leave the exact programme open there is a lot of uncertainty in the plan as well in the effects of that plan on noise pollution. In order to fulfil the standards of jurisprudence, the worst-case scenario is leading, resulting in many theoretical measures in the plan (silent house fronts, silent asphalt on roads, closed building blocks, limitations to traffic intense land-uses, etc.). The same uncertainty of the development framework (both in time and programme) also caused similar problems for the land exploitation plan to claim the public costs from landowners. The plans contained many uncertain public investments.

A crucial decision for the project was the decision of Noordwaarts to insist on a land-use plan that theoretically provides the legal basis for urban development in the Buiksloterham at once in every single corner. Although Dutch planning law knows no differentiations of land-use plans, in practice these operate on a continuum from global to detailed. The land-use plan Buiksloterham is considered a global plan because it does not define the function, position and lines of buildings in much detail. There is the false assumption that a global plan is much easier to develop than a detailed plan, but actually a global plan requires much more scrutiny than a detailed plan. Since uncertainty was an issued, this posed the question which alternative land-use plan strategies have been considered. A phased approach or a detailed definition of the programme would have probably resulted in fewer measures. By the time of drafting, the options of the law (e.g. *uitwerkingsplicht*) would have provided no clues to postpone the noise related measures (including the application for exemptions) to the moment when this part is actually developed. This has changed with the Crisis- and Regeneration Act in 2010 and might have been an enormous help for the Buikslotherham to deal with the spatial dynamics of a transforming area.

The governance of the land-use plan process was crucial as the transformation heavily affected the business sector that could appeal against the plan at the administrative court (*Raad van State*). That this has not happened is one of the major achievements of Noordwaarts. The business sector was afraid of residential development, as this is a potential for complaints, independently as to whether environmental norms are actually exceeded or not. The business sector took a constructive stance to influence the plans, after opposing the plans in the beginning. They achieved that the functioning of existing businesses and in especially the industrial estate will be guaranteed, among others by defining the percentages of residential and commercial functions, with the plots with the highest share of housing being situated further away from the estate and a zone around the estate within which housing is prohibited until further notice. Furthermore, when renegotiating the environmental permits of individual companies Noordwaarts financed an acoustic consultancy and a legal advisor for the companies to counter-check the effects. Finally, as a result of negotiations a bus line was redirected to accommodate the wish of the business sector to improve accessibility. In the end, only one company took legal steps but withdrew after successful negotiations.

The case of the Buiksloterham brings us to three dilemmas:

1 Legal certainty v planning uncertainty: There seem to be inherent challenges that result from the incremental development approach of the Buiksloterham in relation to the formal legal requirements. Dutch planning legislation and jurisprudence for land-use plans requests detailed knowledge about and accurate projections of a future situation that is not known and which planners actually want to leave open. It pretends a false legal certainty, as actual development will almost certainly look differently from today's plans. Implicitly it is assumed by the legislator that a land-use plan is realised within ten years. While the actual development of the Buiksloterham will most likely stay behind the possibilities of the land-use plan, in many cases municipalities have exceeded the projections. The land-use plan in the way it has been applied in the Buiksloterham results in an overly complex plan. Is this a fundamental problem of legislation (the land-use plan is an ill-defined instrument for organic transformation projects) or of applying legislation (another land-use plan strategy is required)?

2 Mixed-use v separation: There is a widely shared ambition to realise mixed-use development in planning practice while legislation actually operates from a separation paradigm (in particular the Noise Abatement Act). Tight environmental norms may lead to a healthier and safer environment, but paves the way for separation. Mixing is extremely difficult and already the smallest workshops require large bureaucratic efforts to avoid individual contours. In terms of spatial outcomes we may pose the provocative question to what extent the Buiksloterham really is a mixed-use area some years after the approval of the land-use plan: one part remained an industrial estate, on the other part all industrial activities have been either removed of 'circled' by a contour.

3 Active transformation v organic development: While the municipality presents the Buiksloterham as an organic development project, the municipality takes a very active role in the development of those plots in municipal ownership. More than half of the programme is actively developed according to the conditions of the municipality. This brings us to another problem, because the municipality is on the one hand financially involved in urban development while at the same time being the responsible authority for granting exemptions on environmental standards within the limits of the law. Thus, again a provocative question: to what extent does the role of the municipality fundamentally differ and to what extent does the financial interests of the municipality have an influence on the spatial plan in terms of maximising the programme and minimising environmental norms?

1 Introduction

The Buiksloterham is an industrial estate in Amsterdam undergoing a gradual transformation into a mixed-use urban area. The project is part of the wider restructuring of the Northern IJ-Banks in Amsterdam (Stadsdeel Amsterdam-Noord, 2003). The area is in the vicinity of Amsterdam Central Station on the other side of the IJ, but connected by frequent and free ferry service. The redevelopment of the Buiksloterham polder is split in two. The former Shell area, the southern part, is transformed into a posh urban neighbourhood, named Overhoeks, with the new EYE Film Institute as both eye catcher and major attraction. Under the project title Buiksloterham, the rest of the polder is subject to a long-term transformation into a mixed-use neighbourhood. The two areas, and in particular the way these are redeveloped, differ fundamentally. Overhoeks is a traditional development project in which the municipality acquired all land and the 20-hectare area was realised by a project developer. Buiksloterham in contrast is a step-by-step redevelopment with sitting owners enabling the 'organic' transformation from a mono-functional industrial site into a mixed-use area. The project Buiksloterham was one of the first projects in the Netherlands that experimented with a different style of urban development over the last years. Interestingly, the planning and decision-making started before the financial crisis.

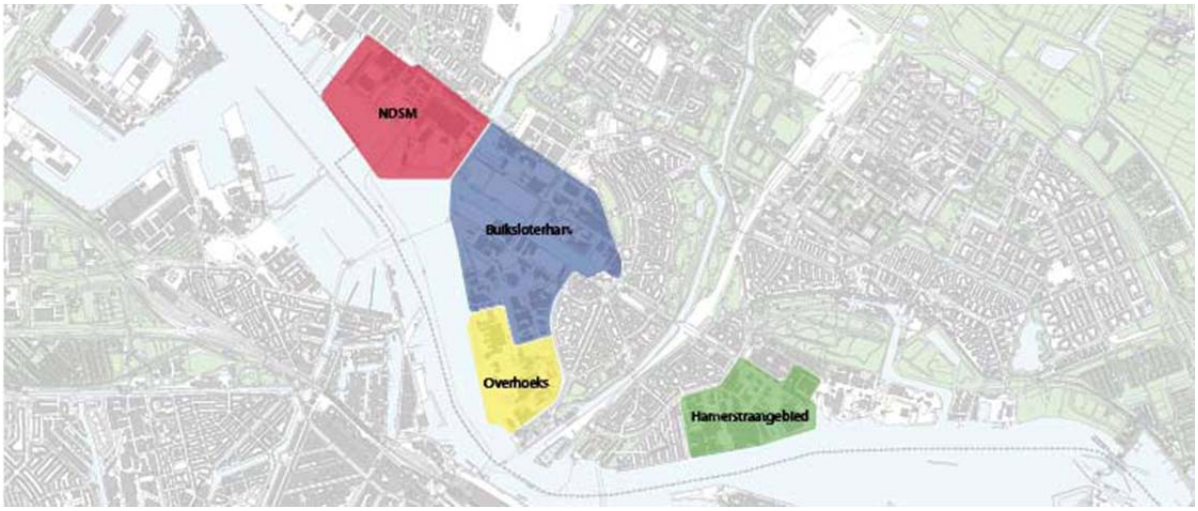


Fig. 1. Subprojects of the transformation of the Northern IJ Banks, Amsterdam. Source: DRO Amsterdam

The Netherlands has a strongly developed tradition of urban development projects (large-scale and integral). However, this system shows serious cracks, not only due to the current financial and economic crisis in which banks are reluctant to finance high-risk projects, but also due to the type of projects. In the past, it was mainly about new urban extension, for which this system was highly adapted, whereas now there are many signs that in the coming decades the focus will be

on redevelopment projects (Korthals Altes & Tambach, 2008). A second important the shift is the (perceived) need towards facilitating bottom-up initiatives. There is certain dissatisfaction with the traditional Dutch development model that leaves little space for individual and small-scale initiatives (Van der Krabben, 2011). This perception has increased with the financial crisis that has stalled many large projects. The traditional instruments seem to be unsuited.

Urban development projects are confronted with a significant body of rules changing at a high rate. Planners and policy-makers often complain about the complexity of environmental law (Koeman, 2009; I&M, 2011; Sorel et al., 2011). There is a general notion, that legislation is too detailed and limits development. Even worse, the efforts to comply with legislation direct all the energy of a development project in the compliance to rules (negative energy) than into spatial and environmental quality (De Zeeuw et al. in Borgers, 2012: 82). There is a culture of risk avoidance or a 'defensive planning culture' due to the chance of nullifying by the Council of State (Sorel et al., 2011: 13).

These problems multiply in the specific case of (1) mixed-use development projects that are planned as (2) organic transformation, a fashionable term to indicate long-term strategies that take into account the existing urban structure and work without clearly defined final image of the area. First, transforming an industrial area into a mixed-use urban neighbourhood poses huge challenges. Although mixed-used neighbourhoods are on the policy agenda of almost every city, enabling a real functional mix is extremely difficult as there are numerous regulations made to separate functions and guarantee a high protection level to citizens. Second, organic transformation of an area, implying a gradual development strategy, requires a lot of prospective research based on models of a future situation. There is a lot of uncertainty involved, both in the actual models (and their input) simulating the future and, more important, the actual course of development. There are high costs involved for research reports and the limitations to the actual development opportunities and additional requirements as a result of these reports for both the planning authority and investors.

While a considerable part of the problem might be rooted in legislation, we also have to look into how legislation is applied. At the operational level of integrated development projects the often competing claims of a variety of actors have to be aligned. These negotiations usually involved asymmetries of power, of access to resources and of capital in its various forms (financial, social, cultural and symbolic). While the restrictiveness of legal rules is widely considered a problem because these usually provide a set condition leaving no room for consideration between various qualities, the problem can be approached from the other side: norm utilisation (*normopvulling*). The margins of material norms are often taken as starting point. The slightest change in a plan may lead to new constraints when these changes lead to the violation of the norm (Sorel et al., 2011: 12; VROM-raad, 2009). Thus rules defined as closed norms, may stimulate undesirable behaviour of planners and investors by taking the stated closed norm as the principle quality, while in fact it is the bottom-line.

This interplay between central-level legal norms and local-level interactive governance is investigated in the project Buiksloterham in Amsterdam, the Netherlands. The guiding research question of this report is therefore twofold:

1 The dimension of legal norms: Which central legal norms and policies did affect the project and have how local planners dealt with these regulations?

2 The dimension of interactive governance: How have the various claims of public and private actors been aligned, in particular with respect to the conditions of central regulation?

Methodology

The case study Buiksloterham looks into the preparation of the land-use plan for this area, which started officially with the investment decision in 2006 and was approved by the Amsterdam Municipal Council in 2009. The study builds on 11 interviews with key stakeholders (public, private and civic domain) that have been conducted in late 2012 and early 2013. All interviews have been recorded, transcribed and send back to the interviewees. Copies of the digital recordings and transcriptions of the interviews are kept disclosed by the author, being only accessible to members of the research team. The report has been returned to the interviewees to provide feedback (member checking). Additionally, the conclusions have been discussed in a focus group interview with the Projectbureau Noordwaarts. Statements in interviews on legal issues have been checked with the original passages in the law and if necessary discussed. The interview data is backed up by intensive desk research of law texts, policy documents and reports (see Bibliography).

Structure of the report

The report starts with a brief description of the geography and history of the Buiksloterham. In section three follows a description of the objectives of the plan. Section four provides a detailed account of the legal framework that proved relevant to the understanding of the case study. The following section introduces the relevant actors of the case. Section six recalls the decision-making process over the Buiksloterham since the mid-1990s. In sections seven all strands come together and the interaction between law and governance is presented. The report presents three major dilemmas, before drawing some general conclusions.

Acknowledgements

The author would like to thank all the respondents for their time and willingness to delve into the details of the case (see appendix), Jip van Zoonen for sharing his insights on current debates in planning legislation and jurisprudence and Willem Salet, Jochem de Vries, Constantijn Hageman, Anoeska Buijze and Johann Gomez for their comments on earlier versions.

2 Geographical and historical context of the Buiksloterham

The Buiksloterham, with a total plan area of about 100 hectares, is a polder (*droogmakerij*) situated in the Noord district of the municipality of Amsterdam. A key characteristic of Noord is its separation from Amsterdam. Until 1957, there was no land connection between Amsterdam and Noord, and even today, the municipal ferries still are a crucial transport link to cross the IJ. For a long time in the history of Amsterdam the area to the north of the IJ was of little importance. The northern IJ banks were fenland and therefore only sparsely populated. Until the late 19th century, Amsterdam-Noord remained below the radar. The whole urban development of Amsterdam was turned away from the IJ. This was reinforced by the fact that except for a little strip of land, the Volewijk peninsula, the land belonged to small, independent municipalities (Buiksloot, Landsmeer and Nieuwendam). Amsterdam-Noord has always been the dumpsite for less desirable functions. From 1409 until 1795, the Volewijk peninsula across the IJ was used as gallows field (BMA, 2003: 33). Later Noord became the prime industrial location of Amsterdam.

The Buiksloterham is an artificial piece of land that has been impoldered in the mid-nineteenth century as a labour project (*werkverschaffingsproject*) of the municipality of Amsterdam. Before, it had been already used as a depot for dredging materials. Outside the polder an additional strip of land was filled up from 1870.[1] This was also where the first industries located in the second half of the nineteenth century (BMA, 2003: 65). The new polder caused a boundary conflict with the municipality of Buiksloot, who claimed the Buiksloterham as part of its territory, referring to a regulation that defined the northern shoreline of the IJ as boundary of Amsterdam. The new polder should therefore belong to the municipality of Buiksloot. With the construction of the North Sea Canal, this argument was finally settled in favour of Amsterdam. However, apart from farms and few workshops, the Buiksloterham remained an empty polder.

The actual transformation into an industrial estate started only in the early twentieth century. The Buiksloterham was clearly a water-based industrial estate with no direct rail links except via a ferry. Several harbours were dug and the polder was elevated. In 1905 a predecessor of the Bataafsche Petroleum Maatschappij opened a production site, which should later become Royal Dutch Shell. The Buiksloterham also hosted the First Aviation Exhibition Amsterdam (ELTA) in 1919, which attracted 500,000 visitors. On the exhibition estate Anthony Fokker opened his first factory. Fokker actually moved in 1951 to Schiphol after its factories had been damaged through allied bombings during World War Two. The Buiksloterham became also home to a municipal

[1] The Grasweg forms approximatly the boundary between the Buiksloterham polder (to the north) and the newly filled up strip of land.

power plant (1918–1982) and a waste incinerator (1918–1993). Both public utilities had been extended over the years but finally moved into the Western Harbour District.

