Radboud University Nijmegen School of Management



Transforming business parks into mixed working and living areas in The Netherlands

Legitimately solving bottlenecks in organic transformation processes through new legislation in the Environment and Planning Act

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Abstract

Transforming obsolete inner-city business areas into mixed living and working areas deals with two spatial issues at once, since it reduces the housing shortage by reincarnating these sites into attractive urban areas. However, such transformation processes face multiple bottlenecks, such as fragmented land ownership, local resistance and environmental zoning restrictions. Furthermore, zoning plan requirements restrict organic transformation strategies.

In 2021 the Environment and Planning Act is expected to enter into force in the Netherlands, which emphasizes on organic development, flexibility and customization. It offers new opportunities for resolving organic transformation bottlenecks. Municipalities already make use of these new opportunities by acting as experimental areas through the Crisis and Recovery Act. The Act allows municipalities to deviate from current planning legislation and enables them to make use of new legislation in the Environment and Planning Act in advance.

Through nine case studies, this qualitative research investigates whether the Environment and Planning Act actually offers new possibilities to facilitate organic business park transformation processes and in what ways municipalities legitimize this.

It is concluded that the new planning legislation provides sufficient opportunities for resolving transformation bottlenecks, while guaranteeing legal certainty for stakeholders. These solutions are legitimized through input-, throughput- and output reasoning.

Key words: Business park transformation, transformation bottlenecks, Environment and Planning Act (*Omgevingswet*), Crisis and Recovery Act (*Crisis- en herstelwet*), flexibility, legal certainty, legitimacy.

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Spatial planning Planning, land and real estate development Master's thesis in spatial planning

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Preface

Finally! In front of you lies my master's thesis, which is both an end result and my vehicle to bridge the gap between the university and actual planning practise. For years I was looking forward to the moment of graduation, but at the same time I did not look forward to writing my thesis. Engaging myself for months on one scientific study: I certainly was not looking forward to that. However, this research has now been completed and the process was not that bad after all. In fact, despite the high difficulty level of the topic, I actually enjoyed it. On the one hand because of the fun I had at my internship at DGMR. No shortage of conviviality exists there and it is combined with a high level of professional knowledge. On the other hand, conducting research into area transformations through the Crisis and Recovery Act was also extremely interesting. During the research I spoke with nineteen respondents, all characterized by a good dose of enthusiasm and guts. This led to candid and very interesting interviews about complex and sometimes sensitive material. I would therefore like to thank my respondents enormously for their willingness to cooperate and for the trust they have placed in me. During my graduation internship I also visited several events where I gained knowledge and broadened my network. DGMR has given me complete freedom to conduct my research and to develop myself throughout the process. I am very grateful for that, especially with regard to my internship supervisors Jasper Pondman and Michel van Kesteren.

I hope that you, the reader, will read this thesis with interest and that it will help you prepare for the era of the Environment and Planning Act. Do you have any questions or would you like to spar about the results and insights in this report? Do not hesitate to contact me! Together, we will work it out. If you ask me, the latter should also be the real slogan of the Environment and Planning Act: 'Together, we will work it out!'

Devlin Oosterwijk - <u>dev.oosterwijk@gmail.com</u> - February 2020

Summary

Problem statement

Two spatial planning issues in The Netherlands contain the housing shortage and the presence of outdated inner-city business parks which are not aesthetically appealing. These business areas are often located near the city center and main infrastructure and are sometimes also located along the water. Therefore, these areas are potentially attractive for living, thus making transformation to a mixed living and working environment an obvious solution for resolving both spatial issues. However, transformation processes face multiple bottlenecks. Buying out companies that are still functioning leads to high acquisition costs. The lessons learned from the economic crisis has resulted in municipalities no longer daring to bear these costs through active land policy. They therefore opt for organic area development, where they facilitate initiators to transform the area. However, due to other bottlenecks and uncertainties such as environmental zoning, compensation for planning blight and lengthy legal procedures, project developers are reluctant to invest in transformation areas. Municipalities must therefore entice market parties to invest by drawing up an inviting zoning plan that removes obstacles. The preparation of such an inviting zoning plan is hampered by the feasibility requirements imposed on zoning plans, such as a feasibility period of 10 years, assurance of cost recovery up front and an obligation to study spatial and environmental feasibility based on maximum planning possibilities.

Solutions through new planning legislation

The Environment and Planning Act is expected to enter into force in 2021, which will offer municipalities additional instruments for providing (themselves) more consideration space and flexibility. Organic area development is facilitated through the Environment and Planning Act, while current legislation actually hinders this. In anticipation of the Environment and Planning Act, the Crisis and Recovery Act can already be used to experiment with the new system, for example to enable organic transformation processes.

Research

Through nine case studies this thesis investigates which solutions the Crisis and Recovery Act offers to remove bottlenecks in the organic transformation of business parks into mixed residential and working areas. However, as the new possibilities offer more flexibility, legal certainty might be at stake. Van den Hoek (2017), on the other hand, argues that internal plan flexibility can improve legal certainty, a proposition that is being investigated further in this thesis. The question then arises to what extent the new possibilities are considered legitimate, whereby legitimacy is subdivided into input, throughput and output aspects (Scharpf, 1999; Schmidt, 2013). Woestenburg, Van der Krabben & Spit (2019) state that all these three aspects must be present in order to be able to legitimize government action. This study examines the solutions offered by the Crisis and Recovery Act, and consequently the Environment and Planning Act, by means of these aspects.

Results

The Crisis and Recovery Act appears to be a representative precursor of the Environment and Planning Act. Experimenting with it is therefore considered useful for municipalities. In addition, this new legislation offers suitable instruments to promote organic transformation processes. The feasibility requirements can simply be moved to the permit phase and thus no longer form an initial bottleneck. The mixing of living and working is simplified because it is possible to deviate from environmental standards for 10 years. This means that housing can be developed while nuisance-causing businesses can (temporarily) continue their activities. The municipality can also decide to optimize environmental utilization space, which in some cases is even possible without compensation for planning blight. Finally, the Crisis and Recovery Act offers the option to work with emission and immission standards. In Alphen aan den Rijn, for example, this means that existing business activities at Rijnhaven Oost cannot be restricted if sensitive objects are realized within their environmental utilization space.

Despite the organic nature of the transformation process, municipalities still want to be in control. The new legislation also provides solutions for this, because the zoning/environmental plan can refer

to local policy rules in which, moreover, open standards can be applied. These open standards can offer scope for consideration, both for municipalities and for initiators. This means that tailor-made solutions can come about during the planning process, without hard, pre-formulated standards being obstructive. Moreover, if local policy rules do not work as expected, the municipality can easily adjust them without potentially having to go through an objection and appeal procedure. The zoning/environmental plan itself can remain intact and is adaptive and future-proof in this way.

A final advantage of the Crisis and Recovery Act is the accelerated legal procedure, usually within six months. This ensures procedural acceleration. Experimental areas are therefore given priority, and transformation areas, where legal procedures are the rule rather than the exception, are greatly accelerated. This keeps the pace in the transformation process.

The three already established CRA zoning plans in this study (Soesterberg, Alphen aan den Rijn and The Hague) have all been challenged by existing companies before the Council of State. So there is certainly something to be said about the legitimacy with regard to the way in which the new instruments are applied. For example, companies act against the uncertainty associated with general function assignations, against the changeability of local policy rules, the lack of clarity of open standards and finally the optimization of environmental utilization space without compensation for planning blight.

However, the respondents in this study, mostly municipal officials, legitimize these points based on input, throughput and output reasoning. With regard to input legitimacy, they point to the democratic and legal guarantee of laws and (policy) rules. Regarding throughput legitimacy, they point to a transparent planning process in which thorough consultation and collaboration with stakeholders has taken place. Finally, they defend the output legitimacy by stating that the plan respects the actual business operations of companies and that, in the context of the public interest, it is important to make housing possible in the area. Removing latent environmental utilization space is therefore considered a legitimate result of weighing of interests.

Each of the four already published CRA zoning plans (Meppel has not yet been established) contains elements to guarantee legal certainty in addition to flexibility. The reservation system in the Binckhorst plan, for example, protects initiators against prematurely running out of planning capacity while feasibility studies are still being carried out. The plan in Meppel offers initiators clear consideration and netting options through the mixing panel and Alphen aan den Rijn separates the responsibility to comply with environmental standards between initiators and nuisance-causing companies by applying emission and immission standards. Finally, the plan for Soesterberg-Noord illustrates how the new legislation stimulates cooperation between the municipality and companies by enabling customized solutions.

Conclusion

That internal plan flexibility can promote legal certainty, as Van den Hoek (2017) states, is validated by this thesis. For initiators, there is room for tailor-made solutions, while the limits for this can be clearly indicated. However, it is clear that this beneficial relationship does not always hold. The plans that have already been drawn up make clear that the environmental utilization space of existing companies must be handled with care. The Soesterberg-Noord case shows that expansion plans must be taken into account and the embedding of environmental utilization space through open standards in a local policy rule for the Binckhorst transformation area is legally challenged by multiple companies. The Council of State will still rule on this, but it seems advisable to anchor existing rights in a clear manner in the plan rules, for example via emission and immission standards.

It is concluded that the new planning legislation offers municipalities ample opportunities for flexible and legitimate solutions for organic transformation processes to take place. Sufficient options are available to ensure that this does not come at the expense of existing companies' legal certainty. Putting more emphasis on a collaborative planning process (throughput), within the widened legal framework (input), does enable the search for a better outcome for all stakeholders (output).

List of terminology and abbreviations

Dutch	English	Abbreviation (if applied)	Brief explanation	Page first mentioned
Omgevingswet	Environment and Planning Act	EPA	New comprehensive planning act with regard to zoning and environmental aspects	16
(Besluit uitvoering) Crisis- en herstelwet	Crisis and Recovery Act	CRA	Experimental act that can be used to anticipate and innovate within the Environment and Planning Act regulations	16
Bestemmingsplan met verbrede reikwijdte	Zoning plan with a broadened scope	ZPBS	Experimental zoning plan that can be drawn up by means of the Crisis and Recovery Act	16
Omgevingsplan	Environmental plan		Municipality wide 'zoning plan' in the Environment and Planning Act	16
Aanvullingswet/- besluit Bodem	Supplemental Soil Act/Decree		Newly drafted legislation that will be incorporated into the Environment and Planning Act	23
Aanvullingswet/- besluit Geluid	Supplemental Sound Act/Decree		Newly drafted legislation that will be incorporated into the Environment and Planning Act	23
Aanvullingswet/- besluit Natuur	Supplemental Nature Act/Decree		Newly drafted legislation that will be incorporated into the Environment and Planning Act	23
Aanvullingswet/- besluit Grondeigendom	Supplemental Land Property Act/Decree		Newly drafted legislation that will be incorporated into the Environment and Planning Act	23
Publiek-private samenwerking	Public-private partnership	PPP	form of cooperation between a government and one or more private companies, whereby one new joint organization is established for developing an area	31
Globale bestemming	General function assignation		Function assignation that initially allows multiple functions at a specific location	31
Milieugebruiksruimt e	Environmental utilization space	EUS	Current emission allowances for a business to cause nuisance in its (immediate) surroundings	35
Emissienorm	Emission standard		Maximum permitted emission of an environmental aspect as a result of a business activity	36
Immissienorm	Immission standard		Maximum permitted load of an environmental aspect on a sensitive function (such as housing)	36
Activiteitenbesluit Milieubeheer	Environmental Management Activity Decree	EMAD	A general administrative measure to regulate the environmental impact of nuisance-causing businesses that are below the environmental permit thresholds	36
Ontwikkelingsgebied	Experimental development area		Experimental status through the Crisis and Recovery Act that can be used to (temporarily) reduce environmental zoning restrictions	37

Salderen	Netting		A method whereby the quality of specific aspects can be weighed and exchanged to facilitate initiatives	37
Omgevingswaarde	Environmental value		Instrument in the EPA with which policy goals can be expressed, after which they are monitored in a quantitatively measurable way.	42
Kostenverhaal	Cost recovery		The settlement of costs for public works and facilities	48
Projectuitvoerings- besluit	Project implementation decree		Instrument in the Crisis and Recovery Act to speed up decision-making procedures	52
College van B&W	Municipal Executive Board	Board	Daily management of a municipality consisting of the mayor and aldermen	52
Planschade	Compensation for planning blight		Compensation for a loss that results from a changed planning situation which was not reasonably foreseeable for a party	54
Anterieure overeenkomst	Anterior agreement		Private law agreement between a government body and a market party	55
Exploitatieplan	Exploitation plan		Instrument for recovering the costs of public works and facilities from developing parties	55
Voorzienbaarheid	Foreseeability		An period within which a party could reasonably have expected the planning situation to change	57
Bestemmingsplan- activiteit	Zoning plan activity		An activity that is in accordance with the zoning plan, but for which an environmental permit is required	60
Stad- en milieubenadering	City and environment approach		Instrument in current planning legislation to possibly deviate from environmental standards	63
Voortdurende buitenplanse omgevingsplan- activiteit	Ongoing non- compliant activity	ONCA	A licensed activity that deviates from the environmental plan and which presumably lasts for over five years	65
Digitaal Stelsel Omgevingswet	Digital System for the Environment and Planning Act	DSO	National digital system for collecting environmental plans and other spatial documents that will be functioning under the Environment and Planning act	66
Normaal maatschappelijk risico	Standard societal risk		The share of depreciation that is borne by landowners. This is not part of the compensation for planning blight	68

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1. Introduction

1.1 Research problem statement

Despite the fact that the Dutch planning system is highly regarded internationally (Faludi, 2005), the Netherlands has to deal with some severe spatial issues, one being the current housing shortage. Housing pressure is particularly high in the *Randstad*, the most prosperous and densely populated region, which is located in the west of the country. Up to 2030, approximately 75.000 dwellings must be developed in the Netherlands each year to meet increasing demand (Rijksoverheid, 2018). This while in the years 2016, 2017 and 2018 successively 54.800, 63.000 and 66.000 new dwellings were delivered (Centraal Bureau voor de Statistiek [CBS], 2019a). Despite the housing shortage, it appears that the number of environmental permits issued for building has fallen sharply since the beginning of 2019, as can be seen in figure 1.1.1 (CBS, 2019b).

Figure 1.1.1 Environmental permits issued for the construction of dwellings in each quarter since 2016 up to halfway 2019.



CBS, 2019b

Moreover, due to the country's current compact city policy, dwellings must be built predominantly in existing urban areas. Expansion is impeded as much as possible by means of red contours and the Ladder for Sustainable Urbanization, in order to prevent urban sprawl and protect the landscape (Korthals Altes & Tambach, 2008).

Contrasting with the housing shortage another spatial issue exists, namely vacancy on outdated innercity business areas. These areas have increasingly become centrally located in cities as a result of urban expansion in recent decades. Due to strong inter-municipal competition to attract business, there is ample provision of attractive and affordable business space on newer, easily accessible business parks on the outskirts of cities (Olden, 2010; Stijnenbosch, 2012; Zonneveld & Evers, 2014). Because of the surplus of attractive options, outdated inner-city business areas are often no longer filled with new activities and become obsolete (Van Dinteren & Van der Krabben, 2008).

Due to the housing shortage, compact city policy prohibiting urban expansion and, nowadays, the favourable inner-city location of many outdated business parks, transformation of these areas into (mixed) residential areas seems to be obvious solution (Loures, 2015). Moreover, as companies cause less and less nuisance to the environment through technical innovation, business areas are increasingly suitable for mixed-use (Stijnenbosch, 2012). Research by Stec Groep (2019), for example, shows that 85% of the business areas with transformation ambitions in Amsterdam and Zaanstad seem suitable for mixed use with housing. An earlier report by the Planbureau voor de Leefomgeving [PBL] (2016) already indicated the potential for new housing on business parks (see figure 1.1.2).



Figure 1.1.2 Potential for new housing in inner cities, specified per type of property/terrain in 2012

PBL, 2016

However, such transformation projects often face multiple bottlenecks, for example issues regarding fragmented land ownership, environmental zoning, parking requirements and soil pollution. Due to these issues transformation projects take long, fifteen years on average, and sometimes even come to a halt completely (De Zeeuw, 2018). Resultingly, drafting a positive business case for such a transformation project is an art in itself (PBL, 2016; De Zeeuw, 2018).

A change in legislation might offer a solution. The Netherlands is currently preparing itself for a planning system review, namely the implementation of the Environment and Planning Act (*Omgevingswet* [EPA]), which:

"seeks to modernise, harmonise and simplify current rules on land use planning, environmental protection, nature conservation, construction of buildings, protection of cultural heritage, water management, urban and rural redevelopment, development of major public and private works and mining and earth removal and integrate these rules into one legal framework." (Ministerie van Infrastructuur en Milieu, 2017a)

The EPA aims to achieve the following interrelated objectives (Ministerie van Infrastructuur en Milieu, 2017a):

- a. to achieve and maintain a safe and healthy physical environment and good environmental quality, and;
- b. to effectively manage, use and develop the physical environment in order to perform societal needs

It is already possible to experiment with the EPA, by means of the Crisis and Recovery Act ((*Besluit uitvoering*) Crisis- en herstelwet [CRA]). Municipalities can, even before the actual introduction of the EPA in 2021, already prepare a so-called zoning plan with a broadened scope (*Bestemmingsplan met verbrede reikwijdte* [ZPBS]), which is quite similar to the upcoming environmental plan (*omgevingsplan*) (Ministerie van Infrastructuur en Milieu, 2017b). This way, municipalities can gain early experience with the EPA. It also offers them new opportunities to resolve current legal-planning bottlenecks on the basis of new, yet to be implemented, legislation (Ministerie van Infrastructuur en Milieu, 2017b). Without the use of such a ZPBS such projects would in many cases be hampered by current planning legislation (Van der Geest, 2018). The CRA therefore offers extra flexibility for municipalities by offering additional instruments and deviations from current planning legislation.

However, legal certainty, the counterpart of flexibility, might now be at stake. The legitimacy of government interventions could therefore be challenged.