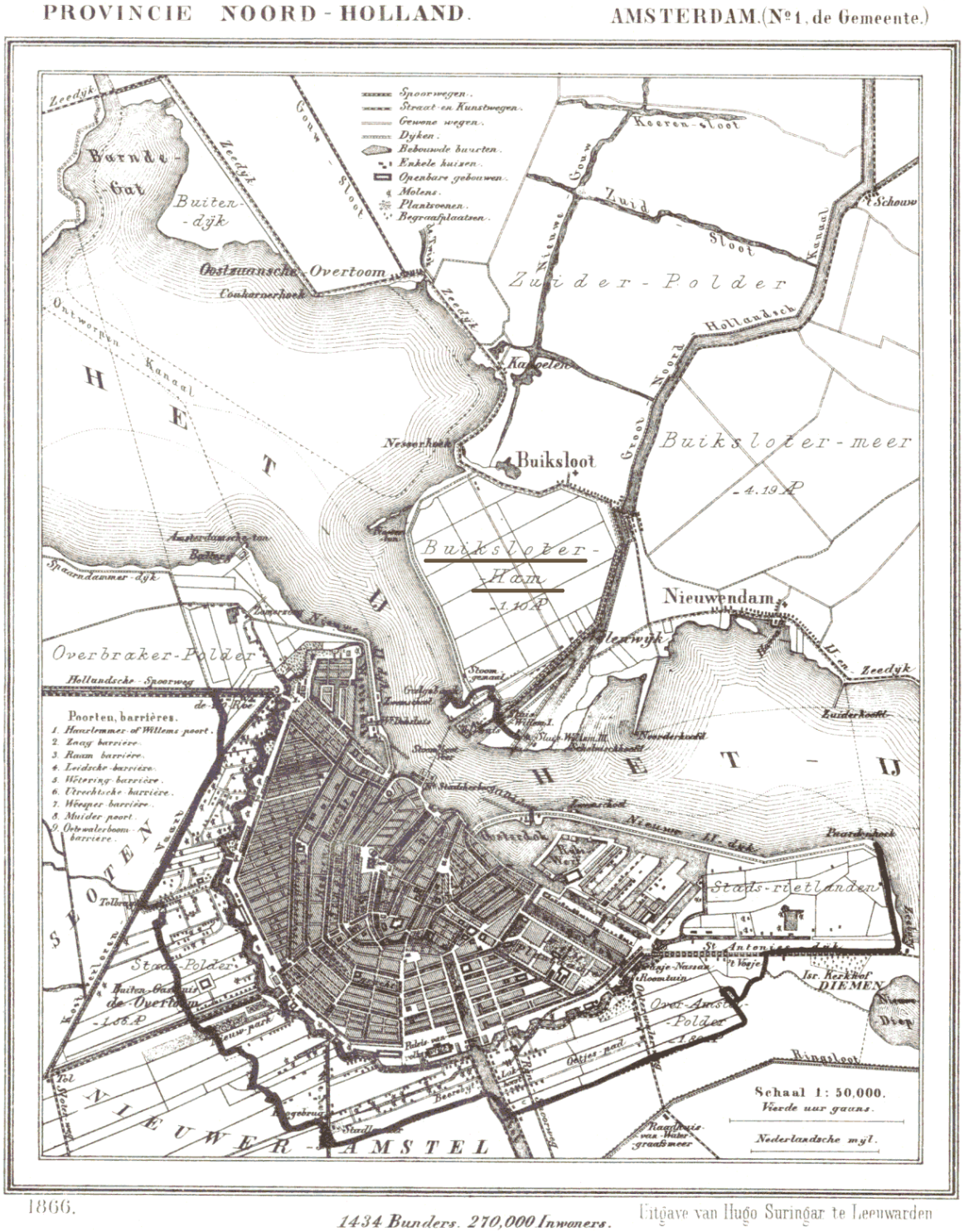


Fig. 2. Historical map of Amsterdam, 1866. Source:* Gemeente Atlas van Nederland, *J. Kuyper 1865-1870, Uitgave Hugo Suringar Leeuwarden

The first planned urban extension in Amsterdam-Noord did not start until World War One. A series of new neighbourhoods were realised adjacent to the Buiksloterham often inspired by the garden city idea. Disteldorp, Van der Pekbuurt, and Tuindorp Buiksloterham (better known as Floradorp) were built to offer housing to the growing number of workers, but in particular inhabitants of Amsterdam slums. Noord therefore has the character of a patchwork of closed villages. The villages were built by the Municipal Housing Department and are nowadays owned by housing corporations and fall under the social housing regulations. The Buiksloterham remained by and large uninhabited, yet the first settlement of Amsterdam-Noord was realised on the Grasweg for war refugees in 1916: Obelt. This collection of wooden barracks with 306 dwellings were only inhabited for twelve years and was burned down in 1929 shortly after the last inhabitant moved out. The second exception was Asterdorp. It was erected in 1926 as a special neighbourhood for families with behavioural problems, a gated village with a dusk-to-dawn curfew for its inhabitants. It has been demolished in 1955, but the Gatehouse still exists.

Fig. 3. Aerial view on the Buiksloterham, 1971. Source: Dienst Ruimtelijke Ordening Gemeente Amsterdam

With the decline of the wharf industries and industry in general in the 1980s, Amsterdam-Noord was in crisis. With the exception of one repair shipyard, nowadays operating under the name Shipdock, all mayor docks have closed. The former NDSM shipyard has been discovered by squatters and artists and has since developed into a cultural hotspot; in the beginning autonomously without the municipality, later the have become co-opted by the municipality for providing cultural services and putting the area back on the map.

The industrial crisis also affected the Buiksloterham, but industrial decline was less radical due to the smaller scale of industrial activities. But also here many activities had moved away. Yet it had also attracted many new activities. The picture at the beginning of the planning process for the Buiksloterham in the mid-1990s was therefore a mixture of large brownfield areas, active industrial sites, public utilities, workshops and new small-scale businesses, partly belonging to the so-called creative industries. In this respect it clearly differed from other derelict areas such as the Eastern Harbour District and thus NDSM.

Fig. 4. View on the Johan van Hasselt Canal from the West, 2009. Photograph: Doriann Kransberg. Stadsarchief Amsterdam

In contrast to other derelict industrial there are no national monuments; there is only one municipal monument and very few characteristic buildings. Most of impressive factories, such as the waste incinerator (AVI Noord), the municipal power plant (Electriciteitscentrale Noord) and the chemical company (Electro Zuur- en Waterstoffabriek), have been cleared. The Asterdorp gatehouse is the only actual monument in the Buiksloterham. It has been the atelier of the Dutch sculptor André Volten from 1955 until his death in 2002. Furthermore the Buiksloterham contains

a large warehouse of the Hollandsche Beton Groep, including the manager's residence. Another landmark is the transformed shipyard De Groene Draak on the IJ. Some buildings have been torn down over the last decade, despite being included as significant building for the cultural history of Amsterdam-Noord in a report in preparation for the transformation of the northern IJ Banks (BMA, 2003).

What the Buiksloterham again shares with many industrial estates is the problem of soil pollution, making redevelopment a costly operation. About 80 per cent of the plan area is affected by immobile soil pollution, including metals and asbestos. In addition, large parts are polluted with mobile materials, in particular volatile organic chlorine compounds (VOCl) and mineral oil. This requires heavy investments in soil rehabilitation.

Nevertheless, the problem of the Buiksloterham is not so much a problem than an opportunity for the urban development of Amsterdam, in particular to solve the general housing problem in Amsterdam. Amsterdam, with a population of approximately 800,000 in 2013, grew at a rate of 10,000 inhabitants per year over the last decade. For the wider metropolitan region, housing forecasts predict a demand of 300,000 dwellings until 2040 (Karst, 2012). A substantial share of the housing demand has to be realised in Amsterdam. Amsterdam-Noord is one of the poorer districts of Amsterdam with a below-average income, but autonomous processes together with active policy of Amsterdam have placed Amsterdam-Noord back on the map over the last decade and that makes it a hotspot for new urban development projects. While Overhoeks particularly focuses on the higher segment and NDSM provides ample space for cultural industries, the Buiksloterham focuses on urban explorers or pioneers that appreciate an environment that is rough around the edges.

3 Buiksloterham: transformation into urban living and working

Buiksloterham is about the transformation of an industrial estate into a mixed-use urban neighbourhood. This implied enabling residential development on the Buiksloterham to tackle the housing objectives of Amsterdam, while at the same time respecting established firms in the area. The plans envisage a gradual transformation of the economic structure from traditional industrial into a more urban estate with a mix of green, creative and nautical industries. Mixing should take place at various levels of scale: area, block and building. The Buiksloterham forms the link between the more traditional urban development project Overhoeks and the new cultural district NDSM with its industrial character. It was framed as a sustainable area for creative entrepreneurs and adventurous city-dweller where you could live in a rough industrial estate in the city close to the water (Bosman, 2011).

Fig. 5. Artist impression of the Buiksloterham seen from the west. Illustration: Lukas Kukler

The fact of scattered ownership and many businesses that are still operating successfully somehow required a mixed strategy. On top of that, there was simply no budget to remove all businesses and realise a new neighbourhood from scratch. But actually, there was also dissatisfaction with some former mono-functional urban redevelopments in Amsterdam that were architectonically outstanding, but lacked in urbanity. So before the financial and economic crisis urged many

municipalities to enter a different path of urban development, Amsterdam opted for this new approach of transformation in the case of the Buiksloterham.

The total programme of the Buiksloterham involves approximately one million square metres floor space, which are 700,000 square metres more than now. When finished, the Buiksloterham will have undergone a significant intensification with higher floor space indices and higher buildings. In total, the plans allow for up to 4,700 dwellings and it is expected that the number of jobs will increase by 8,000 jobs if the transformation is completed. Furthermore, the IJ Banks are made accessible and transformed into a green shore (*Groene Oever*) and the plans reserved space for a neighbourhood park. The Johan van Hasselt Canal will be transformed into a promenade that connects the old part of Noord (Oud-Noord) with the new cultural hotspot NDSM-wharf area.

The municipality of Amsterdam plays an important and active role in the transformation by taking half of the programme on its account. About one third of the land is owned by the municipality and will be launched for development. The core area of the municipal investments is in the northwest of the plan area. The Investment Decision (Noordwaarts, 2007: 43) discloses plans to realise 2,000 dwellings (30 per cent in the social-rental sector), 38,000 square metres of offices, and 25,000 square metres of cultural and community amenities. The public investment is approximately €156 million for soil rehabilitation, public space and infrastructure (Noordwaarts, 2009 exploitatieplan: 18).

The final plan is largely split into two areas. The area adjacent to the new Shell Technology Centre remains reserved for industrial activities. No housing is allowed in this zone. Nevertheless, the new environmental regime has become tighter. The land-use plan allows companies up to category 3.2 (light industries) related to environmental nuisance. Exemptions are made for existing companies of higher categories, which cause more environmental nuisance. Thus the chosen regime protects industrial activities, while also enabling the transformation into an area with light industries and offices. The other part is transformed into a mixed-use area with (light) industrial, commercial and residential land-uses. In the mixed-use zones, land-use of the environmental categories 1 and 2 are allowed and, under certain conditions, functions up to category 3.1 (offices, retail, garages, craft producers and other light industries). Along the Klaprozenweg there is already a location for large-scale retail (DIY, car parts, etc.) that will remain.

The most important guideline in the planning process is the informal rules-of-the-game map. It provides the general vision for the transformation without defining everything in detail. Thus, the planners did not work with an urban design plan (*stedenbouwkundig plan*) that was to be accomplished in clearly defined development phases, but a plan that could grow organically. It only provides the urban design principles for the Buiksloterham. The colours indicate the land-uses, densities and building heights. It knows four gradients of commercial and residential spaces, ranging from (light) industrial, commercial with residential (70/30), residential with commercial (70/30) to residential land-uses.

Fig. 6. Map showing the rules of the game for the BSH development. Source: Noordwaarts

4 Dutch legal framework

In the case of Buiksloterham, the following regulations were of particular relevance for drafting a legal land-use plan: Spatial Planning Act, Noise Abatement Act, Environmental Management Act and Soil Protection Act. In general terms, the project struggled with the requirements of the Spatial Planning Act in combination with noise regulations. External safety has been an issue, because of a company dealing with hazardous materials. The obligation to rehabilitate the soil posed a financial challenge, not a legal challenge. I will briefly introduce the main legislation relevant to the case.

In terms of policies, the national planning document, *Nota Ruimte* (Space Memorandum), the provincial *streekplan* (regional plan) and the municipal spatial plan, *Structuurplan Amsterdam* (2003), set some general norms and policy ambitions. Since these plans had little negative impact (the *Structuurplan* was drafted by the very same actors that develop BSH and the Nota Ruimte only had a real effect in terms of setting the conditions for subsidies), these will be discussed in the chapter on decision-making if relevant.

Spatial planning regulations

The Spatial Planning Act, in Dutch *Wet ruimtelijke ordening* (Wro), has been fundamentally reviewed and was enforced in 2008. It replaced the *Wet op de Ruimtelijke Ordening* from 1965. It was basically a new act, which is expressed in the different name and acronym (the old WRO is in capital letters). The new act aimed, inter alia, to separate policy from rules and to restore the position of the land-use plan as the primary instrument to provide guidance for development (Buitelaar et al., 2011; Needham, 2005). The act, as did the previous planning act, defines the system of spatial plans, their material contents and the procedures to be followed. It does not involve any material spatial norms. The central underlying norm of the Spatial Planning Act is ‘good spatial planning’ (*goede ruimtelijke ordening*), an open norm providing lots of discretion to local authorities. It is mainly about the scrutiny of a plan, in particular to what extent adjacent land-uses are compatible. Plans might be refused on formal grounds by court decision, such as the quality of the motivation, the violation of procedural legal norms, etc., but not on the actual material content (Van Buuren et al., 2010: 41–42).

The Spatial Planning Act introduces a system of plans at the national, provincial and municipal level. In contrast to the WRO, the new Wro has the ambition to differentiate between indicative policy and normative rules (Van Buuren et al., 2010: 346). Spatial Development Plans (*structuurvisies*) set out the main directions of spatial development, including how these ambitions will be realised, at all three administrative levels. It is considered a policy document, not a legal plan

(Van Buuren et al., 2010: 20-21). Instead of a hierarchical system of plans, each level formulates normative rules. These are called Provincial Ordinance (*provinciele verordening*) with the provinces and Orders in Council (*AMvB*) with national government. The main instrument of the local authority is the land-use plan (*bestemmingsplan*), which has the status of a municipal ordinance. Alternatively, local authorities can draft protective ordinances (*beheersverordeningen*) for built-up areas without foreseen spatial developments. There is a clear hierarchy in the planning legislation of the various levels (Van Buuren, 2010: 9). The new act has left the idea of preventive inspection in which plans are tested against the plan of the next higher tier, but provides instruments to overrule decentralised government. The national government and the provinces can issue a land-use plan (*rijksinpassingsplan* or *provinciaal inpassingsplan*) on behalf of a local authority. Furthermore, they may issue orders (*proactieve/reactieve aanwijzing*) in specific instance if national or provincial interests are concerned.