However, municipalities do not seem to be very concerned about this and use the new instruments in large numbers. By mid-2019, 147 municipalities were already appointed to make use of this new instrument (Ministerie van Binnenlandse Zaken en Koninkrijksrelaties, 2019a), for example to facilitate business area transformation. This sometimes happens in a legally unacceptable way. In Zaandam¹ and Alphen aan den Rijn² the Council of State has pulled the brakes to protect the position of existing businesses.

Although the experimentation regularly goes well, a lack of knowledge still exists about the content and practical application of the EPA (Binnenlands bestuur, 2018). Therefore, opportunities to promote transformation processes through the EPA are by no means fully exploited (Ministerie van Infrastructuur en Milieu, 2017b).

1.2 Research aim and research questions

In this research, various transformation projects are examined, whereby inner-city business parks are being transformed into mixed working and living areas. Central to this are the bottlenecks that arise during these transformation projects due to current laws and regulations. It is being investigated to what extent the system review, through the introduction of the EPA, could remove these bottlenecks. The ultimate goal of this research is to foster the transformation of business parks in an acceptable way in terms of legitimacy, by providing more insight into this matter. The main question is therefore as follows:

"In which ways can the Environment and Planning Act, and in anticipation of that the Crisis and Recovery Act, offer legitimized solutions for Dutch municipalities to tackle bottlenecks in transforming business parks into mixed working and living areas?"

In order to be able to answer the main question adequately, it is important to answer the following sub-questions:

- (1) What are the motives for municipalities to transform inner-city business parks into mixed working and living areas?
- (2) What bottlenecks within current legislation are occurring during the transformation of inner-city business parks into mixed working and living areas?
- (3) What are the motives for municipalities to make use of the Crisis and Recovery Act for transforming inner-city business parks into mixed working and living areas?
- (4) To what extent are there differences between new opportunities for business area transformation within the Crisis and Recovery Act and the upcoming Environment and Planning Act?
- (5) How is the increased flexibility provided by the Crisis and Recovery Act and the Environment and Planning Act legitimized in transformation processes?

1.3 Societal relevance

On the one hand, the Netherlands deal with a large housing shortage which, at least for the time being, must be solved within the city boundaries. On the other hand, outdated inner-city business parks form obsolete areas in many Dutch cities. Although transformation of these sites into residential areas seems obvious to solve both these spatial problems, municipalities experience many bottlenecks during such processes. The EPA might offer new possibilities, but municipalities in particular still lack knowledge about this new comprehensive planning act.

Scheepers et al. (2016) distinguish between fundamental and practice-oriented scientific research. Fundamental scientific research focuses on theory, while practice-oriented scientific research strives for knowledge to support decision-making or for solutions to social problems (Scheepers et al., 2016).

¹ ABRvS, April 30 2019, ECLI:NL:RVS:2019:1398

² ABRvS August 30 2017, ECLI:NL:RVS:2017:2346; ABRvS, September 26 2018, ECLI:NL:RVS:2018:3126; ABRvS, July 3 2019, ECLI:NL:RVS:2019:2156

This research is practice-oriented, since it investigates how the EPA can contribute to solving bottlenecks during transformation processes regarding outdated inner-city business parks. It does so by identifying best and worst practices during current transformation processes that make use of the CRA.

This research offers municipal officials in particular a map to find their way in the maze of current and upcoming legislation in order to transform outdated business parks into mixed working and living areas. This research is of great social importance if, as a result, future transformation projects run faster, simpler and cheaper, thereby possibly resulting in a better functional result as well.

1.4 Scientific relevance

This research has scientific value by providing more insight into the early adoption of a new planning system by Dutch municipalities. For example, it is researched on what grounds municipalities decide whether or not to pioneer future legislation. Flexibility versus legal certainty is an important area of tension in spatial planning. That they are each other's absolute opposites and live on a continuum, as is traditionally assumed, has already been nuanced several times. Although Dutch planning belongs to the Napoleonic legal family, where legal certainty (through legally binding zoning plans) formally predominates over flexibility, Buitelaar & Sorel (2010) and Korthals Altes (2016) argue that flexibility seems to predominate in Dutch planning practice. The flexible ways in which municipalities deal with zoning plans, by frequently revising them through stamp plans, create false legal certainty (Buitelaar & Sorel, 2010; Korthals Altes, 2016; Van den Hoek, 2018). These revisions are necessary because the applicable zoning plans are highly detailed, precisely intended to guarantee legal certainty.

The EPA, also on paper, seems to place even more emphasis on flexibility, especially regarding internal plan flexibility (Vereniging van Nederlandse Gemeenten [VNG], 2019a). Van den Hoek (2017) states that more internal flexibility could in fact increase legal certainty. The EPA could therefore be a blessing for both flexibility and legal certainty. This research critically examines this statement in the Dutch planning context. The consequences of the system revision for this field of tension are thus examined by zooming in on areas with conflicting interests, namely transformation areas.

Relevant is the question whether Dutch municipalities use the CRA mainly in the transformation of outdated inner-city industrial sites into mixed working and living areas due to the increased emphasis on flexibility. A follow-up question would be what its effect is on legal certainty and to what extend a possible reduction thereof can be considered acceptable in terms of legitimacy. To this end, in this research concepts of legitimacy (Scharpf, 1999) and the public interest (Alexander, 2002) were applied on Dutch planning practise. This research provides first answers to these issues.

1.5 Reading guide

Chapter 2 of this research proposal contains a theoretical framework, which results in a conceptual model. Chapter 3 discusses methodology, in which the research design is explained. Chapter 4 contains a brief overview of the selected cases and in chapter 5 the gathered results are presented, before coming to a conclusion in chapter 6. Finally, in chapter 7 the research and its outcomes are reflected on.

2. Literature review

Based on scientific literature and a selection of relevant policy, this chapter examines the societal challenge of tackling the housing deficit and solving problems concerned with outdated business areas. Firstly, the existence of business parks in the Netherlands is placed in a historical context, after which urban expansion is discussed. Subsequently, the two societal and spatial challenges that are central to the study are discussed, namely (1) the obsolescence of business parks and (2) the housing shortage. The transformation of business parks, including the environmental issues that accompany them, is then discussed, followed by explaining the basics of the Dutch planning system. Lastly, the concept of legitimacy is outlined. The chapter concludes with a conceptual framework, which contains a visual overview of the theoretical framework.

2.1 Developing business parks

During the 20th century, monofunctional business parks were created on the outskirts of cities. On the one hand, this had to do with the realization that factories in the middle of the city, right next to workers' houses, led to unhealthy living environments (Stijnenbosch, 2012; Badcock, 2014). This problem could largely be resolved through separating functions, instead of mixed-use (Korthals Altes & Tambach, 2008; Stijnenbosch, 2012). On the other hand, the development of business parks was encouraged by increasing mobility, for example due to the introduction of trucks. It became beneficial for companies to establish themselves at well-accessible locations along main infrastructure, instead of centrally in the city (Badcock, 2014). Developing monofunctional business parks, separated from residential areas, was a suitable solution for realizing these ambitions.

Stijnenbosch (2012) distinguishes five types of business parks:

- 1. Heavy industrial areas
- 2. Seaport sites
- 3. Mixed business areas
- 4. High-quality business parks
- 5. Distribution parks

In addition to these five types, also thematic business parks can be distinguished, such as science parks. In the Netherlands, 90 percent of the business parks belong to the third category, mixed business parks. Heavy industrial sites and seaport sites are often large in size and therefore also form an important share of the arsenal of business sites. Municipalities often provide a variety of different business parks, in order to provide every market segment with business space (Stijnenbosch, 2012).

The development of business parks gradually became an important tool for municipalities to attract businesses, ultimately aiming for economic prosperity. After all, establishing a new company within the municipality creates jobs. Creating new jobs meant reducing unemployment or attracting more residents, which would lead to economic growth (Kavaratzis, 2007). As a result of this insight, municipalities compete fiercely for attracting businesses. Municipalities therefore ensure that there are always enough business plots available, which has resulted in a substantial surplus of business space (Stijnenbosch, 2012; Cushman & Wakefield, 2018). Cushman & Wakefield (2018) estimate that 7.833.000 m² of business space was available in The Netherlands at the end of 2017. Inter-municipal competition and the resulting surplus of business space has led to business plots being sold by municipalities at low prices, sometimes even below cost (Van Dinteren & Van der Krabben, 2008; Stijnenbosch, 2012; Zonneveld & Evers, 2014).

2.2 Urban expansion

Increased employment in cities, increasing urbanization, economic growth and population growth in the 20th century have led to large-scale urban expansion in the Netherlands (table 2.2.1).

Table 2.2.1 Total population and urbanization levels in The Netherlands in 1950, 2000 and 2019.

	1950	2000	2019			
Total population in The	10.042.000	15.926.000	17.097.000			
Netherlands						
% of population living in an	56,1%	76,8%	91,9%			
urban area in The Netherlands	urban area in The Netherlands					

United Nations, 2018; 2019

To handle this population growth, new residential areas and business parks were developed on the outskirts of cities, causing urban sprawl at the expense of the landscape (Dieleman & Wegener, 2004; PBL, 2009). Although most business sites were initially situated on the outskirts of the city, this gradually changed as new residential areas began to overgrow these sites in order to deal with population growth and urbanisation. Resultingly, these business parks are no longer situated at the edge of the city, but are rather centrally located in it (Loures, 2015).