The land-use plan (*bestemmingsplan*) is considered the central instrument for regulating land use and is legally binding to both public sector and citizens. It serves as legal basis for issuing building permits. The local authority cannot decline proposals that do not comply with the plan. There is a basic assumption in both the old and the new planning act that the land-use plan has a steering function, i.e. the system is plan-led. This was apparently one of the main intentions of the revision of the planning act. In practice, land-use planning had become reactive to concrete building proposal, i.e. development-led (Buitelaar, et al. 2011: 928–929). This is also why the land-use plan has become mandatory for the whole territory. It is possible to split the territory into several plans, and this is actually common practice. The land-use plan has to be redrafted or simply re-endorse every ten years and approved by the municipal council. While the ten-year rule is not new, in the previous Spatial Planning Act there was no punishment to update plans. This has been changed in the current Spatial Planning Act of 2008 by not allowing municipalities to charge fees for building permissions (*leges*) if they do not redraft plans in time (Van Buuren, 2010). Under the old act, the alternative route of an exemption, the article 19 procedure, has outnumbered the land-use plan. This was a much shorter route than drafting a new land-use plan. In order to maintain an instrument with quick procedures the project decision (*projectbesluit*) has been introduced. There is some evidence that the land-use plan has become the dominant regulatory mode for land-use planning again (Buitelaar et al., 2011: 936).

A land-use plan includes a description of the land-uses that are allowed to achieve good spatial planning (Klaassen, 2010: 2010). The Wro leaves a lot of discretion to local authorities (Klaassen, 2010: 116). There are no standard definitions of land-uses. Instead the Standards for Comparable Land-Use Plans (*SVBP2012*) only define standard terminologies and colours. Therefore, the exact definition of land-uses is an important part of each Dutch land-use plan. Each land-use is meticulously composed by first defining functions, which are then assigned to specific land-uses. These can be further specified if necessary. Per plot, floor space indices, maximum or minimum building heights, percentages of (social) housing and so on and so forth, can be assigned.

Although the Wro only mentions one type of land-use plan, in practice four different strategies can be distinguished (Klaassen, 2010: 115-116). (1) A detailed land-use plan, land-uses are prescribed in much detail as well as the buildings. (2) A global land-use plan fulfils the minimum legal requirements of a land-use plan, namely that it provides general rules about land-uses. (3) If a local authority decides for a global land-use plan, it may include an obligation to later specify land-uses (*uitwerkingsplicht*) within the legal terms of the land-use plan. It is a plan within a plan.

The ‘mother plan’ needs to include some rules that define the discretionary space of the municipal government as to guarantee a minimum of legal certainty. The procedure for the specified plan is lighter and does not need approval of the municipal council. (4) It has to be said, that these are two ends of a continuum and regularly mixed forms are chosen (see also Van Buuren et al. 2010: 58–59). As a general rule of thumb, the more vested interest in the plan area, the more legal certainty and thus rules for specification (Van Buuren et al. 2010: 61–64). A more general problem is that jurisprudence of the Council of State often asks for a detailed land-use plan (instead of a later specification) as to guarantee legal certainty for citizens (Zonneveld et al., 2008: 92). However, the dilemma of legal certainty remains unsolved either way. The land-use plan represents the knowledge of the planning authority in a static situation. New circumstances may lead to new constellations and thus a revision of a land-use plan at any point in time in accordance with the official legal procedures.

The land-use plan guides development for a period of ten years. However, in some cases changes within this period can be foreseen. To enable a certain extent of flexibility the planning act offers some instruments. Land-use plans may include provisional land-uses and regulations for a maximum of five years. The final land-use needs to be defined. Usually, this instrument is used to protect current land-uses until the planned land-use will be realised, but it can also be used for temporary functions. It is not applied frequently (Van Buuren et al., 2010: 71–72). Land-use plans may also include an option for the municipal government to adapt the plan within the limits as defined in the plan (*wijzigingsbevoegdheid*). It may not result in profound changes of the spirit of the plan. It can also be applied in combination with the obligation to later specify land-uses (*uitwerkingsplicht*). The *uitwerkingsplicht* then becomes an option, not an obligation (Van Buuren et al., 2010: 64–67), because the *wijzingsbevoegdheid* is not obligatory to be actually applied. Plans may include conditions under which deviation is possible via an environmental permit (*omgevingsvergunning*), but only in concrete instances and not as a general rule. The permit can grant exemption from limiting regulations. For individual cases, additional requirements (*nadere eisen*) within the predefined margins of the plan are possible.

All building activities (or destruction of buildings) require an environmental permit (*omgevingsvergunning*). With the introduction of the environmental permit, several permits that had to be applied for separately (e.g. building permit, environmental permit) have been merged as to reduce bureaucracy. The General Rules for Establishments Decree (*Besluit Algemene regels voor inrichtingen milieubeheer*) in short Activities Decree (*Activiteitenbesluit*) regulates the environmental standards for commercial activities. Via an environmental permit it is also possible to deviate from a legal land-use plan, however, this only applies to individual application for building permits. The plan deviation is not regulated in the Spatial Planning Act but in the *Wet algemene bepalingen omgevingsrecht* (Area Exploitation Permits Act). Refusals need to be motivated! Under the old act, the project decision was a good (many would say the better) alternative to a partial revision of a land-use plan. This gave considerable leverage to local authorities.

Spatially relevant aspects of environmental regulations need to be included in the land-use plan, in particular elements from the Noise Abatement Act (*Wet geluidhinder*). A land-use plan needs to integrate industrial zones and their noise contours, as well as noise zones along roads and railways. The latter is also explicitly addressed in the Order in Council on spatial planning (*Besluit ruimtelijke ordening*). The integration of environmental quality norms (*milieukwaliteitseisen*) on the basis of chapter 5 Environmental Management Act is not explicitly stated, but as far as spa-

tially relevant norms (contours) are concerned, it has become common practice to integrate these to meet the standards of good spatial planning. Furthermore, the land-use plan has to guarantee that the environmental norms are met, if the plan is realised. In practice this implies that air quality, noise or any other environmental norm will stay within the limits if the programme that is enable by a land-use plan is realised. This is at the heart of the problem of the land-use plan Buiksloterham and we will empirically demonstrate the problems this creates in more detail below.

Since the introduction of the new planning act, a land-use plan has to be accompanied by an exploitation plan (*exploitatieplan*), if the development costs of the local authority cannot be claimed in another way. The exploitation plan provides the basis for the claim of costs under public law on landowners that realize a building plan. It has to be reviewed yearly. On leasehold land the costs are usually discounted in the rent.[2]

Noise regulations

Noise regulation is rather fragmented in the Netherlands. The various sources of noise pollution are treated differently in different acts. While one act deals with housing construction alongside roads, another act regulates the noise of new road construction. While it might be obvious that the protection of workers from noise is regulated in the Occupational Safety and Health Act (*Arbeidsomstandighedenwet*), it is less obvious why there are two types of industrial noise which are dealt with in two different acts, depending on whether an industry is located in a special designated zone or not. We will address these problems below. For the Buiksloterham, the Noise Abatement Act (*Wet geluidhinder*) and the Environmental Management Act (*Wet milieubeheer*) were the most important acts concerning noise pollution. It has to be said at the outset that the influence of EU regulations on noise norms is very limited. The EU Directive 'relating to the assessment and management of environmental noise' (Directive 2002/49/EC) has been implemented in Dutch legislation and has introduced a uniform measurement (L_{den}) and the instruments of strategic noise mapping and noise action plans. However, the directive did not establish any limit value for noise.

The Noise Abatement Act (*Wet geluidhinder*) has been introduced in various stages since 1979, with the central ambition to protect vulnerable land-uses from noise pollution (industrial estates, road traffic and railways), in particular dwellings, educational institutions or hospitals.[3] A particularity of this act is that it contains material norms in the form of limit values. Usually, these are specified in subordinate regulations (Orders in Council). There are plans to integrate the *Wet geluidhinder* into the *Wet milieubeheer* (Klassen, 2010: 405). Already with the introduction of the *Wet milieubeheer* in 1993 several sections have been transferred. Recently, the construction or reconstruction of main roads and railways has been transferred, but housing construction alongside existing roads is still regulated in this act. There is an intensive reorganisation of the noise instruments in progress under the label *Swung-1* (national motorways) and *Swung-2* (provincial

[2] Korthals Altes and Wambach (2008: 226) use ‚emphyteusis' as a more accurate description of the Dutch system. It is leasehold in perpetuity, a right to build on municipal land that can be even sold. A yearly rent has to be paid to the municipality on the basis of a leasehold contract. The rent is often paid off for many decades in advance. The contract changes only if the land-use changes.
[3] "Met de Invoeringswet geluidproductieplafonds worden ligplaatsen voor woonschepen voortaan aangemerkt als geluidsgevoelige objecten." (*Staatsblad* 2012, nr. 164, p. 22)

and municipal roads, industrial noise), which is not yet completed (for an overview of the intentions see TK, 2009).

One of the crucial instruments of the Noise Abatement Act for the Buiksloterham case are zoned industrial estates. Sites of heavy industrial activity have to be designated as zoned industrial estates surrounded by a noise contour. The cumulative noise level caused by industrial activities on this contour must not exceed 50 dB(A). Such a zone is an essential part of a land use plan, and cannot be changed without amending the plan. Furthermore, a zone can only be changed or abolished if the area or parts of it are de facto not industrial anymore. (Van Buuren et al., 2010: 52). A zoned industrial estate poses strong limitations to housing development. Within the noise contour of a zoned industrial estate the preferential limit value (*voorkeursgrenswaarde*) is 50 dB(A) for dwellings. Under certain conditions, the Noise Abatement Act allows to exceed the protection level, namely if the higher value (*hogere waarde*) is motivated and does not exceed the maximum noise level that is allowed: 55 dB(A) for planned housing and 60 dB(A) for existing housing within such an industrial zone. The municipality is responsible for granting the permission for a higher value. In the past, the provinces were responsible, but this has changed in 2007. In order to meet the protection levels, the act also allows the municipality to formulate additional requirements for dwellings (silent house fronts, maximum noise level inside, and other additional requirements). Another exemption allowing for a higher noise level of 60 dB(A) is made for seaport-related activities, because mitigation of noise is difficult due to significant outdoor activities. For dwellings replacing existing ones the noise protection level can be raised (or lowered) to 65 dB(A). Thus the protection level for dwellings actually varies between 50–65 dB(A). Until recently, these protection levels actually did not apply to houseboats as these were considered temporary functions. While the Noise Abatement Act has been installed to protect the quality of living, the exemptions seem to be enforced to safeguard specific activities, thus they are a correction on the restrictions set by the very same act.

The other body of regulations in the Noise Abatement Act concerns traffic noise. Around main roads and railroads noise contours apply, with a maximum noise caused by the road that must not exceed 48 dB. The norm for traffic noise differs from industrial noise norm of 50 dB(A) due to different measures, namely dB and dB(A). With the introduction of the uniform noise measure (Directive 2002/49/EG) the new norm had to be adjusted in order to maintain the same protection level. Dependent on the type of main roads and their situation (within the built-up area or outside), different contours apply, varying between 200 and 600 metres (Van Buuren et al., 2010: 52–53). Roads with a maximum speed level of 30km/h are not subject to the Noise Abatement Act, yet jurisprudence has made clear, that this does not exempt local authorities from scrutiny (Klassen, 2010: 402). In the case of traffic noise, too, higher values can be adopted up to 63 dB in inner-city areas. Buildings alongside new roads built 1982 and later (railroads: 1987) or building permission that have been issued 1982 or later are regulated via chapter 11 of the *Wet milieubeheer* (Environmental Management Act) of 1993.

External safety

The Enschede fireworks disaster on 13 May 2000 (an explosion of a fireworks depot that was located in a residential neighbourhood and killed 23 people) has had a strong impact on norm development in the Netherlands, in particular on the supervision of compliance with existing norms.

The External Safety of Establishments Decree (*Besluit externe veiligheid inrichtingen*) defines safety norms for operations with high risks for people around the industrial site. It is based on chapter 5.1 of the Environmental Abatement Act. It is binding to public institutions, but through the integration of norms into land-use plans and their relevance for building permits, it has a direct effect on citizens as well.

The order makes a difference between group risk and place-bounded risk. The former defines the likelihood on a yearly basis that a group of people (10, 100, or 1,000 persons) will be subject to an accident and therefor judges the potential impact of an accident. The place-bounded risk, in contrast, expresses the likelihood of casualties outside the establishment as an immediate consequence of an accident with hazardous materials. The two forms of external safety risks are regulated differently. The group risk does not involve a hard norm but provides thresholds for orientation and emphasises the accountability of local authorities. The following elucidation therefore refers to the place-bounded risk, which proves of more direct relevance for land-use planning (Van Buuren et al., 2010, 411).

External safety is formulated as a contour (*afstandsnorm*) since the risk is related to the distance to an establishment. Whether a quantitative risk analysis is required or standard distances can be applied is specified in the Risks for Serious Accidents Decree (*Besluit risico's zware ongevallen*), the Dutch implementation of the European Seveso II Directive, but also includes additional establishments such as LPG stations and marshalling yards. The safety contour can be integrated in the land-use plan based on the place-bounded risk 10^{-6} (the chance that a person dies within the zone is below 1:1,000,000 a year). Within the contour vulnerable objects are prohibited, such as dwellings, hospitals and large offices. There is some discretionary space for local authorities to allow less vulnerable objects depending on the number of people, the time of presence, etc. For the most common establishments standard distances have been defined in a manual of the Association of Dutch Local Authorities (VNG). Local authorities can deviated from such a standard if it is well motivated. In all other cases, the minimum distance for vulnerable land-uses has to be calculated.

Special purpose legislation

Except for integrated exemptions to the rule, the legislator has produced a whole series of ad hoc legislation on a project basis. These are often extremely instrumental in that they react to demands from the ground, often to test new forms of legislation. They may remain temporary legislation or become integrated into the respective bodies of law when proving successful. These are prime examples of what has been described variably as risk-rule reflex or legislative ADHD (Sorel et al., 2011).

One such example is the Experimental Act Town and Environment (*Experimentenwet Stad en Milieu*), which was in force 1999–2006. It enabled municipalities to deviate from existing environmental and procedural norms if the overall spatial and environmental quality (*zuinig en doelmatig ruimtegebruik en optimale leefkwaliteit*) was improved and if the Aviation Act and European regulations were respected. The act applied to specific areas that were mentioned in an appendix. The Interim Act Town-and-Environment Approach (*Interimwet stad-en-milieubenadering*) extended the legislation to designated rural areas with livestock (*reconstructiegebieden*) and replaced

the Experiment Act. Initially, it had to be integrated into the environmental and spatial planning regulation within five years, but this period was prolonged until 2014. In order to get the permission to deviate, a three-step approach had to be followed: firstly, all municipal departments had to search for possibilities to solve bottlenecks by taking measures at the source; secondly, if these measures proved insufficient, the existing option of legislation had to be used; and only if the first two failed, finally, local authorities may deviate from environmental norms.

The experiences with the town-and-environment approach are typical for the difficulties of dealing with the existing discretionary space in current legislation (cf. Borgers 2012: 22-27). It appeared that the possibilities of this particular act were only applied in three cases (Arnhem, The Hague and Vlaardingen), which were all about industrial noise pollution. Mostly the existing legislation proved sufficient. The approach had indeed led to more efficient land-use and a better quality of life in the projects that were participating. But it did not need a new act: the current legislation seemed to have more discretionary space than expected (Evaluatiecommissie Stad en Milieu, 2004).

In 2010, the government introduced the temporary Crisis and Recovery Act to speed up decision-making on infrastructure projects, as listed in the act. It, too, is a paradigm of the risk-rule reflex, as it only serves the policy purpose of pushing the economy by accelerating planning processes. The appendices I and II of the act comprise a list of (categories of) projects to which the weaker regime applies. The quicker planning permissions are achieved by lesser and quicker court appeals. For instance, it rules out the possibility to appeal for local authorities against decisions of other public authorities (unless the authority in question is directly affected by the decision) and limits legal steps for other actors by only allowing claims of those whose interest are at stake (relativity requirement).[4] In addition it introduces specific instruments such as experimental development areas (a period of ten years to meet environmental standards), innovative experiments (exemption of environmental norms if boosting the economy and sustainable development), quick implementation of building projects (less permissions) and quick implementation of projects of national importance (less permissions, too) (VROM, 2010). Some of theses measures resulted of amendments of existing acts immediately. The actual act has become permanent in 2013.

Pseudo-law

Apart from official legislation, the Dutch environmental law knows many regulations that have no formal legal status. However, in jurisprudence these are treated similar to a law. The legal literature uses the term soft law (Bröring & Geertjes, 2013). The Association of Dutch Municipalities (VNG) has written many manuals on behalf of their members how to deal with certain situations. Ministries frequently provide a helping hand by formulating guidelines (*handreikingen*) how to interpret open norms in certain situations or to simply the application of rules. These manuals and guidelines are widely used in the making of land-use plans and also in jurisprudence. The draftsmen of a plan may deviate from these rules, but not without motivation.

[4] This is problematic in the Dutch context because of the strong position of local authorities *vis-à-vis* citizens to implement their policies against the will of citizens (for a comparison of the Dutch, Flemish and German planning system see Tennekes & Harbers, 2012)

One such manual for land-use plans is the VNG guidelines for environmental zoning around businesses (VNG, 2009), which classifies companies into environmental categories and defines minimum distances to noise-sensitive functions. These guidelines categorise businesses on the basis of standard business classifications (SBI code). The classification results in a minimum distance to sensitive functions based on the highest individual value of smell, particles, noise and safety. Additionally it provides guidance on the expected effects on traffic. Other relevant indicators for planning concern visual nuisance, soil pollution and emissions. Interestingly, it acknowledges different area qualities, by making a distinction between the recommended environmental contour for a mixed-use area and a quiet residential area (*rustige woonwijk*). For mixed-use areas the guidelines the distance may be relaxed by one category. The required distances may be smaller if no other legal requirements are violated (e.g. external safety).

5 Actors

The project takes place within the city limits of Amsterdam, and more precisely within the urban district Amsterdam-Noord. Amsterdam has a very particular administrative structure as it is subdivided in urban districts (*stadsdelen* or *deelgemeente*) with elected councils as an additional layer of local government. These were introduced in various stages in the 1980s and 1990s. Recently, the by then 14 districts have been radically reduced to 7 in 2010; Amsterdam-Noord (with Amsterdam-Osdorp) was among the first districts in 1981 and one of the few districts that were not affected by administrative mergers in 2010. Actually, it remained unchanged throughout the whole period. The urban districts enjoy autonomy and can be compared with other municipalities. All powers are devolved to the districts, except for a list of task as specified in a municipal ordinance (*Verordening op de stadsdelen*), such as land policy, main transport infrastructure etc., and special competences of the burgomaster that cannot be devolved by law. Thus urban districts are, in general, responsible for land-use planning.[5]

Due to the big challenges in Amsterdam-Noord and the importance of the Northern IJ Banks for the urban development of Amsterdam, the central city and Amsterdam-Noord joined forces and formed a coalition, called Noordwaarts. This involved the devolution of powers from the district to the central city. Projectbureau Noordwaarts, funded and staffed by the municipality of Amsterdam and the district of Amsterdam-Noord, became responsible for the planning of the transformation of Buiksloterham (urban design, land management, land-use planning and regulations, and the realisation of public space and social infrastructure). Although per 2008 the devolution of power for Bureau Noordwaarts has been revoked, the Buiksloterham has been placed under a transitional rule and the formal decision-making on the formal planning procedure remains with the central city.

Despite operating a joint project office, the two actors behind have had an uneasy relationship in the past. Amsterdam-Noord was traditionally a district rooted in industries that turned away from the central city. This was also the case in politics. Vice versa, the central city saw in Noord an ideal place to dump undesirable functions. This has changed only in the beginning of the 2000s, when Noord was actively seeking the connection with the central city through a self-confident development plan, *Panorama Noord*. It was Amsterdam-Noord that initiated the transformation of the Northern IJ-Banks, albeit this caused internal political problems and resulted in shifting majorities in the district council. The central city did not immediately jumped on the proposal, but eventually they came together. Amsterdam needed housing locations and Buiksloterham would contribute to the housing production. Today, main issues concern the funding of projects. This has to

[5] The special administrative status of the urban districts has been abolished. The urban districts cease to exist with the municipal elections in 2014 (*Staatsblad* 2013, nr. 76).

do with the ultimate administrative and thus financial responsibility that is with the central city. Therefore the alderman of the central city, Maarten van Poelgeest, has the last word.

Apart from the general directions of spatial development, land exploitation is an issue. The municipality has invested a lot in the area to enable the transformation: land acquisition, public space and infrastructure, and buying out companies (Bosman, 2011: 18). This, however, limits the flexibility in terms of spatial development. The exploitation plan is tightly calculated, building upon high land values. Thus project developers need to realise the maximum floor space and height that is allowed to be able to pay the land price (Bosman, 2011: 18). Thus, the municipality is providing the guidelines of urban development, but through substantial landholdings in the Buiksloterham (about 30 per cent building land in the area), it is able to also steer development.

The list of further public actors is limited. The National Government is involved as funding body via the Nota Ruimte budget. Buiksloterham was considered as one of the 23 projects in the Netherlands that contributes to the realisation of national spatial policy objectives set out in the Nota Ruimte, but was not actively steering on the content of the project. The Province has been involved in the mid-1990s, when the Masterplan NZKG was approved, which conserved the industrial function of the Northern IJ-Banks. During the actual planning process the Province was not really involved. The City-Region Amsterdam is involved sideways as it realises an express bus connection from Amsterdam to Zaandam (Zaan Corridor) on the edge of the plan area. It has no further stakes in the area and is not involved in the plan making. Thus, the Buiksloterham is in principle a local area development project. There are no significant conflicts involved between various governmental levels. Only in the formal consultation period for the land-use plan, many public and semi-public actors were involved to provide a formal reaction.

Since the plan is about sitting companies, various private sector companies and their umbrella organisations were strongly involved. Most of them are organised in the Vereniging van Bedrijven in Amsterdam-Noord (VEBAN), translated the Association of Businesses in Amsterdam Noord. Furthermore, the private sector was represented by the Chamber of Commerce.[6] The intended transformation has strong implications for the businesses they represent. Up to now, land-use regulations basically protected industrial activities. Residential development is regarded as a potential threat, because this puts constraints on the environmental limits. This is particular the case, if a company needs to grow. It was clear from the beginning, that environmental norms had to be invigorated and would be subject to increased scrutiny. Furthermore, inhabitants are a potential source for complaints about noise, independent whether the noise pollution stays within the limits of legislation. The interests of the existing companies had to be taken extremely serious to avoid court appeals. Both organisations initially had strong reservations and Noordwaarts had to make concessions as to progress with the transformation. In particular some of the larger companies had substantial objections (Noordwaarts 2009). One company had 54 objections against the land-use plan, higher values decision and the exploitation plan.

Housing Corporations and Project Developers are active as investors. They were queuing up for available plots until the recession hit the property market. They were acting in an opportunistic way and actually solved the problem of mixed-uses almost themselves by buying out some of the most polluting industries. However, most land transactions were realised at a time when the land-use plan was almost completed. Thus, their real impact starts only after the approval of the land-

[6] In the Netherlands, all private sector companies have to be registered at the local Chamber of Commerce.

use plan. Project developers, mostly housing corporations, were mainly interested in the residential functions as this is their core business (DoI, 2008: 6). There are also some users whose company is on own land. For them the land exploitation is crucial as they are confronted with potentially high claims by the municipality when they change the function. With the emerging financial and economic crisis, increasingly communities or individuals appear on the scene, here and elsewhere in the city. The banks are reluctant in financing large building projects and self-building becomes therefore increasingly attractive, not only for house-builders, but also as a municipal strategy for urban development. However, these processes had no influence on the land-use plan, but on the later revisions of the plan.

Civic organisations and citizens were involved too. ANGSAW (Amsterdam-Noord Green City on the Water), a citizen NGO that seeks to stimulate the debate on a balanced spatial and cultural development of Amsterdam-Noord, was involved in the question of the Northern IJ-Banks since its foundation in 1994. From the very beginning they proposed mixed-use development for the Northern IJ-Banks, including the realisation of housing on the IJ-Banks. Implicitly, they accept that this also implies different types of companies. Via this role, they got involved in the transformation of the Buiksloterham, too. ANGSAW is content with the general direction of the transformation, but would have preferred if the land-use plan were more flexible. Furthermore there is disappointment with the current solution of the shoreline, which remains reserved for companies, which in turn disables the continuation of a green and accessible waterfront. Another civic organisation is the Stichting Particulier Initiatief Nautisch Noord (SPINN), promoting the nautical development of Amsterdam-Noord (*NoordNieuws*, 27 May 2008).

Individual citizens played a minor role. In the Buiksloterham itself there are only a few houseboats and only on the eastern side, separated via the Tolhuis canal it abuts a residential neighbourhood. The houseboat owners were obviously concerned, not only the one in the land-use plan area of the Buiksloterham, but also those near to the Shell NTC that fell under the land-use plan Overhoeks. They complained about the lack of protection against emissions. Houseboats are indeed not recognised as a sensitive function.[7] Basically, with the approval of a new land-use plan they tried to establish new rights, although nothing changed in their situation. The inhabitants from the adjacent neighbourhood had no fundamental objections.

[7] This will change with Swung-2. Without dismissing their claims, the irony is that houseboats, at least in the past, were chronically under-regulated and often lied off without an official permit, thus were illegal.

6 Decision-making process

In the case of the Buiksloterham, four phases of the planning and decision-making process can be distinguished: exploration, elaboration, decision-making and realisation (cf. Berenschot, 2009). Admittedly, this model assumes that a project has a clear beginning, and more importantly, a clear end. This is not the case with the Buiksloterham project, which is an open-ended planning process. Exploration considers the broader setting of the project and how its general direction has been shaped. The elaboration phase discusses the concrete shaping of the project. The decision-making phase is the crucial phase and includes what the period that is similar to the Amsterdam protocol for projects (Plaberum). It ends with the approval of land-use plan The implementation phase regards the post-approval period. Due to the focus of this research, it is dealt with rather briefly. The review covers the period mid-1990s–2012.[8] As a conclusion I identify key moments.

Exploration

For a long time, plans for the Northern IJ Banks intended to reserve this desolated industrial zone for new industrial development. Many of the port-related industries had already left, but were sometimes successfully replaced by other industries. The Buiksloterham emerged on the agenda of Amsterdam-Noord in the 1990s when some large industrial plots became vacant. There was a very strong industrial lobby in Amsterdam-Noord that supported the reservation of the former shipyard zone for port-related activities. The last testimony to this ambition is the Masterplan for the North Sea Canal Zone (NZKG, 1995). The Northern IJ Banks lacked a clear vision and the district council, and the aldermen of Economic Affairs and of Planning, each had their own ambitions. The Province of North-Holland was also involved via its stakes in the Masterplan NZKG. The first plans for the restructuring of the Buiksloterham/Papaverhoek still fitted this ideology (Stadsdeel Amsterdam-Noord, 1998). It was a restructuring of the industrial estate to prepare it for attracting new businesses. This plan was a typical blueprint for the future with a very active land policy. The Johan van Hasselt Canal was to be filled up, as were smaller canals and harbours, too. The plan remained without lasting effects and was shelved.

The vision on the Northern IJ-Banks only changed in the late 1990s, when Shell contacted the municipality of Amsterdam about their plans to restructure its laboratories. The old physical testing installations had become obsolete as these tests were now mainly done by computer models. As a consequence, 20ha would become available for urban development in a prime location right across the water of central station. Shell also alluded that it had no objections against residential development in the area to create a more attractive environment. The move of Shell was consid-

[8] An extended time line of the project can be found online (http://timeglider.com/t/6a1802b2762e7339).

ered a main turning point in the thinking about the Northern IJ Banks in general and the Buiksloterham in particular. If the southern tip of the Buiksloterham, nowadays called Overhoeks, would be develop as a mixed-use area with significant residential development, the plans for the Buiksloterham had to acknowledge this. A strategy to preserver the Buiksloterham as an industrial estate was considered incompatible with the grand urban development scheme for Overhoeks.

This is also the time when the *Toekomstvisie Panorama Noord* (2001) sketches the future development of Amsterdam-Noord for 2030, including the restructuring of Overhoeks and the Buiksloterham. *Panorama Noord* was the first attempt to seriously integrate Noord into the urban fabric of Amsterdam. Before that, Noord was inward-looking (OntwikkelingsAlliantie, 2008: 88). The central city in person of the alderman for Spatial Planning, Duco Stadig, gave Noord the cold shoulder.[9] Noord went through politically turbulent times. The chair of the district council at this time, Marijke van Schendelen of the Labour Party (PvdA, 2002–2003), had to make room midterm for Joke Peppels from the populist party 'Leefbaar Noord' (Liveable Noord, 2003–2004) until Rob Post from the Labour Party took over in 2004. The vision for Noord, which has been approved in 2002, was quite ambitious and partly controversial (Van der Tol, 2002), but the decisive approach of the District Council also resulted in a project organisation for the Northern IJ-Banks (OntwikkelingsAlliantie, 2008: 89).[10] From this period remains the name of the later project bureau, *Noordwaarts* (Northbound).