2.3 Obsolescence of business parks

Stijnenbosch (2012) distinguishes 4 phases during the lifecycle of business parks (figure 2.3.1.). Business parks located in inner cities regularly struggle with aging and vacancy (Van Dinteren & Van der Krabben, 2008; Olden, 2010). These sites are therefore in phase 4 (decline) of their lifecycle. According to Stijnenbosch (2012), the obsolescence and decline of a business area is mainly caused by a lack of attention for futureproofing the site in phase 3 (consolidation).

Figure 2.3.1 Lifecycle of business parks



Figure by author, based on Stijnenbosch (2012)

Aging of business parks, especially visible through overdue maintenance of the public space, has several causes. Firstly, their accessibility decreases due to urban congestion (Badcock, 2014). After all, as a consequence of urban expansion during the last decades they are now located centrally in the city. As a consequence of this push-factor, these areas become increasingly less attractive for business usage.

Secondly, the aging of inner-city business parks accelerates due to the presence of good alternatives, being the excessive supply of business space on new business parks on the outskirts of the city. Those have mainly been developed as a result of inter-municipal competition to attract new business activity. Great accessibility, availability of parking space, low land prices, possibilities for expansion and developing a building that exactly meets the wishes of the company all shape the pull-factors that make these new sites attractive (Stijnenbosch, 2012; Zonneveld & Evers, 2014). Because of the pull- and push-factors mentioned, (some) existing businesses move from outdated inner-city business areas to these new sites. The older inner-city sites are then barely refilled. Vacancy is the logical consequence, which amongst others facilitates criminal activity (Van Dinteren & Van der Krabben, 2008; Olden, 2010). Municipalities are therefore searching for solutions for these obsolete areas, moreover since they are so centrally located in the city. Municipalities regularly opt for a form of restructuring (Olden, 2010). Olden (2010) distinguishes five types of restructuring:

- 1. Facelift
- 2. Revitalization
- 3. Major revitalization
- 4. Re-profiling
- 5. Transformation.

The first three forms of restructuring provide, in different intensities, a qualitative boost to the area while maintaining the business function. Regarding the last two types, the functioning of the business park (partly) changes. In case of re-profiling, functional change primarily takes place from a business function to, for example, offices and/or retail. Transformation is a heavier means, in which business plots make way for non-economic functions, mainly housing (Olden, 2010). The resulting increase in land value in both instances makes it more attractive for private parties to invest in the area (Stijnenbosch, 2012).

2.4 Housing shortage

As mentioned in the introduction, a substantial housing shortage exists in the Netherlands. Up to 2035, approximately 1.000.000 dwellings must be built to meet rising demand (ABF Research, 2018; Ministerie van Binnenlandse Zaken en Koninkrijksrelaties, 2019b), equivalent to producing approximately 75,000 dwellings per year (Rijksoverheid, 2018). Rising demand is due to an increase in the number of households, especially in the Randstad. Causes of this are (1) increasing life expectancy and aging, (2) decreasing average household size and (3) immigration (Rigo, 2015).

On the other hand, the supply of housing does not increase sufficiently. The initial cause of this was the economic crisis that started in 2008. Housing projects were scaled back or even cancelled completely (PBL, 2016). New initiatives hardly emerged, so few new dwellings were delivered in the years following the crisis. Whereas the average annual home production in the 2007-2009 period was still around 80.000, in the following three years production fell to around 55,000 a year. In the period 2013-2015 this even decreased to 46,800 dwellings per year (CBS Statline, 2014; CBS Statline, 2018).

Now that the crisis has been over for several years, more new dwellings are being delivered, but new supply is still insufficient. For example, there is a shortage of construction personnel and the building material has become considerably more expensive as a result of scarcity. Construction plans therefore remain on the shelf for a long time. Construction companies, dating mid-2019, had a working stock of ten months (Economisch Instituut voor de Bouw, 2019).

Another important cause for the increasing housing shortage is the national compact city policy, which was introduced in the 1980s (Dieleman & Wegener, 2004). This policy aims to limit urban sprawl and to increase densification and mixed-use in inner cities (Dieleman, Dijst & Spit, 1999; Korthals Altes & Tambach, 2008; Dieleman & Wegener, 2004). The Netherlands in fact fits in with New Urbanism, a North American movement that has sprung from the ideas of Jane Jacobs (Talen, 2005; Hall & Barrett, 2012). In her book *The Death and Life of Great American Cities*, she opposed the American planning tradition of the 1950s in New York, led by Robert Moses. Jane Jacobs wrote a manifesto against rationalist top-down blueprint planning, impersonal monofunctional areas and the decline of neighbourhoods. According to Jacobs, successful urban planning requires a bottom-up approach, with a focus on densification, walkable streets and diversity of people, functions and architecture (Jacobs, 1961; Hall & Barrett, 2012). The compact city policy in the Netherlands fits in perfectly with many of these principles.

The Dutch compact city policy is largely enforced through the Ladder for Sustainable Urbanization and the drawing of red contours around cities. The ladder requires a substantiation that there is (1) demand for the development and that (2) for out-of-town developments it must be demonstrated that there is not enough space available in the inner-city (InfoMil, n.d.). Regarding the housing shortage, the first requirement in many municipalities is not that problematic. However, the second requirement is more complicated, for example due to the presence of (partly) vacant inner-city business parks. In addition, in 2000 the Fifth Note on Spatial Planning (*Vijfde Nota over de Ruimtelijke Ordening*) has drawn red contours around Dutch cities. Cities are not allowed to expand outside these contours, with the aim of keeping urban sprawl under control (Korthals Altes & Tambach, 2008; Olden 2010). However, it must be mentioned that it also limits the housing production. As a result of the policy, most new dwellings are being developed at change-of-function locations (Korthals Altes & Tambach, 2008).

2.5 Bottlenecks in business park transformation

Concluding on former paragraphs, infringement currently forms the basis for developing housing. Possible locations for this could be outdated inner-city business areas, transforming them into (mixed) residential areas (Loures, 2015). Both the problem of outdated inner-city business parks and the housing shortage can be tackled this way, all the more because inner-city residential locations are increasingly popular nowadays and because businesses cause less and less nuisance to their surroundings (Stijnenbosch, 2012; Loures, 2015; PBL, 2016). Transforming outdated business areas into mixed working and living areas also brings other advantages. For example, it reduces urban sprawl and it increases the liveliness in the area, especially outside working hours, thereby reducing the risk of criminal activity (Olden, 2010; Loures, 2015).

However, such a process takes a long time, fifteen years on average. In addition, it entails many bottlenecks and high costs (Korthals & Tambach, 2008; Van der Krabben & Jacobs, 2013; De Zeeuw, 2018). Stijnenbosch (2012) mentions high costs and fragmented land ownership as the main bottlenecks.

Loures (2015) goes a few steps further and distinguishes the following seventeen common bottlenecks for post-industrial redevelopment:

- Perception of crime
- Available but under-skilled labour force
- Difficulties in site assembly
- Inadequate access
- Insufficient understanding of redevelopment interrelationships
- Local and regional lobbies
- Ownership patterns
- Uncertain demand
- Challenges in obtaining financial support

- Uncertainty about liability and cleanup issues
- Potential for biological, physical or chemical impacts
- Practical uncertainties regarding remediation and construction
- Overlapping jurisdiction
- Unclear idea of monetary cost
- Long clean-up and site assembly
- Aging urban infrastructure

It can be concluded that transformation projects are highly complex and face multiple bottlenecks, although not all of them are directly related to spatial planning practise.

A number of these bottlenecks can be regarded typical planning issues, such as fragmented ownership and environmental zoning restrictions, resulting in a long process duration and high costs that put pressure on drafting a positive business case. Woestenburg, Van der Krabben & Spit (2019) state that market parties therefore rarely take the initiative for transforming inner-city business areas.

The consequence of this lack of market initiative is that municipalities must take the lead and make substantial (pre)investments before the transformation starts (Gemeente Delft, 2019). The costs associated with this were previously covered by projects elsewhere in the municipality, where profits were made through active land policy. However, this method, as stated in Woestenburg et al. (2019), does not seem to apply anymore these days. After all, during the economic crisis, municipalities made a substantial loss in their land positions, so that the financial means to invest in transformation areas are now limited (Buitelaar, Galle & Sorel, 2014). Moreover, municipalities are less willing to take active land policies, for example through the purchase of companies, because they have recently experienced the risks involved (Buitelaar & Bregman, 2016.

Consequently, municipalities are now trying to get transformation processes started by means of a different strategy, namely by enticing the market to invest in organic area transformation through invitational planning. Municipalities therefore try to outline an inviting spatial framework which offers flexibility for market parties and which tries to remove the (uncertainties about possible) bottlenecks as much as possible (Buitelaar et al., 2014; Buitelaar & Bregman, 2016).

The EPA may contribute to this strategy, especially by introducing new instruments for providing flexibility in order to facilitate organic (re)development (Van der Geest, 2018). The following section

explains how current planning practice hinders organic transformation and how the EPA tries to change this.

2.6 Towards the Environment and Planning Act

The Dutch comprehensive planning system, with its high ambition for spatial ordering and consensus, is valued highly in international perspective (Faludi, 2005; Zonneveld & Evers, 2014; Buitelaar & Bregman, 2016). Especially the success of active land policy of Dutch municipalities was considered fairly unique. Dutch municipalities purchased land, prepared it for construction and then sold it to project developers (Van der Krabben & Jacobs, 2013; Buitelaar & Bregman, 2016). The main reasons behind this were (1) the possibilities for municipalities to exert more influence on the development program and (2) to recover costs for infrastructure and other public spaces. Until 2008 this was not possible through public law (Buitelaar, 2015; Gielen, Salas & Cuadrado, 2017). Finally, (3) a great deal of profit was made on this active land policy for a long time, as a means of public value capturing (Van der Krabben & Jacobs, 2013; Buitelaar, 2015).

Regarding the first two arguments, the system review in 2008 now made it possible for municipalities to achieve these goals through public law (Van der Krabben & Jacobs, 2013; Buitelaar, 2015). Active land policy was therefore only required for financial gain, which had become necessary to get municipal finances balanced (Buitelaar, 2015). After the losses on municipal land positions during the financial crisis, as mentioned in the former paragraph, active land policy was increasingly abandoned. Municipalities now prefer the concept of planning-by-invitation and organic urban development, where they take on a facilitating role (Van der Krabben & Heurkens, 2014; Korthals Altes, 2016; Buitelaar & Bregman, 2016; De Zeeuw, 2018). This way, municipalities facilitate market initiatives by shaping the conditions. The result is that an area gradually, incrementally, (re)develops (Lindblom, 1959). By applying this planning philosophy, municipalities can still manage and operate flexibly without directly compromising on legal certainty (Buitelaar & Sorel, 2010; Korthals Altes, 2016).

However, in current planning practise zoning plans are often highly detailed because they enable specific developments that have already been agreed with an initiator (De Zeeuw, 2018). Subsequently, as most new initiatives do not fit in with the current zoning plan, drawing up a new one is often required (Van der Geest, 2018). This in fact gives municipalities a strong position during negotiations and puts them in a driving seat, since only they are allowed to determine zoning plans. The result is that in some municipalities more than 100, often very small, zoning plans exist at once, so-called stamp plans. The dominant position and the arbitrariness of municipalities to facilitate initiatives forms an obstacle to the transparency of the planning system and the legal certainty of stakeholders (Buitelaar & Sorel, 2010).

In addition, current planning legislation is complicated, for example with a separation between the spatial track and the environmental track (Loozeman, Gans, Groeneveld & Ros, 2016; VNG 2019b). Planning legislation is fragmented and leads to a lack of clarity due to different procedures and concepts being used, which results in a slow and complex planning process that does not excel in transparency and efficiency (Buitelaar & Sorel, 2010; Zonneveld & Evers, 2014; Korthals Altes, 2016; De Zeeuw, 2018; Van der Velde & Zebel-Vaudo, 2019).

In order to make the planning system simpler and clearer, the EPA is currently being developed, which should enter into force in January 2021. 26 laws, 117 general administrative orders and approximately 120 ministerial regulations are thereby merged into one comprehensive planning act (VNG, n.d.(a)). In addition to the development of the EPA, four supplemental acts and decrees have also been drawn up, which will be incorporated into this comprehensive planning act at the moment it enters into force. It concerns the following supplementation acts (VNG, n.d.(b):

- Supplemental Soil Act (Aanvullingswet Bodem)
- Supplemental Sound Act (*Aanvullingswet Geluid*)
- Supplemental Nature Act (Aanvullingswet Natuur)
- Supplemental Land Property Act (Aanvullingswet Grondeigendom)

The final version of the EPA, including the supplementation acts and decrees, emphasizes integrated and organic area development and encourages municipalities to take on a facilitating role. The system

revision is therefore not only a change in legislation, but also implies a different way of working. This requires a cultural shift in Dutch planning practise (Van der Velde & Zebel-Vaudo, 2019).

Eventually one environmental plan will exist within each municipality, instead of a multitude of zoning plans co-existing. The spatial track and the environmental track will be united, and increasing consideration space for municipalities will be emphasized, for example by applying more open standards instead of specific threshold values (Van Moorsel, 2017; VNG, 2019). The latter simply amounts to a further step towards decentralization and a greater emphasis on flexibility, possibly at the expense of legal certainty (Sanders, 2016; BMC, 2018; VNG, 2019a).

The increasing flexibility for municipalities in the EPA might make it possible to resolve contemporary bottlenecks in transformation processes through location-specific solutions (Ministerie van Binnenlandse Zaken en Koninkrijksrelaties, 2018; Van der Geest, 2018).

2.7 Crisis- and Recovery Act

During the most recent economic crisis, the CRA was adopted with the aim of stimulating projects that contribute to innovation and the recovery of the economy. Through this law, legal bottlenecks could be deviated from by means of experiment. Now that the crisis has been over for several years, the CRA continues unabated, this time as a kind of precursor to the EPA. By means of experiment, municipalities can already use upcoming possibilities within the EPA. Through Article 7c CRA, they can, for example, prepare a ZPBS, which in fact enables an environmental plan for a specific area to be drawn up (Ministerie van Binnenlandse Zaken en Koninkrijksrelaties, 2018; De Zeeuw, 2018). Bregman, Karens & Koning (2019) mention 16 possible deviations by means of article 7c. New experiments have now been added through newer articles in the act, in which municipalities can also participate.

The CRA is used extensively by approximately half of all Dutch municipalities, amongst others in transformation processes. Since the revision of this law in June 2019 it has become even easier to use these new options. Because areas are now assigned as experimental areas by ministerial regulation, instead of through a general administrative order, the procedure is significantly shortened (Ministerie van Binnenlandse Zaken en Koninkrijksrelaties, 2019a).

2.8 The legitimacy of increased flexibility considered

It is clear from the previous sections that municipalities currently require more flexible instruments in order to fulfil their transformation ambitions for outdated business parks. The CRA, and subsequently the EPA, may provide this flexibility.

Balancing legal certainty and flexibility has been a point of discussion in spatial planning for decades. This is particularly relevant regarding the already pragmatic and flexible way in which most Dutch municipalities deal with zoning plans (Buitelaar & Sorel, 2010; Van Buuren et al., 2013). The basic principle of the legislator for introducing the EPA is that no loss of legal certainty should occur in relation to the level of protection under current legislation and regulations (Van Moorsel, 2017). However, it could be questioned whether the increasing flexibility in the EPA does not result in an unacceptable degree of legal certainty for other stakeholders.

Tonnaers' view (in Van den Hoek, 2017, p. 29), implying that flexibility and legal certainty live on a continuum and that the increase of one is always at the expense of the other, has been nuanced in various ways in recent years. For example, Buitelaar & Sorel (2010) and Faber (2019) state that the Dutch zoning plan practice, with often highly detailed zoning plans, not only leads to very limited internal plan flexibility, but that the absence of this also results in false certainty. After all, a new zoning plan must be drawn up for new initiatives, which is regularly done in practice. Melanie Schulz van Haegen-Maas Geesteranus (2014), then Minister of Infrastructure and the Environment, endorsed this problem, as did Van den Hoek (2017) in his thesis on this field of tension. On the basis of this argument, however, the idea that legal certainty and flexibility live on a continuum can certainly be maintained. After all, the pragmatic Dutch planning practise regarding zoning plans offers sufficient flexibility, which directly affects the certainty it should provide.

Contrasting to Tonnaers' idea of a continuum however, Van den Hoek (2017) states that legal certainty can in fact be increased by providing internal plan flexibility because, for example, general zoning assignations makes clear what different spatial outcomes are possible at a specific location. In current planning practise this is less certain.

The discussion about the relationship between flexibility and legal certainty corresponds to legitimacy debates on government (planning) interventions. To define legitimacy, Suchman (1995) provides the following definition:

"Legitimacy is a generalized perception or assumption that the actions of an entity are desirable, clean, or appropriate within some socially constructed system of norms, values, beliefs, and definitions" (p. 574).

Although some perceive legitimacy as just one of the criteria that government action must meet, others see it as the crucial criterion that transcends all other criteria, for example effectiveness, fairness and transparency (Woestenburg et al., 2019). Acting in the public interest is perceived as a key concept to legitimize government (planning) activities (Alexander, 2002). In general, government intervention is considered legitimate when it serves the public interest. However, "the public interest" is difficult to define and its univocal existence is even disputed. Alexander (2002, pp. 226-227) starts his article by stating: 'For planners and the planning profession, the public interest has always remained relevant as a legitimating principle and a norm for practise, even while philosophers and political theorists debated its existence.'

The public interest can be interpreted in different ways, according to Alexander (2002). He subdivides its perceptions into procedural and substantive interpretations. Within these interpretations he again distinguishes different approaches (figure 2.8.1).