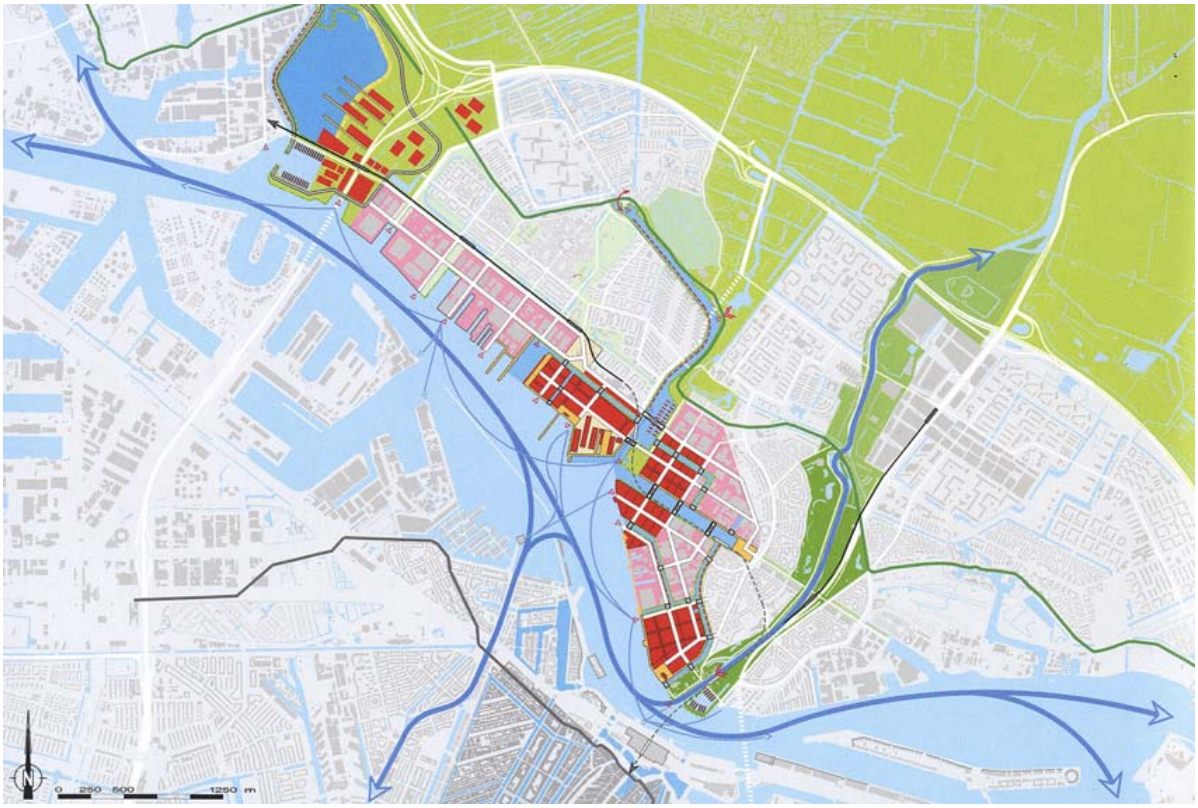


Fig. 7. Masterplan Noord aan het IJ. Source: Stadsdeel Amsterdam-Noord, 2003

[9] "We begonnen grote projecten te definiëren. Het lastige was dat Stadig er helemaal niks in zag. Duco zei letterlijk: 'Luister eens Hans, ik wil de Bijlmer op orde krijgen. Daarna ga ik IJburg doen, dat is nog moeilijk genoeg. Als ik dat achter de rug heb ga ik aan de Zuidas beginnen, als ik daar mee klaar ben aan de Westelijke Tuinsteden. En als ik dat allemaal gehad heb, dan ga ik nog eens een keer aan Noord beginnen.'" (OntwikkelingsAlliantie, 2008: 88)

[10] One bone of contention was a new urban extension in the iconic countryside of Amsterdam-Noord, which was cancelled after protests.

As a result of the new momentum in Amsterdam-Noord the IJ Banks received increased intention. The Masterplan “Noord aan het IJ” Banks (Stadsdeel Amsterdam-Noord, 2003) sketched a new image of the Northern IJ Banks and sets out a broad framework for long-term development and a stronger integration of the Northern IJ banks into the urban fabric, in particular in relation to the city centre. Three networks provide the framework for urban development: green and public space, water, and transport. Within this hard framework the programme for urban development is kept relatively open, to be specified in a later stage. It has never achieved any formal status as an official policy document and hence the Northern IJ Banks have never achieved a status as an integral project, because Amsterdam-Noord had no priority with the former aldermen of Amsterdam, Duco Stadig. Nevertheless, the Masterplan proved very influential. In addition, the Masterplan has been integrated in the Structuurplan (Stadsdeel Amsterdam-Noord, 2003: 7; Gemeente Amsterdam, 2003: 56). The transformation of the Northern from a derelict industrial into a high-quality urban area for about 9,000 dwellings and 25,000 workplaces (Stadsdeel Amsterdam-Noord, 2003: 11) became a shared political objective.

Elaboration

The transformation of the Northern IJ Banks officially starts on 1 January 2004. The central city and the district (*stadsdeel*) Noord formed a coalition, called Noordwaarts (Going North), which involved the devolution of powers from the district to the central city (municipality). Projectbureau Noordwaarts, funded and staffed by the municipality of Amsterdam and the district Amsterdam-Noord, became responsible for the planning of the transformation of Buiksloterham (urban design, land management, land-use planning and regulations, and realisation of public space). Although per 2008 the devolution of power has been revoked, the Buiksloterham has been placed under a transitional rule and the formal decision-making on the formal planning procedure remains with the central city.

Meanwhile and in parallel with the masterplan process, the plans for Overhoeks were progressing and this automatically involved that the initial plans for the Buiksloterham as industrial estate were reconsidered. It was also clear that a traditional development process of Buiksloterham, where all land is acquired, prepared and then released, was undesirable. One reason was economic. Although Buiksloterham was partly deserted, there were also many functioning businesses. This is the key point why the redevelopment of Overhoeks and Buiksloterham differs so strongly: while the first became a brownfield estate at once through the movement of Shell, the economic restructuring of Buiksloterham was a creeping process, including some success stories of new, contemporary (creative) businesses. Another reason was the experience with previous redevelopment projects. Although these were internationally acclaimed (e.g. the Eastern Harbour Area), there was certain dissatisfaction with the mono-functional character. The Buiksloterham should become different. This is probability related to a wider debate in urbanism and the rediscovery of city life.

Since the transformation of the Buiksloterham is strongly intertwined with the development of Overhoeks, the Environmental Impact Assessment (EIA) has been carried out for both areas together (2004–2006), though clearly separated in the report (Noordwarts 2005b). The challenges were different, too: Overhoeks was a traditional project development, whereas Buiksloterham was considered organic development. Both project were subject to an EIA anyway due to number of

dwellings. The EIA of Buiksloterham is based on the ambition to realise 3,300 units (Noordwaarts, 2005b: 15). The restructuring of Overhoeks was already in an advanced stage while there was no final decision of the Municipal Council on the transformation of Buiksloterham at the start of the EIA procedure. The decision for the transformation of the Shell area into the urban neighbourhood Overhoeks had already been confirmed in 2004. The construction works on Shell's New Technology Centre started already in 2005; housing followed in 2007. The land-use plan 'Overhoeks' was approved in 2006, although some appeals to the Council of State were rejected only in 2008. The southern part of Buiksloterham was included in the land-use plan as to conserve the current situation and thus not impede the foreseen transformation of Buiksloterham.

The EIA for the Buiksloterham was different from Overhoeks as no clear design alternatives existed. Therefore the assessment worked with three scenarios of the transformation process (Noordwaarts, 2005b: 15): *active transformation* of an extensive industrial estate into a high-density mixed-use neighbourhood that combines residential and commercial functions; *spontaneous transformation* into a mixed-use area with higher densities over a longer time period; and *intensification* of the industrial estate. The choice was between the two extremes of a very proactive role of the municipality ('active transformation' or the traditional development model) and a reactive role in which the municipality facilitates market initiatives ('spontaneous transformation'). The intensification option, which cannot be assigned to either of the two steering models, was never really concerned since the general decision for a mixed-use neighbourhood had been made.

In both scenarios soil pollution and noise emissions will play an important role. Soil rehabilitation takes place whenever land-uses change, thus almost any plan results in better soil conditions. On the basis of an overall reduction of industrial noise, the intensification of land-use and the improvement of accessibility, the municipality concludes that a more favourable environmental situation will emerge as a result of its plans, although traffic and traffic noise increases (Noordwaarts 2005b; Noordwaarts, 2007: 48). However, the information provided for Buiksloterham was considered insufficient by the EIA Commission (2006) and had to be resubmitted when more details of the plan were known. The EIA is a formal step that is solely carried out to match the legal requirements and has therefor little impact on the course of material planning decisions.

In 2006, the EIA Commission, which evaluates all EIAs of the Netherlands, concluded that essential information was now available about the Buiksloterham to make a better-informed decision for a transformation model that will be elaborated in the land-use plan. That was actually the time when the land-use plan "Overhoeks" was nearing completion. This land-use plan actually covered the Buiksloterham south of the Johan van Hasselt Canal and prepared the ground for the Buiksloterham project. Many noise-mitigating measures were already taken to enable Overhoeks and it conserved the situation in the remaining industrial estate to prevent the location of new industries. When the EIA Commission reassessed the plan, a first draft of the land-use plan had already been sent for consultation to public authorities in October 2007. There has never been a fully-fledged complete EIA for the Buiksloterham that has been open to public inspection. The EIA commission finally approved the EIA for the Buiksloterham, despite the flaws in the procedure.

Decision-making

The decision-making process for large projects in Amsterdam was usually designed as a three step rocket: The project decision provides the spatial, programmatic en financial framework for the transformation of an industrial estate into a mixed-use urban neighbourhood. The project decision marks the end of the exploration phase. The next step is the investment decision, which mainly adds a financial paragraph to the project decision. The final step concerns the juridification of the informal plan into a legally binding land-use plan.[11] All steps need be to be approved by the Municipal Council. Independently of the official decision-making, based on the *Plan van aanpak* of 1998, the municipality had already become active on the land market when plots became available (Noordwaarts, 2005a: 10).

The official start for the transformation of the BSH is with the project decision in 2005 (Noordwaarts, 2005a). It now includes parts of NDSM East (the dark red area in the Masterplan). The clear distinction between a core residential area with a high density, a transformation zone and the industrial estate has been set aside in favour of a stronger functional mix, except for the industrial estate (Noordwaars, 2005a: 35). This was actually the only major change in the plans for the Buiksloterham once the decision for an organic transformation process had been made. Moreover, it was more or less unrelated to legal problems. The main reason was the different programme for the NDSM area. Once the plans to transform the NDSM wharf area into a high-density residential area were abandoned because this would harm the festivals and the wharf monuments, it became logical to include this part in the Buiksloterham project area.

At the end of 2006, the municipality of Amsterdam agreed on an investment scheme for the Buiksloterham (Noordwaarts, 2007). This enabled Noordwaarts to invest in the area, in particular soil rehabilitation. But already before that, the municipality had pursued an active land policy acquired land when the opportunity arose. The scheme is at the same time the main (informal) planning document that outlines the vision for Buiksloterham. It includes a map that defines the rules of the game (see Fig. 6) – the land-uses, public space, and indicative building heights – but it is no blueprint with a final picture. It provides the general direction for the land-use plan procedure. In order to enable its realisation, a preparation ordinance applies to the Buiksloterham so that undesirable developments before the approval of a new land-use plan could be prevented.

The investment decision also contains the *Welstandsnota* in which the urban design criteria that need to be followed are explicated (Noordwaarts, 2007). Mainly, it is intended to prevent undesired developments such as extensive use of billboards. Still it also provides guidelines to make sure the area would look like as intended by the planners. For example, the industrial character of the area should be leading in the design of buildings and public space and the choice of materials. Here it becomes clear that a rule-free zone as frequently mentioned by planners does not imply that urban design is completely neglected. In the individual tenders for small plots on municipal land more detailed specifications are provided. For each plot individual bid books with guidelines, requirements and inspiration are provided.

The Buiksloterham (Noordelijke IJ-oevers) was also part of the investment strategy of the National Government to realise the goals of the national planning strategy, the *Nota Ruimte*. It. received

[11] The planning and decicion making process for spatial interventions (Plaberum) can be assessed via http://www.amsterdam.nl/gemeente/organisatie-diensten/dienst-ruimtelijke/publicaties-dro/plaberum.

a Government subsidy of €30m via the Nota Ruimte budget (former FES) to stimulate the transformation of an industrial area into a mixed-use neighbourhood. It was shortlisted even before the official start of the Nota Ruimte budget procedure, as it has been one of five impulse projects (*versnellingsprojecten*) that were later integrated in the Nota Ruimte budget (Berenschot, 2009). They were assessed on their funding suitability in 2006 and re-assessed in 2007. The cost–benefit analysis that was part of the procedure produced a mixed result. The re-assessment, after some changes in the funding application leaving out the culture and arts dimension of the project, confirmed some of the doubts. The Netherlands Bureau for Economic Policy Analysis (CPB) placed question marks over the legitimacy and the effectiveness of national funding. Because most of the benefits are realised by the local authority, it basically says that in the light of the subsidiarity principle, the local authority should fund the project and not National Government (Ecorys 2006; CPB, 2007: 25–28). Despite the mixed assessment it received the green light per 1 January 2009 (Berenschot, 2009). However, the national government subsidy has never been of vital importance for the project, despite the fact that it constitutes 45 per cent of the official budget (Berenschot, 2009: 68). Actually, the alderman, Duco Stadig, initially wanted to avoid the bureaucracy of applying for national government money altogether, but the project manager at that time did not want to pass up the opportunity. Parts of the subsidy (€13m) as well as €1,5m of the land exploitation surplus of the Buiksloterham are used for the improvement of public transport between Amsterdam Central Station and Zaandam (*Zaancorridor*), which is another project related to the transformation of the Buiksloterham and *en passant* elegantly underpins the determination of the municipality to adapt the traffic network to the new reality.

Public consultation of the draft land-use plan took place in late summer 2008. Additionally, an earlier draft had been sent to public authorities, including the Chamber of Commerce. Since the start of the planning procedure, regular consultations with the industrial sector have taken place to take their concerns seriously. Nevertheless, most reactions stemmed from the industry and their representing organisations. The Chamber of Commerce as a relevant public authority provided 39 comments in the first round and 6 follow-up comments in the public consultation together with VEBAN. Several companies tried, sometimes with success, to keep residential functions at a larger distance than initially intended. Three companies (Air Products, CPM Europe, and Wegter en Zn) had fundamental objections, not by coincidence all of them were excluded from the industrial estate and were therefore more affected by the transformation. Each had already presented similar objections in the public consultation of the land-use plan “Overhoeks” (Gemeente Amsterdam, 2006: 156-163). The obligatory land exploitation plan was addressed by several actors, in particular those with development ambitions. The objections have been handled and if necessary negotiated.

The draft land-use plan did not include a land exploitation plan that had become obligatory with the new Spatial Planning Act. With such a plan, the municipality can claim the public sector costs from individual landowners. Noordwaarts wittingly decided have no land exploitation plan. By that time, it was a completely new instrument and it the exact procedures were unclear. Moreover, the project had a balanced budget. Via its active land policy, the municipality could cover most of the costs anyway due to the peculiarities of the Dutch land leasehold system, which allows to cover costs via land rents. Since from a rational point of view no landowner would have an interest in extra costs that would ultimately follow from such a land exploitation plan, it was a realistic bet that the plan could be approved without the land-use plan. However, the novelty of the act and thus the inexperience with the land-use plan caused some landowners to remark on the lack of

such a plan. Hence, the municipality had to draft a land exploitation plan, including a public consultation process. This took more than a year.

The final step in the planning phase is in December 2009, when the municipal council approved the land-use plan for the Buiksloterham. Just shortly before the extension of the deadline, a private sector company withdrew its appeal to the Council of State. Another claim on the land exploitation plan was dismissed as the official participation period had expired. With no pending legal actions the plan has become peremptory. It entitles the municipality and private investors to realise residential uses on a large number of plots by law. The land-use was the milestone to enter the implementation phase.

Implementation

The planning for the transformation of the Buiksloterham continues, but with the approval of the land-use plan the formal decision-making process is completed. Planning decisions are made now within the (legal) framework of the rules map and the land-use plan. The Ridderspoorweg, a road and bridge crossing the Johan van Hasselt Canal necessary to improve the accessibility of the Buiksloterham, was already realised before the approval of the land-use plan via another legal procedure (article 19 procedure after the WRO). That is not to say that nothing happens. The financial and economic crisis unfolded and it soon became clear that the approach had to be reconciled.

Already before the approval of the land-use plan, in 2008, a supervisor has been appointed to guarantee the coherence of the architectural aesthetics, despite the fact that the principles for aesthetics were quite limited and many plots are free of aesthetic considerations (*welstandsvrij*). It was not the planners themselves that asked for a supervisor but two Amsterdam commissions overseeing urban design of projects (Commissie Welstand and Amsterdamse Raad voor de Stadsontwikkeling). Projects on municipal plots have to receive positive advice of the supervisor before they are allowed to submit their plans to the aesthetics commission. For other building projects it is offered as a service to provide advice, which may help them to get their plans through the municipal aesthetics commission (see also *Noorder IJ-Krant*, 2008: 7). Project developers harmonise their plans to create certainty about the future development of the area.

The effects of the economic crisis hit the municipality hard, as its business model was based on the revenues from urban development cross-financing all sorts of economically unviable activities. There was an overabundance of office space in Amsterdam already before the crisis with vacancy rates approaching 20 per cent, but with the crisis it became even more salient. In the summer of 2010, all development projects of the municipality were subject to scrutiny (*projectenschouw*). As a result the active implementation was stopped for parts of the plan; the emphasis is mainly on the area south of the Johan van Hassel Canal as here are less environmental constraints. Furthermore, the new office strategy of Amsterdam (OGA, 2011) resulted in a reduction of 85,000 square metres of offices in the programme of Buiksloterham. The reduction of office space only concerned those plots in municipal ownership as to avoid legal conflicts on development rights (compensation). Obviously, this further limits the possibilities to realise work functions.

As of 2012, the first partial review is already approved and two more are in progress. It concerned the reduction of the parking norm and an increase of the housing percentage. The second review is necessary due to the road expansion of the Klaprozenweg to realise freestanding bus lanes, (the road extension is regulated via a separate land-use plan). It requires adapted noise regimes ('silent house fronts') for some plots within the noise contour of this road. The third review will enable self-building on a specific plot. Possibly many more reviews will follow to further reduce the percentage for commercial uses. Additionally a new, temporary school building for two primary schools has been approved via the legal instrument of project decision (*projectbesluit*). Despite the fact of a global land-use plan that theoretically facilitated an organic transformation of the Buiksloterham, the plan did not withstand the financial and economic crisis unaltered.

Key moments

In the place of a short summary I will briefly sum up crucial moments in the decision-making process of the Buiksloterham. The most important key moment is before the actual start of the Buiksloterham project. The decision of Royal Dutch Shell to sell 20 hectares of its 27-hectares estate opened a window of opportunity, which subsequently set in motion the transformation of the Buiksloterham. The plans for Overhoeks, the new urban development on the Shell estate paved the way for the transformation, for it marked the end of an industrial future of the Buiksloterham. This move of a private sector party required the public sector to reposition itself and accelerated the transformation process. The masterplan for the Northern IJ Banks provided an important basis for the individual project and placed the area on the map, not only in Noord, but also in the central city. The Project Decision and more so the Investment Decision were key moments as the Buiksloterham became a formal project and the municipality could invest in the area. Obviously the approval of the land-use plan was a key moment. This includes in particular the deal with the main objector to withdraw its appeal to the Council of State. Otherwise the following court battle would have resulted in serious delay of the planning process. The last key moment, though chronologically before the approval of the land-use plan, is the financial and economic crisis that started to take off in the third quarter of 2008. Its effects however, took place later. Some important land transactions still took place in 2009. In conclusion, the Buiksloterham project faced some challenging periods (e.g. around the land exploitation plan) and certainly some legal-technical obstacles, but by and large it is a more or less linear process since the official start of the project.

7 The problem of contextualisation

We have already introduced the prevailing legal regimes that were relevant for the planning process of the Buiksloterham. To recapitulate, spatial planning policy frameworks did not place limitations on the development options under consideration. What challenges did central legislation pose for planning and how were theses addressed? And on the governance dimension, how has Noordwaarts managed the different stakes to realise collective action?

With respect to spatial and environmental legislation Sorel et al. (2011: 33-34) make a distinction between plan-dependent and plan-independent legal issues. These require a different strategy and have different implications. Some issues are *dependent* on the material content of the plan as to whether or not the legal norms will be met and therefore deal with a future situation. Prime examples are noise and air quality, which are strongly related, among others, on the programme (e.g. number of dwellings) and the physical structure (how noise travels). Plan-*independent* issues, in contrast, refer to environmental and spatial planning problems that exist whether or not a planning is carried out; the plan itself has little or no impact on the gravity of a problem. These issues exist at the outset, such as protected species, archaeological values, and soil pollution.

There is a difference between the two with respect to problem mapping and, following from this, the flexibility to deal with these issues. Plan-independent issues are more or less static and therefore require empirical research of the current situation. They pose rather hard conditions that cannot be easily influenced. The most famous and often polemic cases are the hamsters and other protected species that have brought large-scale projects to a halt. Sometimes via creative solutions workarounds are possible. In the case of soil pollution non-sensitive functions can be placed on more polluted soil. Plan-dependent issues, in contrast, are usually influenced by the programme and therefore require prospective research (modelling) to reveal the effects of the plan. There is a lot of uncertainty about the prognosis, which increases the more the exact spatial programme is left flexible. Thus the flexibility of an open plan correlates with the uncertainty of the models.

Both can pose serious challenges, but in the case of the Buiksloterham it is particular the plan-dependent issues that have proven problematic. The openness of the spatial plan as outlined in the rules-of-the-game map has implications on the credibility and thus legal trustworthiness of the models to result in ‘good spatial planning’. The main challenges, in particular around noise issues from both industry and traffic, have been addressed in a variety of ways. First, I will outline the traditional measures of zoning. Next we will discuss the issue of projections for plan-dependent components of a plan and the land exploitation plan, both in relation to the complexities that emerge due to the organic development model. This brings us to the question as to whether alternative instruments of the planning act could have helped to overcome some of the

main obstacles, particularly referring to the land-use plan strategy. Finally, I will pay attention to the governance model of the land-use plan as an important ingredient for contextualisation.

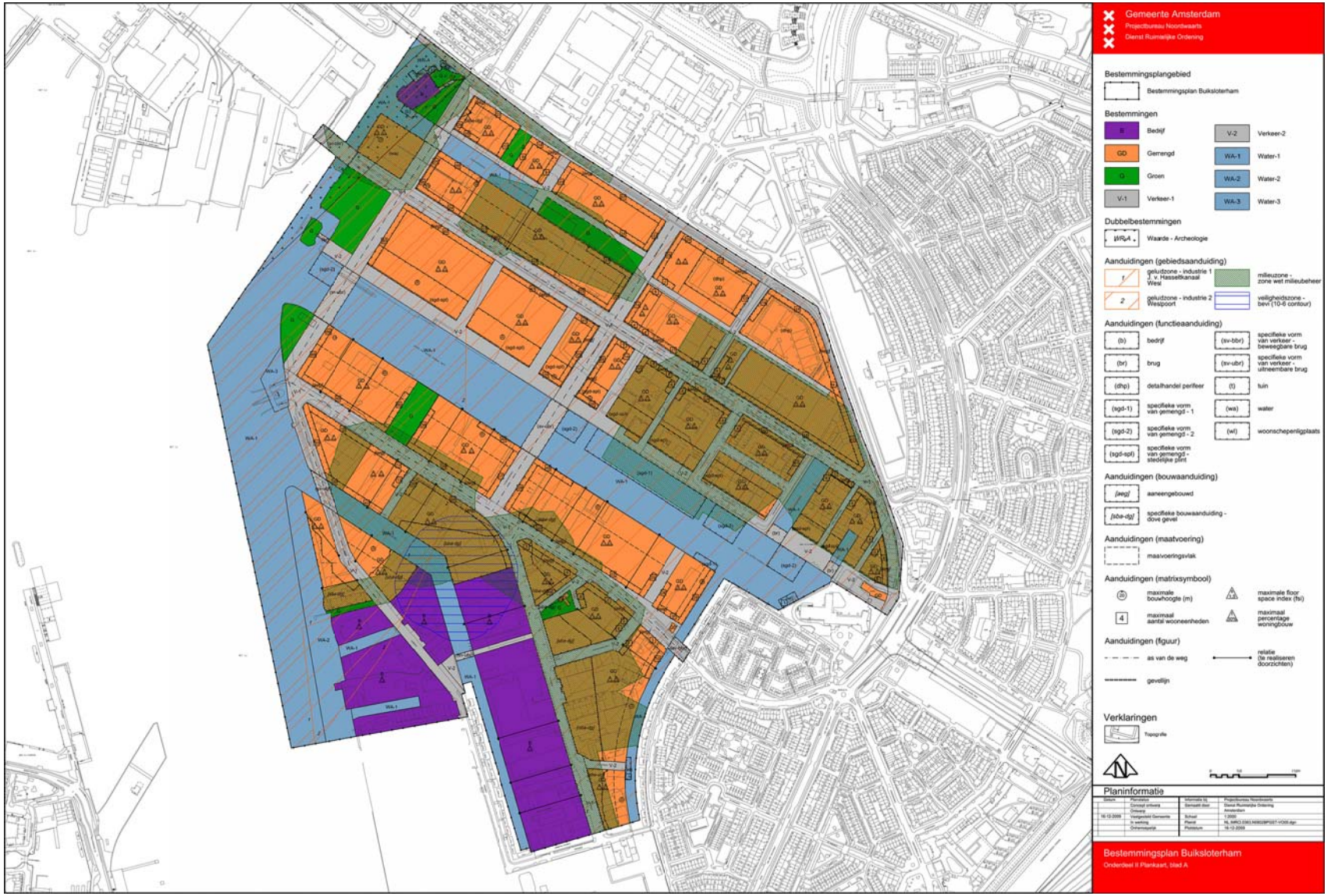
Zoning

The total area of the Buiksloterham was designated as a zoned industrial estate 'Johan van Hasseltkanaal' (*gezoneerde industrieterreinen in de zin van de Wet geluidhinder*) according to the Noise Abatement Act, which implies that no housing was allowed on the industrial estate. In an adjacent zone surrounding the industrial estate, a maximum noise norm of 50 dB(A) applies. Thus removing the zoned area and significantly reducing it was part and parcel of any transformation into a mixed-use area. Changing the zoned industrial estate required drafting a land-use plan. The land-use regime dated from the pre-WRO legislation, but via transition rules, it had the status of a *bestemmingsplan* (Noordwaarts, 2007: 55). The land-use plan for Overhoeks covered large parts of Buiksloterham but only conserved the situation of that time, avoiding new emitting businesses to settle. The potential reduction of the coverage of the zoned area depends on the presence of certain big noise emitters or 'category 2.4 establishments'.[12] Due to the closure or relocation of many industrial companies, it was possible to reduce the industrial zone to cover the area that was absolutely necessary. The industrial zone became split it up into two areas: a larger zone adjacent to Shell's New Technology Centre, 'Buiksloterham', and a small shipyard, 'Stella Maris'. The industrial zone and thus the land-use 'industrial' was reduced to those plots that accommodate companies of the highest environmental categories that required an industrial zone as specified in the Noise Abatement Act. The noise contour of the industrial estate was left intact and still covers the whole Buiksloterham at the request of the business sector. A tighter noise contour would lead to problems for the development of the existing industries.

Within the noise contour, but not on the actual estate, residential functions are possible as long as it can be guaranteed that the norm of 50 dB(A) is not exceeded. In practice, the municipality approved of higher values, 55 dB(A). This was considered acceptable regarding the overall character of the Buiksloterham. Industrial noise knows a strict regime and further exemptions from the norm are impossible. In order to ensure that the overall noise level of the industrial estate will not increase significantly in the future, only businesses of maximal environmental category 3.2 are allowed on the estate. These have an individual contour of 50 metres according to the VNG list. To ensure the function of the industrial estate within a zone of 50 metres around the estate residential and other sensitive functions are prohibited, so that a business of the highest tolerable environmental category can locate on every plot within the industrial estate without potential interference.[13]

[12] This is not to be confused with the VNG categories. It is named after article 2.4 art. 2.4 of the Environmental Management Decree for Establishments and Permits (*Inrichtingen- en vergunningbesluit milieubeheer*). Since 2010, the Environmental Law Decree (*Besluit omgevingsrecht*) defines which type of industries must be located on a zoned industrial estate.
[13] This solution was introduced on behalf of the Chamber of Commerce (Noordwaarts, 2009, Onderdeel III – Toelichting: 133)

Fig. 8. Land-use plan 'Buiksloterham'. Source: Gemeente Amsterdam, 2009



Reducing the zoned industrial estate provided a necessary but not a sufficient legal condition to allow residential development. The remaining area of the Buiksloterham that has become zoned as a mixed-use area now contained many businesses with individual environmental concessions that resulted in individual contours based on the Environmental Management Act, which exclude any sensitive functions. Instead of one large zone covering the total area of the Buiksloterham, there were now two zoned industrial estates and numerous individual circles of various diameters around businesses and workshops, depending on their environmental classification. The VNG defines environmental categories for different types of business as defined in the SBI (Standard Business Classification) that are translated into indicative contours (*richtafstanden*). In the case of mixed-use areas these may shift to the next lower category, if no safety issues are concerned (VNG). The SVBP 2012 offers a zoning tool. The planners and legal advisors decided to define these zones as environmental zone (*milieuzone – zones Wet milieubeheer*). For each zone, an entitlement for the local authority to alter the plan (*wijzigingsbevoegheid*) applies, so that a zone can be revoked or adapted once an emitting company relocates or changes its business model, as to enable residential development. Such an environmental zone with a contour of 50 metres has been also installed around the industrial zone as to specifically protect the industrial activities on the estate. As the land-use plan allows activities up to the environmental category 3.2 as specified in the VNG list it ensures that new businesses up to this category can locate on the industrial estate without any potential conflicts with environmentally sensitive functions.

External safety has been accepted as one of the constraints. There is one company that deals with industrial gas (Air Products). The land-use plan includes a safety contour within which housing and other sensitive land-uses are not allowed. The safety contour was calculated by a consultancy firm and has been fixed at a 100-metre distance to the source (Save, 2007). There was certainly no intention to escape or even undermine safety regulations. Nonetheless, there was a debate on the size of the contour. For an industry, it is comfortable to have the zone larger than absolutely necessary to allow for extensions. The company had a long list of complaints about the land-use plan, the exploitation plan and the higher value decision for noise – most of them actually unrelated to the initial concern of the safety contour (Noordwaarts, 2009a: 6-23). This conflict has been settled only shortly before approval of the plan. Furthermore, there are bulk transports of hazardous materials (for Shell), but the risk was considered extremely low (Noordwaarts, 2009b: 104).