Focus	Approach	Interest Base	Theory	Perspective	Application
Substantive	aggregative	individual values/ preferences	utilitarianism	objective	social welfare function; benefit-cost analysis
	aggregative	individuals and/or groups	modified utilitarianism	subjective	multi-objective evaluation
	unitary	collective community	communitarianism	value-based cultural ideological	political/ administrative: compatibility with values, norms
	unitary	polity, state	étatism, constitution, law	objective	legal/adjudication compatibility with state interest
	deontic	individual (planning) rights	liberal-democracy; constitution, law	objective	administrative/legal review: compatibility with planning rights
Procedural	deontic	individual rights	liberal individualism	objective	legal/adjudication compatibility with individual procedural rights
	dialogical	stakeholder groups	Madisonian liberalism communicative practice	inter-subjective	political discourse

Figure 2.8.1 Perspectives on the public interest.

Alexander, 2002

Procedural interpretations of the public interest mainly relate to the planning process. Dialogical approaches, for example, emphasize the importance of an inclusive and transparent process in which all stakeholders are able to defend their interests. Madisonian liberalism even assumes that every decision that is made democratically is also in the public interest. 'Good' processes therefore inextricably result in 'good' outcomes. Dialogical concepts are regularly used in this way as a default legitimation for planning (Alexander, 2002).

Deontic approaches, on the other hand, are rule and norm based, whereby the rights of disadvantaged stakeholders must be guaranteed. The procedural interpretation of this approach focuses on the quality of the process, in which stakeholders have a say and have access to court when the weighing of interests place them at a disadvantage.

Substantive interpretations of the public interest mainly focus on the result of the planning intervention. Here too, a deontic approach exists, in which the (property) rights of stakeholders are central and must be protected. When property rights are infringed, compensation must be provided for this. Deontic approaches are therefore primarily aimed at protecting the rights of individual stakeholders.

Other substantive approaches are more collectively orientated. For example, for aggregative approaches a cost-benefit analysis is carried out, whereby all individual interests are stacked. The public interest is then guaranteed by choosing the option with the highest benefits is. However, the practical implementation of such an aggregative approach is problematic, because it is difficult to recognize, validate and compare all those individual interests. After all, values are difficult to trace to monetary values.

The unitary approaches are more user-friendly and predominate in the field of spatial planning. This is because deontic and dialogical approaches come together. The public interest is based on collective social values that go beyond individual interests. These collective values are anchored in legislation and regulations via political discourse, which are then used for the assessment of planning initiatives. This way stakeholders are deontically protected by the regulations that have been established through a dialogical approach. This way an outcome is achieved that is expected to be in the public interest. However, risk arises when the regulations offer possibilities for interpretation. The subjective handling of this interpretation space does not necessarily result in the optimum safeguarding of established collective values. Moreover, the question is whether collective values exist at all in today's diverse society, particularly regarding complex spatial issues, so-called "wicked problems" (Alexander, 2002).

There is something to be said for each of these approaches and they all have fanatic and less fanatic supporters. Each approach can also be criticized in several ways (see Alexander, 2002). The question seems to be: 'To what extent does the end justify the means?'. Each approach answers this question differently. According to Alexander (2002), government interventions can therefore be legitimized in various ways as being "in the public interest". Based on the public interest, legitimacy therefore remains a subjective, philosophical concept which is difficult to operationalize.

A more practical application of the legitimacy question concerns the distinction of Scharpf (1999) in input and output legitimacy. Input legitimacy mainly concerns the procedural aspects of an organization or of a social order. For example, Woestenburg et al. (2019) mention the degree of inclusive representation, openness to public scrutiny, transparency and accountability as indicators for input legitimacy. Originally, participation is part of input legitimacy. The institutional structure of the planning system therefore plays a central role.

The other side of the spectrum concerns output legitimacy, which concerns the problem-solving capacity, the effectiveness and the efficiency of the outcome (Woestenburg et al., 2019). This therefore mainly concerns the functional end result of planning practice.

Following the dichotomy of input and output legitimacy Schmidt (2013) added throughput to Scharpf's (1999) concept of legitimacy, which regards the "black box of governance". This black box of governance contains the interaction between different parties during the process. The aspects of throughput legitimacy, such as transparency, inclusiveness and accountability largely overlap with input legitimacy, but this time relate to specific planning processes. The addition of throughput legitimacy by Schmidt (2013) seems to result in participation shifting from input to throughput legitimacy as it is part of the planning process. Participation makes the black box of governance more transparent. What then remains under input legitimacy is the institutional structure of the planning system as a whole, such as the emergence of laws and regulations in a democratic manner and the functioning of the rule of law in which access to court is open to everyone.

When the distinction between input, throughput and output legitimacy is compared with Alexander's approaches (2002), it becomes clear that procedural approaches to public interest are strongly related to input and throughput legitimacy. March & Olsen (In Woestenburg et al., 2019) justify these aspects of legitimacy through the "logic of appropriateness". Particularly in a constitutional state, such as the Netherlands, procedural aspects are of great importance. The democratic adoption of laws and regulations and the possibility of participation, objection and starting a lawsuit by citizens is crucial for ensuring the legitimacy of government interventions in the spatial field. In substantive aspects, the public interest groups a socially desirable outcome or a process. If government interventions lead to social benefits, then March & Olsen (2010) would argue that output legitimacy is guaranteed through the "logic of consequentiality" (Woestenburg et al., 2019). Table 2.8.1. shows the coherence between the different conceptualizations.

Public interest (down)/ Legitimacy (right)		Logic of ap	Logic of consequentiality	
		Input	Throughput	Output
Procedural interpretations	Dialogical		X	X (Madisonian liberalism)
Substantive	Deontic	Х	x	X
interpretations	Unitary Aggregative	Х	X	X X

Table 2.8.1 Public interest and legitimacy

Table by author, based on Scharpf (1999), Alexander (2002), Schmidt (2013 & Woestenburg et al. (2019)

All previous distinctions seem to imply that government intervention can be legitimized by joining one of the approaches. However, Woestenburg et al. (2019, p. 15) argue that it is not a matter of choosing between input, throughput or output legitimacy for legitimizing government intervention. According to them, all three legitimacy aspects should be covered.

Following this point of view however, it might be questionable whether the increased provision of flexibility in the EPA and the CRA can be considered completely legitimate by being in line with all approaches of legitimacy and the public interest. The ideal of the EPA is that the necessary guarantees that input aspects offer are maintained, but that the regulatory burden that this currently entails is reduced by introducing framework-setting rules. The rules then do not lay down the end result, but offer room for policy consideration and make customization possible (Van der Velde & Zebel-Vaudo, 2019). During the process, this reduced pressure on input offers more room for customization. After all, location-specific solutions can be devised during the process that match the interests of all stakeholders (Faber, 2019). This benefits both throughput and output legitimacy.

However, the new framework-setting legislation might also be abused by municipalities. This way, increased flexibility provided by the CRA and the EPA can also be used by municipalities to unilaterally influence the process and thereby force the outcome, possibly at the expense of other stakeholders.

Alexander (2002) states that in large-scale and/or complex areas, for example with mixed-use, it is (virtually) impossible for a planning intervention to be benefitable for all stakeholders. After all, it is to be expected that the outcome will turn out to be negative for at least one of them. Through a dialogical process, such as extensive participation, everyone's interests should be represented as well as possible. However, due to the diversity of interests, the competent authorities must finally make a weighing of interests which is inevitably contestable (Alexander, 2002).

The transformation areas that are central to this research are challenging examples of such complex (upcoming) mixed-use areas with conflicting interests. In this study it is therefore interesting to find out how municipalities use the additional instruments in the CRA (input) during the process (throughput) and to what extent this leads to a result in which none of the stakeholders is

disadvantaged (output). Only if this is achieved, the strict requirement set by Woestenburg et al. (2019) for legitimate government intervention will be met.

2.9 Conceptual framework

In the previous sections, the literature was reviewed in order to gain contextual and theoretical understanding about the research topic. Figure 2.9.1, the conceptual framework, provides an overview of this. It illustrates how the transformation ambition of the municipality will only be realized if there is a willingness to invest. Now that municipalities are less active on the land market and apply organic development strategies, they are dependent on the market for transforming the area. However, the market is not willing to invest if there are many (uncertainties about) bottlenecks. The EPA, and in anticipation the CRA, offer municipalities the opportunity to create more internal plan flexibility and to solve bottlenecks. By applying this, municipalities hope to entice market parties to invest and fulfil the transformation ambition. This research examines which solutions are possible through the new legislation and to what extent they are considered legitimate.



Figure 2.9.1 Conceptual framework

Figure by author

3. Methodology

Scheepers et al. (2016) mention the difference between scientific and non-scientific applied research. They argue that scientific research distinguishes itself by following the methodological choices of science. To be able to label this research as 'scientific', it is necessary to understand the methodological rules of science, to apply them and to substantiate the methodological choices made. This chapter outlines the methodological choices that were made in order to carry out this research. First, research strategy will be discussed, entailing ontology, epistemology and methodology. Thereafter, choices regarding research approach and research methods will be explained. Finally, the methodology of data analysis is explained.