So far, we have looked into the instruments of strict land-use planning. Yet it was clear from the outset, that some individual businesses had environmental contours either on paper or de facto, that covered such a large area that any transformative ambition would be blocked. The cement company Struyk Verwo was the only company that has been bought out by the municipality to relocate into another part of Amsterdam. The environmental contours of this company would have disabled the development of several municipal plots near the Klaprozenweg that were intended to give a boost to the transformation of the Buiksloterham. The case of the galvanic company NedCoat was somewhat differently. The zoning plan explicitly zoned this company away, which would entitle the municipality to expropriate NedCoat. The negative impact on urban development had been underestimated initially, probably due to the fact that it was only ranked a 3.2 category business. However, the noise level was at the limit of the environmental permit and therefore it proved incompatible with housing. An investor bought the plot in 2008, facilitated by Noordwaarts. There were a few other companies with problematic environmental norms. Here Noordwaarts pursued a double strategy. They were actively seeking investors that would buy out the

companies. If this remained without success, the interests of these companies were safeguarded in the land-use plan so that a potential appeal would have no chance.

Furthermore, each company of a higher environmental category than allowed in the respective zone has been listed in the explanation (*toelichting*) of the land-use plan. In particular on the industrial zone some companies were classified into an environmental category with very large contours. Per company it has been argued why the company has a lesser impact than assumed in the VNG list and could therefore be tolerated. This was particular the case for Omya, the former Norwegian Talc. This company is almost symbolic for the mixed-use development of the Buiksloterham as about once a week a sea-going vessel is unloaded. However, being classified into category 5.2 implied a contour of 500 metres within which no residential uses were allowed.

The existing environmental contours were challenging, but not to the extent of threatening the approval of the land-use plan. It results in some 'free' areas where housing is possible a zoning point of view, implying that a plot was not on the industrial estate, neither subject to the green-shaded, environmental zones. However, we have to remember the noise limit of the industrial noise zone, which is subject to the calculation of cumulative noises. And this brings us the next problem of prospective research, in particular with respect to noise. Additionally, the planned programme poses new problems to the noise and traffic levels.

Projecting future environmental conditions

The maximum noise level needs to be guaranteed and where exceeded higher values need to be adopted. This is easier said then done, because it is not known for which plot the higher values have to be adopted and for how many dwellings. Neither has it been clear where the noise would hit the façades. Therefore acoustic research had to prove that the measures taken would match the norms. This concerned both traffic and industrial noise, and in particular in combination. It has resulted in a lot of 'space on paper' as one interviewee put it, which was created by a serious of specifications in the land-use plan. Alongside many roads it includes an obligation of a continuous plinth with a minimum height of 9 metres so that wall of buildings protects the back laying plots. Furthermore, special, silent asphalt has been prescribed on busy roads during the next regular maintenance to mitigate some of the effects. The maximum number of dwellings to which higher values apply had to be specified and occasionally minimised. Silent house fronts (*dove gevel*) were the last option to stay within the noise limits. While the planning horizon has always been 2030, the land-use plan is conceptualised by law for ten years and therefore it is tested against the programme that is enabled in the plan. Noordwaarts insisted on enabling residential development in theory in as many places as possible. Therefore these measures had to be included in the plan, because otherwise legal rules would have prohibited noise-sensitive functions. This has made the land-use plan more complex than initially intended.

The calculation of the noise level depends on noise produced on paper. Each business has been assigned a certain maximum noise level in the environmental permit (*milieuvergunning*). The permits usually include some growth potential with respect to noise pollution. Case by case the environmental permits have been checked to what extent the actual noise level matches the one allowed. In many cases it was possible to adjust the environmental permit to the actual noise pollution or to facilitate investments to reduce noise emissions. This required individual negotia-

tions with businesses, which was extremely time consuming. In some cases, companies have been compensated, but in many cases companies were surprisingly easy with reducing their potential emission level. The problem with industrial noise is that it does not matter whether it is real noise or theoretical noise. The calculation of cumulative noise does also not take into account whether noise is emitted at the same time. Therefore the real noise level is often much lower than the theoretical noise level.

The increase in traffic and accordingly noise formed an important problem, too. In various scenarios of the development of Buiksloterham, including the full implementation of the Overhoeks plan, several crossroads would be overloaded, which resulted in the exclusion of some function notoriously known for attracting traffic (Goudappel Coffeng, 2009). The norm is 48 dB on the house front, but this is almost impossible alongside main roads. Yet, it is slightly easier to deviate from the norm in the case of traffic noise than with noise from industrial sources. The modelling of traffic noise implied that for almost 3,000 units higher values have been granted, ranging from 49 to 63 dB L_{den} (Sight, 2009). We have to be cautious in stating that 3,000 will be de facto subject to a unsatisfactory exposure to (traffic) noise, since in some locations other functions will be realised or the actual traffic volume stays behind the prognoses, but it is no exaggeration that certainly more than half of the housing units will be affected by higher noise levels due to traffic if the Buiksloterham is fully developed. While this concerns national regulation, and exemption is – in theory – relatively easy as with reform of the Noise Abatement Act the municipality is its own inspecting authority, Amsterdam's higher values policy places an additional obstacle by requiring that for each dwelling at least one outer wall needs to meet the standards of the norm, that is maximum the preferential limit (*voorkeursgrenswaarde*) of 48 dB.

There is a lot of uncertainty in the projections and therefore the total programme had to capped so as to limit the effect on the wider traffic system in conjunction with other development projects (Klomp & Van Heusden, 2011: 9). There is a cumulative effect of assumptions of traffic projections and industrial noise projections. Another issue related to the modelling of the future is due to the fact that the transformation of the Buiksloterham into a mixed-use area works without a clear blueprint involves potentially high variation. If no rules would limit the designation 'mixed-use' combining living and working, it could mean either jobs or housing, which makes it extremely difficult to calculate. In fact, the worst case sets the standard for the calculations. This resulted in a large number of rules, which might prove redundant at the time a building permit will be issued.

Claiming development costs under public law

During the drafting of the land-use plan Buiksloterham a new act was enforced that enables municipalities to claim the preparation costs of a plan: the Land Exploitation Act (Grex-wet), which was as an integral part of the new planning act. It was enforced in 2008 at a moment when the public consultation of the land-use plan had been already started. Actually, Noordwaarts did not want such a plan. It had a conclusive budget, albeit only via the municipal fund that cross-finances deficit projects (*vereveningsfonds*). For the plots owned by the municipality private contracts had been signed with developers. This is the traditional model of urban development: the municipality can claim costs through the leasehold contract. In most cases, they have tried to realise anterior agreements (contracts) with presumably lower payments for individual landowners, as to avoid any difficulties.

The key problem of the land exploitation is similar to the problem of traffic and noise projections, as it expects a detailed prognosis of all costs and benefits that can be realised within the plan area. However, many public investments were dependent on the moves of private sector investors. The investments in public space and infrastructure were subsequent to building activities. In parts of the planning area, it was quite likely, that nothing was to happen within the next decade. Nonetheless, everything had to be brought on the balance sheet, scaring off one or the other landowner who suddenly discovered massive payments to be made to the municipality if the current function would be changed.

The Grex-wet builds upon the implicit assumption that a land-use plan will be realised within the legal period (*geldigheidsduur*) of ten years. While this assumption does not correspond to reality anyway, it is also questionable whether it fits with the intention of the Spatial Planning Act, because land-use plans are installed to enable the issuing of building permits. The current Grex-wet is not a one-fits-all solution. It is a very useful instrument for small-scale development project that are accomplished within a limited time frame, but very difficult to apply in transformation areas without clear phasing of the development process.

Another obstacle concerned the administration of cost and benefits within the municipality of Amsterdam. The extra income of land lease contracts that had been renewed due to higher value land-uses had been allocated to the overall municipal budget. In traditional development project, the municipality acquires all land and, therefore, this is no issue. Since the municipality only disposed over approximately 30 per cent of the land in the plan area, this had severe consequences for the business case of the Buiksloterham project. Only by deviating from this ‘rule’, via approval by the municipal council, the Buiksloterham could present a conclusive business case.

Finally, the municipality is dependent on land revenues. This is a constraint that is a result of the financial model of Dutch municipalities (Tennekes & Harbers, 2012: 57-58). The preparation of building land is a profitable business, in particular before the financial and economic crisis. The fact that in the case of Buiksloterham the balance is negative could be compensated through development projects with a surplus. This limits the possibility of downscaling the project without major losses for the municipality. Therefore, the leverage of the municipality in stimulating development is limited, also with respect to public space and infrastructure.

Land-use plan strategy

So far we have investigated problems related to the organic development strategy of the Buiksloterham and the legal requirements of environmental and planning legislation to ensure that environmental norms will be matched. Noordwaarts opted for a global land-use plan (*globaal eindplan*) as is claimed in the land-use plan (Noordwaarts, 2009: 7), implying that it enables, at least theoretically, instant development opportunities. Since there is no definition of a global land-use plan, it is difficult to establish that it is not, although the amount of regulations posing limitations to possible development options was higher than initially desired. The instrument of the land-use plan can be applied in a variety of ways as outlined above. Why did Noordwaarts opt for this specific strategy? The following options have been discussed in various combinations: one or more land-use plans, detailed or global, with or without an embedded plan (*uitwerkingsplan*), and full-development or partly conservationist?

The main argument to draft one land-use plan for the whole area is grounded in the spatial integrity of the area. The Buiksloterham consisted of a single zoned industrial estate that needed to be changed. It had also to do with the coordination of development. Together with Overhoeks it consisted of a massive development scheme, which placed severe strains on the road system. Splitting the Buiksloterham up may lead to internal coordination problems. Finally, the Council of State might still regard the separate development schemes as a coherent project.

The choice of a global land-use plan over a detailed plan was almost self-evident. A detailed land-use plan was in contradiction with the idea of an organic transformation that leaves space for private initiatives. There is no clear definition of a detailed or global plan, but in practice a detailed usually prescribes for instance the exact building lines. Yet, the urban design of the built environment as left as open as possible. A detailed plan would have resulted in many constraints. Another option was a global mother plan with one or more embedded detailed plans, but was dismissed for a variety of reasons. At the time of drafting, a detailed plan had no effects on the prognostic research of environmental norms. Only with the Crisis and Recovery Act of 2010, it became possible to postpone the calculations of environmental norms and thus the approval of higher values. This might provide more flexibility to adapt to changing spatial circumstances in dynamic contexts. In the Buiksloterham, for instance, some businesses have moved soon after the approval of the land-use plan, which might result in less noise problems. However, a mother plan with one or more embedded plans provides another hurdle to the development process. Even in the current situation, the gains through the possibility of postponing the calculation of environmental norms and potentially reacting to changing circumstances, may not weigh up against the additional bureaucracy. If the planners had no intentions to provide more details in embedded plan than, why bother with an detailed embedded plan was the argument made.

This decision for an all-encompassing plan that theoretically allows for urban development on each plot immediately was heavily influenced by the economic context of that time. Planning started in 2005, when the economy was booming. Developers queued for developing the Buiksloterham. The aldermen needed new housing locations that are ready for development short-term. Although the land-use plan dates from 2009, most relevant decisions had been taken under the impression of economic prosperity. This partially explains why alternative solutions, which would not theoretically entitle to realise housing by law almost everywhere, have been discarded.

The governance of land-use planning

Apart from the technical planning solutions, the Buiksloterham planning process required a lot of interaction. Interactive governance is part and parcel of each planning process. This is basically where regulations and governance met. Many legal obstacles or conflicts can be avoided through a good process. Regarding the uncertainties in these types of transformation plans, the threat of a court battle at the Council of State is always a real scenario, in particular if concerns of stakeholders are not recognised. There is always the danger of a potential mistake in prognostic research so that a plan is disqualified as being bad spatial planning.

Throughout the whole period, there was intensive contact with the business sector as well as civic organisations. The consultations were partly a continuation of Overhoeks planning process. In

many cases the same companies and civic organisations were concerned. Noordwaarts installed an advisory committee including the Chamber of Commerce, VEBAN and individual companies, and a neighbourhood committee with ANGSAW, SPINN and the Platform Van der Pek en Distelbuurt. The regular consultations with stakeholders such as ANGSAW and VEBAN continue to date, even now that the land-use plan has been approved. These were much appreciated. In addition there were many negotiations with sitting companies and potential developers.

Throughout the planning process the main issue was about the potential conflict between the local businesses and future inhabitants. The latter were obviously absent and the private sector was present all the more. VEBAN and the Chamber of Commerce were initially against any transformation, but with the plans for Overhoeks they realised that a constructive attitude would provide better results for their members. VEBAN therefore decided to work with Noordwaarts on a workable solution that enables the ambition of Noordwaarts and at the same time protects the interests of the businesses in the Buiksloterham. This decision was assisted by the fact that the realisation of residential development in the NDSM East and Hamerstraat areas would not be started before 2020. This resulted in differentiation of the share of commercial and residential functions per area. Adjacent to the newly delineated industrial estates, lower percentages of housing have been set, while close to the water housing dominates and vice versa. Another agreement was made with VEBAN during the public consultation to improve accessibility. VEBAN objected to the categorisation of the Buiksloterham as a B-location, which implies a certain parking norm.[14] They argued that the Buiksloterham has a lesser accessibility and therefore more parking places are needed. The municipality had no interest in a higher norm. This issue has been solved elegantly outside the trajectory of the land-use plan. The municipality assured to connect the Buiksloterham by a bus line, which cannot be incorporated in a land-use plan. The route of bus 38 has been changed permanently as of 1 January 2010 and has two stops in the Buiksloterham. In the interim period, Noordwaarts even financed a shuttle bus. Apparently, this was a compromise with which both parties could save the face.

Noordwaarts had been clear from the beginning that it had neither the money nor the intention to realise a tabula rasa situation by buying out companies and developing the Buiksloterham from scratch. The only exemption has been Struyk Verwo. The contours were blocking the development of municipal plots in the northwest corner of the Buiksloterham (near the Klaprozenweg). However, Noordwaarts facilitated transactions between industries and project developers so that the really problematic business could move. The companies had been helped with a new site and the project developers with the transformation of the heritable building right from industrial uses into residential uses. This also resulted in a shift in the governance arena. While initially, the business sector was the key actor, now the developers took over this position.

Since the gradual transformation and in particular the modification of the environmental permits had a huge impact on individual companies, some of which did not have the capacity to check the options suggested by Noordwaarts, all companies could ask for a second opinion by an independent consultancy, paid by Noordwaarts. This was particularly important when the environmental permits where renegotiated and potentially curtailed to reduce the theoretical noise level of the

[14] The ABC location policy makes a distinction between three categories of locations that are translated into parking norms. A-locations are highly accessible by public transport. The norm is one parking place per 250 square metres floor space. B-locations have a good accessibility by public transport and by car. The norm is 1 parking place per 125 square metres floor space. C locations are car dependent and are therefore exempted from a parking norm (Gemeente Amsterdam, 2008).

Buiksloterham without hampering the conduct of businesses. As shown, many companies were open to adjust the environmental permit, which had been probably issued at a time when noise was a less scarce 'resource'. In one case, Noordwaarts invested in technical solutions to mitigate noise as these were beyond what could be expected with respect to the applicable norms Best Available Techniques and As Low As Reasonably Achievable (good engineering practice). This approach also resulted in very few objections of individual businesses during the formal public consultation. By and large, bottlenecks had been solved beforehand.

A small number of companies had fundamental objections. VEBAN and the Chamber of Commerce were representing the whole business sector, but each company was free to submit individual objections. Noordwaarts made clear that it would not buy out companies with the land-use plan in their hand.[15] According to a civil servant, some businesses had hoped that the municipality removes them and thus providing a new plot and production site. On the other hand, businesses could have easily achieved a good deal with a property developer at that time since investors were queuing up. As mentioned, only two companies have been removed in mutual agreement. For the three main complainants no such plans existed. One company took legal action, but withdrew shortly before the period expanded. At the very last moment successful negotiations resulted in an agreement. It is difficult to tell whether in this specific situation the situation had been underestimated by mistake, but it demonstrates the importance of consultations in good trust. In the end, it is not about a plan that complies with the every minor details of overly complex rules but that no parties feels that its concerns have been ignored.

[15] A valid land-use plan is sufficient in Dutch planning to prove the public interest and expropriate landowners (Tennekes & Harbers, 2012).

8 Dilemmas

We can summarise the planning of the Buiksloterham in a series of dilemmas or paradoxes that are to some extent interrelated. The first dilemma concerns the quest for legal certainty in a context of planning uncertainty. The second dilemma concerns the popularity among planners and users of mixed-use urban neighbourhoods and the restrictive but also much sought after legal environmental norms. The third dilemma is about the organic development rhetoric and the wish to intervene in urban development or between order and control. Each dilemma seems to pose mutually exclusive dimensions of a problem.

The quest for legal certainty in a context of uncertainty

There seem to be inherent challenges that result from the incremental development approach in relation to the formal legal requirements. Dutch planning legislation and jurisprudence for land-use plans requests detailed knowledge about and accurate projections of a future situation that is not known and which planners actually want to leave open.[16] Noordwaarts had to commission lots of empirical and prognostic research to underpin the land-use plan for developments that might not take place or look completely different than intended. The basis for this research formed the worst-case scenario, meaning that those functions will be used in the calculations that, for instance, attract most traffic. As a matter of fact, a global land-use plan that provides more flexibility regarding the functions and the exact location of buildings results in complex prognostic research that bares a high potential for contestation. The more is left open, the more measures it requires to meet the environmental standards and the more complex a plan gets. As a consequence there is a sort of a false legal certainty (*schijnzekerheid*). As a civil servant puts it: “Obviously, that is all reality on paper”. The real spatial dynamics usually differ from the planned reality. Despite elaborate models to predict the effects of a plan, there is no certainty that the situation of the here and now, is true over ten years. Some parameters are unpredictable and are dependent on external factors.

Ironically, the same civil servants who bemoan the demand for legal certainty by the legislator and jurisprudence request legal certainty for their approach. The land-use plan of the Buiksloterham has become irrevocable (*onherroepelijk*). However, since no court actions have been taken, there is no certainty that the municipality has drafted a legally correct land-use plan that would

[16] “Vanuit jurisprudentie wordt gezegd je moet alles gedetailleerd in beeld hebben gebracht en je moet precies kunnen aangeven waarmee de toekomstige bewoners worden geconfronteerd. […]. Maar op het moment dat je organisch aan het ontwikkelen bent, kun je die zekerheid niet geven en is de grote vraag van: hoe doe je dit dan nou? Dus de wetgever wil zekerheid en we zitten in een situatie van onzekerheid.” (Interview civil servant)

have passed the judgement of the Council of State, the highest administrative court of the Netherlands.[17] This is something law cannot provide, in particular if it should apply to many situations that cannot be foreseen by the legislator. At the same time they are not willing to take the risk and have their plan tested in court. If we would follow the argument, this would result in more detailed legislation rather than less.

There seem to be also different views on this subject between decision makers and policy advisors. Planning legislations provides a variety of instruments to allow for flexibility and timely decisions. In so doing, plans can be adapted to changing circumstances or become more detailed. Both might result in more accurate projections of environmental effects in the future, meaning that the difference between the worst-case scenario and the factual development might be corrected if development stays behind. On the downside, each decision, even taking the lighter administrative procedure of an embedded plan into account, bares the risk of challenging the decision. Furthermore, it is uncertain whether the benefits of a detailed embedded plan, for instance a reduction of noise mitigating measures that prove unnecessary through a more accurate prognosis of the traffic volume, will actual materialise and weigh up the costs of an extra plan.

Legislation and spatial dynamics have an uneasy relationship. Urban development is a dynamic process while legislation reflects a specific moment on time. In-between these moments, there might be a mismatch. Yet, citizens en businesses have a right to have some degree of certainty about the future. The research obligations for local authorities to predict the effects of a land-use plan on environmental norms are a form of protection. The dilemma of the land-use plan is that is has operates on two levels. It steers the general urban development ambition for the next ten years and at the same time all details are regulated. Planning professionals and academics agree that blueprint planning belongs to the past, but how can planners leave this approach behind if planning legislation demands ever more precise predictions on the future? Is the instrument of the land-use plan suitable to provide guidance to spatial dynamics? There is an implicit assumption in planning legislation that the building programme enabled through a land-use plan will be actually realised within the legal time frame of ten years. The current planning figure of land-use plan works best to enable new developments starting from scratch and to safeguard existing situations. Flexibility is cursed with bureaucracy.

A failed marriage between mixed-use neighbourhoods and environmental norms?

There is a growing demand for compact city development with a strong functional integration among urban planners (Korthals Altes & Tambach, 2008; Hirt, 2007). Inner-city neighbourhood with a strong functional mix are attracting new urbanites and have developed into a role model for the development of new urban areas as the example of the Buiksloterham demonstrates. While policy makers promote mixed-use development, legislation tends to be in favour of segregation. A strong body of environmental law has developed over the years to realise a healthier urban environment. This has resulted in a numerous norms to protect citizens from noise, air

[17] “Hier is gekozen voor scenario’s en omdat er daar dus geen beroep tegen is aangetekend, is dat toevallig goed gegaan. Maar dat wil niet zeggen dat het de volgende keer weer gaat gebeuren. Want er is nu geen jurisprudentie dat het altijd zo kan.” (Interview civil servant)

pollution, hazardous accidents and so forth. Many environmental norms only apply to new situations. The strict norms result in a higher protection level in newly planned areas. Yet, they also result in a further functional segregation – the opposite of the mixed-use neighbourhoods that are desired by urban planners.

Mixing has been achieved in the Buiksloterham, but with many restrictions. The tight noise norm of the Noise Abatement Act causes problems for mixing at the level of neighbourhood. Within the noise contour of a zoned industrial estate the realisation of housing is problematic, not only for dwellings to stay within the norm, but also for the industry to guarantee the norm for these dwellings in the future. On a lower level of scale, the Environmental Management Act poses limitations. In practice already a craftsman's workshop might pose problems for housing. The maximum category of businesses allowed in the mixed-use part of the Buiksloterham still requires a minimum distance of 30 metres. It requires a lot of bureaucracy tailored to the individual needs of businesses in order to enable mixed-use development. This strongly reduces the range of businesses that is legally allowed, in particular if offices are excluded as a result of the oversupply of office space in Amsterdam.

The degree of mixing is also subject to limitations due to the preferences of both industries and project developers. Residents are always a potential source for (legal) conflicts with industries, even when all legal requirements are met. Similar, project developers tend to play safe and rather go for quasi-offices such as advertising and architectural offices (which are considered an industry) or small workshops. Korthals Altes and Tambach (2008: 228) posed the question "whether such mixed-use areas simply represent a transitional phase towards complete gentrification and removal of all industry from the inner city or whether they are a more or less permanent addition to Dutch urban fabric". In the case of the Buiksloterham, the real issue with industrial noise tends to be of a transitional period for most industries with a significant environmental impact have moved or will do so shortly.

Order and control in the relation between state and market

The Buiksloterham is framed as an organic development project in which there is ample space for market initiatives. In particular the differences with Overhoeks is pronounced, which has been planned as a traditional development project led by a master plan and realised with few strong private parties. There is no such master plan guiding the transformation of the Buiksloterham and project developers were not actively involved in the planning process until the approval of the land-use plan. Noordwaarts wanted to offer a plan where market actors, including individuals, could sort themselves out and that provides maximum freedom for ideas with very limited aesthetic requirements (*welstand*).

Despite the rhetoric of the project, the municipality takes a very active role in the development process. The majority of the programme will be actively realised by the municipality, as is clearly stated in the Investment Decision. Apart from urban development, the municipality has also very strong economic interests. The investment area covers Amsterdam has traditionally a very active land policy and the Buiksloterham does not differ significantly in this respect. There are very few

private landholdings the vast majority is leasehold land by the municipality. Noordwaarts certainly put more energy in enabling development on its own plots where development and thus transformation is likely, than relieving privately owned land from environmental contours where the municipality has little leverage to enforce development without expropriating the land. This is problematic in an institutional way: one the one hand the municipality has to wake over environmental norms (not only matching the norms, but going beyond), on the other hand, the municipality has a vital interest of a conclusive budget which is achieved through intensive land-use.

The fact that the majority of the land is in municipal hand also provides it with far-reaching powers to steer development, because for each plot new leasehold contracts have to be entered in which the municipality can steer on development conditions beyond the set legal and aesthetic requirements of the land-use plan and the Investment Decision respectively. The appointment of a supervisor has to be seen in this light, too. Interestingly, not only the Amsterdam committees for urban design and aesthetics demanded such a function, also the project developers value if architectural quality is ensured. Self-building is stimulated, but also exercises strict control. Each plot is put on the market via a formal tender and a subscription list. It seems to cause problems if (a group of) citizens present an own idea to Noordwaarts for a plot for which the conditions have not been formulated yet. These limitations are also strongly related to the key position of the municipality on the land market.

The roles of the state and market are not always clearly separated and this is even more pertinent in an organic development process. How much control does organic development need? What are the general principles that need to be defined and upheld? This dilemma is twofold: about the institutional assignment of powers to control and the exercising of control. The former refers to the hybrid position of the municipality as market party and inspectorate of environmental norms, while the letter is about the interpretation of the level of detailed needed to steer on general principles for an attractive urban environment.

9 Conclusion

The Buiksloterham provides excellent study material other for urban areas seeking to initiate an organic transformation process. With respect to the conclusions that can be drawn on the approach of Noordwaarts we have to proceed with precaution. First and foremost, market conditions have radically altered since the start of the project. It started at a moment when almost literally the sky was the limit. Although the plans for transformation took a long-term perspective, the first building activities should start rather sooner than later. It is therefore difficult to assess the plan on its merits. Furthermore, new legislation has come into force in the meantime. The Crisis and Recovery Act of 2010 has provided new instruments, in particular the option to postpone the decision for higher values related to industrial noise when working with an obligation for a detailed plan within the main plan (*uitwerkingsplicht*). Bearing in mind these caveats, I will reflect on the process of contextualisation, in particular the national legal framework. European regulation and national policy frameworks have been of minor importance and are therefore left out.

The contextualisation of legal (and policy) rules in the Buiksloterham was successful in a sense that the legal frameworks have been applied without changing the overall direction of the plan. In this sense it demonstrates the potential of realising planning goals with the existing legal instruments of the Spatial Planning Act to comply with environmental norms. The land-use plan entitles to mixed-use development, enabling a gradual transformation. Having said this, the planners and legal advisors of Amsterdam had to make a huge bureaucratic effort resulting in sub-optimal legal requirements in the land-use plan. From the dilemmas presented above, we can already infer that it is not only a legislation problem, but also an application problem.

The global planning approach involving many potential development scenarios has been chosen deliberately by Noordwaarts, while other option were available to limit legal uncertainty without affecting the open-ended character of the plan. For instance, the option of postponing the final zoning for a sub-area by means of an embedded plan (*uitwerkingsplicht*) or conservative zoning in parts of the Buiksloterham have been ruled out for a variety of reasons. First and foremost, the decision makers wanted to finalise the plan and start implementation. Furthermore, the potential benefits of alternative solutions were uncertain as well. Nevertheless, the Spatial Planning Act apparently allows for very different pathways to contextualisation. Obviously, the act does not include a free ticket for planners. The spatial programme that it enables it the benchmark to judge as to whether the plan meets the standards of good spatial planning.

The contextualisation of environmental norms as such is clear; the real difficulty is in the prognostic research. The closer a plan tries to meet a certain norm, the easier it is to challenge the plan and the underlying calculations. This is the problem of norm utilisation: all efforts are put into matching an environmental norm, but hardly to move beyond the requirements. It was generally

accepted that in an urban area more noise needs to be tolerated and that many parts of Amsterdam de facto know a higher noise level than the Buiksloterham. While the Noise Abatement Act does not contain any explicit opportunity to choose between the limit value and the target value in relation to the environmental context, this is common practice. The Noise Abatement Act actually involves a structural flaw by reversing the limit value and the target value. The municipality has to grant itself exemption to apply the limit value in an administrative act. Yet, tailored solutions or further exemptions from the norm are impossible. The VNG guidelines are much more flexible to be contextualised, though demanding scrutiny, without actually lowering environmental standards. In any case, potential conflicts are sought to be excluded via legislation at forehand.

A smooth and integrative governance process helps in the contextualisation of legal norms and to find innovative solutions. In the case of the Netherlands, the basic question is not whether a local authority has drafted a legally correct land-use plan, but whether it is challenged in court or not. This is why Noordwaarts tried to get away with not having a land exploitation, which would only provide extra burdens to landowners and extra work for the project office. In complex planning processes in which norms are almost fully utilised, there is always the danger of successful court appeals. A lot of efforts have been put in a constructive relationship with the business sector by taking their concerns serious and searching for acceptable solutions.

The fundamental problem of contextualisation is not so much the capability to contextualise, but the detailed procedures. The norms can be contextualised, meaning that they can be applied in different contexts and that the way to achieve a principal quality can be freely chosen by the local authority. Sometimes, no workarounds exist and environmental norms are experienced as inflexible. This is the problem of imperative norms. So far, the answer is sought too often in ad-hoc legislation that is surrounded by lots of bureaucracy to solve very specific bottlenecks. Often, these only explicate existing discretionary space (cf. Borgers, 2012: 193–194) or provide exemptions if certain conditions are met. Legal norms are usually porous to a certain extent. Hart (Hart in Borgers, 2012: 72) speaks of an open texture of legal norms. It is impossible to define every concrete situation at forehand. Legal norms are than applied and contextualised in a specific case. In environmental legislation the contextualisation of legal norms seems to be rather the exemption than the rule. There is little reflection on the material norms that are defined with much precision and based on a positivist conception of absolute knowledge (Borgers, 2012: 86). The ‘hard’ material norms are considered a major cause of the snowball-effect in environmental law: instrumental solutions are defined to deviate from the norms and provide authorities with the necessary discretionary space (Borgers, 2012: 86).

Put it differently, the real issue is the legal norms’ level of abstraction. Legislation needs to be generic but also account for different circumstances. The objective of the research project is not simply more flexibility of norms. The scientification of norm setting (Borgers, 2012: 18) is deeply embedded in a positivist epistemology of scientific truth. This also results in the fact that the discussion is not about the principal quality such as a healthy or attractive environment, but simply about decimals. A potential solution to this problem is introducing more open norms where health and safety concerns are not a stake, such as indicative norms, relative norms, or qualitative norms. We must warn, however, that open norms might provide more flexibility in contextualisation, but also go along with more uncertainty. Furthermore, a stronger anchoring of open norms in environmental law might have implications for jurisprudence. This is the challenge for future research.

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Wet geluidhinder (Wgh)
Wet milieubeheer (Wm)
Wet algemene bepalingen omgevingsrecht (Wabo)

Appendix: list of interviews

Harry van den Berg, ANGSAW
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