3.1 Research strategy

Guba & Lincoln (1994) discuss the nature of research paradigms, which are defined by them as "basic belief systems based on ontological, epistemological and methodological assumptions... They must be accepted based on faith (however well-argued); There is no way to establish their ultimate truthfulness" (Guba & Lincoln, 1994). They distinguish four major paradigms namely positivism, postpositivism, critical theory and constructivism (Guba & Lincoln, 1994).

Positivism, the dominant paradigm for a long time, argues that an objective truth exists, which can be discovered through science. Positivism therefore assumes verification, primarily through quantitative research methods. Nowadays there is a lot of criticism of positivism, especially from the viewpoint of social sciences (Guba & Lincoln, 1994; Farthing, 2016). Falsification would be the core of science, with every discovery true until the contrary is proven (Popper, 1934). Consequently, social science is now increasingly based on one of the other three paradigms, with post-positivism in the lead (Farthing, 2016).

Any researcher should answer ontological, epistemological and methodological questions before conducting their research, to determine the corresponding paradigm and thus the nature of the results and conclusions to be obtained from their research. In the following paragraphs ontology, epistemology and methodology will be explained and their corresponding questions answered regarding this research. The answers to these questions result in selecting a paradigm, which leads to a concrete research approach.

3.1.1 Ontology

The ontological questions concern the form and nature of reality. Ontology furthermore questions whether what we can know about this 'real world', may it exist (Guba & Lincoln, 1994). Although the upcoming EPA is a social construct, like any legislation, it forms an objective legal base for Dutch planning practise as a whole. It serves as an imagined reality, guiding human behaviour and collaboration (Harari, 2011). Even though legal possibilities will not be fully exploited due to human imperfection/ignorance (Guba & Lincoln, 1994), objective legal possibilities by means of planning law are assumed to exist, depending on each specific case.

3.1.2 Epistemology

Epistemological questions concern the relationship between the seeker of knowledge, the researcher, and the knowledge that can be acquired through research. The possible answers to these epistemological questions depend on the answers given on ontological questions before (Guba & Lincoln, 1994). For example, objective knowledge cannot be linked to the researcher. However, if it is assumed that an objective reality does not exist and that every observation people make is subjective to at least some degree, researchers and their acquired knowledge are always linked by pre-developed values. In the ontology paragraph it was already stated that in this research an objective reality is assumed to exist, but that it is probably impossible for human beings to fully understand it. Possibilities for solving bottlenecks in specific transformation processes are somewhere within the (socially constructed) legal possibilities and are therefore objective. However, due to the adaptability and the gradual development of planning law, these possibilities are not rigid.

3.1.3 Methodology

Just as is the case with the epistemological questions, the answers to the methodological ones depend on the answers given earlier, this time on both the ontological and epistemological questions. Methodology concerns the way in which a researcher can retrieve the yet to be discovered knowledge (Guba & Lincoln, 1994). As the answers to the research question in this thesis are probably not completely clear to anyone, it was important to retrieve information from different sources and in natural settings to collect situational information. During data collection, obtaining information about the experiences from planning practise was key in order to understand the purpose or meaning behind actions and decisions. Qualitative research methods were ideally suited for this (Guba & Lincoln, 1994). Researching different cases by using multiple research methods should have ultimately led to approaching the objective reality as closely as possible.

3.2 Research approach

The main objective of this research was to find out which (im)possibilities the EPA provides to Dutch municipalities for tackling bottlenecks in the transformation of inner-city business parks into mixed working and living areas. Underlying questions relate to the motives municipalities have for transforming business parks, which bottlenecks they experience during the process, why they would want to make use of upcoming opportunities within the EPA and in what way they consider the increased flexibility legitimate.

This research was approached in a post-positivist manner. However, the approach also has characteristics of the constructivist paradigm, since the sub-questions were used to search for motives and local experiences. This is because a strong emphasis is placed on the local context of every transformation project investigated in this study. Moreover, incomplete knowledge and subjectivity of respondents is assumed. At the core of this research approach, however, lies the assumption that an objective reality exists regarding the main question, the full picture, which could be approached as closely as possible by investigating multiple cases. Regarding the last sub-question concerning legitimacy, however, the constructivist paradigm prevails, since the opinion of the respondents occupies a central place.

Case studies have the potential of providing in-depth information about a topic, which is valuable especially in explorative research. However, a single case study lacks breadth (Flyvbjerg, 2006). By performing a multiple case study research this weakness was mitigated. However, due to the limited duration of this study, the case study sample is limited in size. An accurate research design is therefore of great importance in order to obtain reliable results. The next paragraphs discuss the research methods that were used to conduct this multiple case study research. It starts off with explaining case selection.

3.3 Research methods

3.3.1 Case selection

The scientific content of this research is strengthened by systematically selecting cases. By selecting cases on the basis of various criteria, comparability is increased. In this research, selection is made for both local geographical circumstances and procedural content.

To guarantee both the broadening and deepening of this research within the available time, it was important to investigate a suitable number of cases. Investigating (too) few cases offers sufficient possibilities for deepening, but limits the broadening and generalizability of the research (Flyvbjerg, 2006). However, investigating too many cases offers possibilities for broadening and generalization, but on the other hand limits the possibilities for thorough in-depth research. The number of cases to be researched had to sufficiently safeguard both interests. Due to the diversity of CRA-plans that were drawn up, a considerable number of cases were investigated. Therefore, selecting nine cases seemed appropriate and achievable for properly conducting this research.

A similar problem arises in the selection of the transformation projects to be researched. Selecting equivalent business parks encourages comparability but lacks in depth. For example, bottlenecks in transformation and associated possibilities in the CRA and the EPA to tackle these can be completely

missed. On the other hand, the selection of entirely different transformation projects is problematic because they cannot be properly compared. Due to the diversity of characteristics, differences cannot be explained clearly. However, when selecting a variety of projects, it is more plausible that all relevant bottlenecks and associated possibilities in the CRA and the EPA to tackle these are identified in the research. In this study, therefore, various business parks are selected, but a diversification is made in size and phase of the process. However, there are also sufficient similarities between cases to allow for comparisons, such as size of the area, land ownership distribution and the stage of the process. This way comparisons could be made between cases, while all frequent bottlenecks are still expected to be discussed.

The following criteria are used for the selection of cases in this study:

- The municipality desires to transform the business park into a mixed working and living area
- Type of business park: mixed business park
- The area has been assigned as an experimental area in the CRA, at least through article 7c of the act
- Business parks of different sizes
- Different approaches by municipalities for business park transformation

In addition, a distinction is made with four cases where the ZPBS has already been established (or at least a draft has been made available for inspection) and five cases where the draft zoning plan is still being prepared.

The above criteria have led to the following list of transformation projects that were investigated in this research:

CRA zoning plan publicly available for inspection / set aside by court / into force:

- Soesterberg-Noord, Soesterberg (approx. 20 ha.)
- Rijnhaven-Oost, Alphen aan den Rijn (approx. 30 ha.)
- Noordpoort, Meppel (approx. 33 ha.)
- Binckhorst, The Hague (approx. 144 ha.)

CRA zoning plan in the making:

- 't Veen, Hattem (approx. 11 ha.)
- Liebergerweg, Hilversum (approx. 11 ha.)
- Strijp-S, Eindhoven (approx. 31 ha.)
- Stationsgebied OV1200, Heerhugowaard (approx. 66 ha.)
- Schieoevers Noord, Delft (approx. 78 ha.)

It must be mentioned that, strictly speaking, Strijp-S in Eindhoven is not a mixed business park as the area was fully owned by Philips. Nevertheless, the site is included in this study, because all kinds of different business activities were carried out at the time and because the site is now sold to VolkerWessels and the municipality of Eindhoven in order to transform it. Together they develop the area through a public-private partnership (*publiek-private samenwerking*), Park Strijp Beheer B.V. The special status makes the case interesting, as it serves as a kind of contrast case within this study. For example, it shows how gradual area redevelopment, including the laying of general function assignations (*globale bestemmingen*), can already be facilitated by means of a regular zoning plan. Nevertheless, a CRA plan is made for Strijp-S, which adds an extra dimension to the research.

All locations researched throughout The Netherlands are displayed in figure 3.3.1. The cases are briefly outlined in chapter 4, while appendix 1 provides in-depth information about each case.





Google Earth, edited by author

3.3.2 Document analysis

The first research method is a document analysis. Documents form an important potential source for most academic research, whereby policy documents in particular can prove to be valuable since they form the 'hard infrastructure' of the planning system (Farthing, 2016). Also in this research this method provided a valuable source for contextual understanding, both about the upcoming planning system review in the Netherlands and about the selected cases. This way, the analysis of policy documents provided a solid basis for approaching potential respondents the right way and, subsequently, asking them the right in-depth questions during the interviews. By increasing the prior knowledge, more in-depth information could be obtained during the interviews. Secondly, the content of policy documents could be compared with the way in which civil servants use these policies in practice (Farthing, 2016). Performing a document analysis therefore offered opportunities for triangulation, which improves the reliability of the research (Scheepers et al., 2016).

Furthermore, through a discourse analysis it is also worth investigating what is (deliberately) not being mentioned in the documents (Farthing, 2016). The interviews could then provide more clarity about these points not specifically mentioned in the documents.

Eventually, general documents about the EPA and the CRA, documents about transforming business parks, documents about solving the housing shortage and documents about the individual transformation projects were collected and analysed. This concerned policy documents, zoning plans, area visions, multiple laws, case law and opinion articles.

3.3.3 Expert interviews

After the selection of cases and the analysis of relevant policy documents, respondents who are involved in the relevant transformation projects were approached. This particularly concerned

involved municipal officials and external project managers, but also several experts on various themes that cannot be specifically linked to a case (see appendix 4). This choice was made to get a broader understanding of the subject.

The interviews served different purposes:

- Understand the transformation project from a municipal point of view
- Clarification of policy documents
- Identify bottlenecks in the transformation process, including those that may not be mentioned in policy documents
- Identify subjective experiences, particularly regarding municipal knowledge and views about the EPA and legitimacy issues
- Identify possible gaps between possibilities within the CRA and the EPA
- Identify new potential respondents by means of snowball sampling (Farthing, 2016; Scheepers et al., 2016)

The interviews were conducted on the basis of a topic list. This way, semi-structured interviews took place, which had several advantages over an open or closed interview structure. This is because topic list guarantees that the same topics are discussed more or less in every interview. On the other hand, a semi-structured interview setup also provides flexibility. Questions can be asked spontaneously, for example follow-up questions for in-depth information or clarification. This is particularly important in this research, because of its explorative nature (Farthing, 2016).

Two topic lists have been drawn up for this study. One for respondents who are specifically linked to one case (Topic list A, see Appendix 2) and one for other respondents (Topic list B, see Appendix 3). On the one hand, the order of the topics differs, with the aim of making the interviews run as smoothly as possible. On the other hand, the topic lists differ partly in content, because not one specific case is central to interviews with 'other respondents'.

3.3.4 Visiting planning events

In addition to the former research methods, also various planning events were attended. On the one hand, they were attended for gaining more knowledge about the subject and improving contextual understanding about various cases. On the other hand, the first meeting in particular also yielded several respondents. Information about these events and their added value to the research is displayed in appendix 6.

3.4 Data analysis

Multiple qualitative research methods were applied in this study, namely document analysis and expert interviews. The way in which the collected data was analysed regarding the first two methods will now be discussed.

3.4.1 Document analysis

Documents were analysed by means of Mendeley and ATLAS.ti, two programs for qualitative research. In the first stage of the research Mendeley was used to store documents and analyse them by means of marking and writing notes throughout these documents. The most important information could thus be filtered from the documents. In addition, points of attention for the interviews could also be identified. After the interviews, the second part of the document analysis took place through ATLAS.ti. The documents were systematically analysed using the same code tree as in the analysis of the interviews (see appendix 5). In this way the results of both methods could be compared with each other. Document analysis via ATLAS.ti was hampered because not all documents could be adequately transferred to this program. Mendeley was therefore used as the main analysis program for these documents.

3.4.2 Expert interviews

The interviews were, only with explicit consent of the respondents, recorded via the audio recorder on the researcher's smartphone. The audio recordings were transcribed manually. The transcripts were then uploaded into ATLAS.ti. This program made it possible to encode the transcripts openly and axially. This ultimately resulted in a code tree in which fragments from the transcripts are thematically coded (see appendix 5). Respondents' quotes were then used to support the results chapter. These originally Dutch quotes have been translated into English by the author as accurately as possible.

3.4.3 Reliability

One important factor of scientific research is reliability, in short, the absence of coincidental measurement errors (Scheepers et al., 2016). The role of chance, for example as a result of choosing a very specific case, must be excluded as much as possible. A well-considered case selection is thereby of great importance. Due to the explorative nature of this research and the diversity of CRA-plans, regarding reliability it was recommendable to include a relatively large number of cases in the research. This prevented the conclusion from being too one-sidedly focused on a few specific cases. Instead, this research shows a wide range of possibilities that the CRA and EPA offer. In addition, it is important that the same subjects are questioned in an equivalent manner during the interviews. To guarantee this, topic lists were used to guide the interviews.

3.4.4 Validity

In scientific research it is very important to guarantee validity, which means that the initial goal of the research is actually being researched (Scheepers et al., 2016; Farthing, 2016). A careful selection of cases is thereby, once again, essential. In addition, also the right questions must be asked during interviews, which depend on the operationalizations of concepts beforehand.

The validity of this research is guaranteed through intensive literature and document research prior to the interviews. This way, extensive contextual information was gathered beforehand. As a result, specific questions could be asked and follow-up questions could adequately be asked for clarification or in-depth information. This increased the probability that the core of the research was touched during the interviews and that it was discussed in detail.

One important aspect, and potential error in this research, forms the possible gap between new opportunities for transformation that derive from the CRA on the one hand and the EPA on the other. Statements based on research into current experimental areas could therefore not be fully valid with regard to the main question, which concerns the EPA. To deal with this and secure validity, a specific sub-question has been drawn up to investigate this potential gap. To this end, this matter was explicitly mentioned during the interviews. In addition, experts on the CRA and the EPA, which were not necessarily linked to a specific case study, were also interviewed to clarify this.

Lastly, during this research a feedback loop existed with experienced supervisors, who have a great deal of expertise in the field of scientific research and the transformation of business parks. Errors in the research design that could harm the validity are thus detected and corrected in a timely manner.

3.4.5 Research ethics

Scheepers et al. (2016) and Farthing (2016) pay explicit attention to research ethics in their books. Handling the collected data with care and respecting the wishes of respondents is key in ethical research. Their trust should not be ashamed. Therefore, attention to research ethics was paid in various ways. First of all, prior to the interviews it was explicitly requested to record the conversation with an audio recorder. Secondly, beforehand it was asked whether the respondent preferred anonymity. It was also indicated that anonymity could of course be requested at a later stage, during or after the interview. Thirdly, the respondents were sent their interview transcript, asking them to indicate if they would prefer certain fragments not to be used in the report. Confidential information is of course not shared with anyone. Both types of requests, concerning anonymity and not using certain fragments, were made by respondents during the research. These requests were of course respected. As a final measure for guaranteeing ethical research, the transcripts are only stored on the researcher's personal computer (and mandatory in an inaccessible Radboud University depository) and not on an internship computer or account. Access to the transcripts is therefore strictly limited. This way, ethical research is guaranteed.

4. Case description

This chapter briefly describes the nine cases investigated in this thesis. This provides contextual understanding prior to the results chapter. Appendix 1 can be consulted for a more detailed, in-depth description of each case. This chapter concludes with a table, which visualizes the cases more schematically. Unless stated otherwise, the information about the cases was obtained from interviews with respondents related to these cases. See Appendix 4 for the overview of respondents and the case study to which they are connected.

4.1 Soesterberg-Noord (Soesterberg)

Figure 4.1.1 Transformation area Soesterberg-Noord (Soesterberg) in purple.



Google Earth, edited by author

Soesterberg is a small residential area with around 7.000 inhabitants within the municipality of Soest. The village could not expand for years due to the nuisance of the air base located north of the village. The airbase has been closed since 2009 and the village is now able to expand again. The municipality of Soest therefore intends to develop around 3.000 new dwellings, both on the Soesterberg-Noord business park and on the site of the former airbase. Existing business activities, with large environmental circles, form an obstacle for developing these dwellings. Buying out all these hindering companies proved financially impossible, after which a new strategy was drawn up. Together with the companies, the municipality of Soest drew up a customized zoning plan, making creative use of the possibilities in the CRA. By (sometimes unsuccessfully) optimizing environmental utilization space (milieugebruiksruimte [EUS]), measuring noise pollution in a different way, temporarily deviating from environmental standards and applying the new "chameleon function assignation" (kameleonbestemming), the municipality enables the development of housing while companies were still able to function in the same way as before. The Soesterberg-Noord zoning plan was the first established CRA-plan in the Netherlands, dating from 2015. The first homes have now been constructed in the eastern part of the business park. Some nuisance-causing companies, for example De Ridder, have now left.

4.2 Rijnhaven-Oost (Alphen aan den Rijn)

Figure 4.2.1 Transformation area Rijnhaven-Oost (Alphen aan den Rijn) in purple.



Google Earth, edited by author

Transformation area Rijnhaven-Oost, which is approximately 30 hectares in size, is located to the north of the city center of Alphen aan den Rijn. The area is a de-zoned industrial park with all kinds of activities. It is clear, however, that nowadays virtually no water-related business activities are involved anymore. The municipality desires an attractive living and working area where the potential added value of the water is used to a maximum. The western part of the port area still contains a zoned industrial site (Oude Rijn), where the municipality has bought out some major nuisance-causing companies in order to make the transformation in Rijnhaven-Oost possible. In addition, the municipality makes extensive use of the allocated CRA possibilities, for example by basing environmental contours in the ZPBS on emission and immission standards (emissive- en immissienormen) in accordance with article 2.19 of the Environmental Management Activities Decree (Activiteitenbesluit Milieubeheer [EMAD]). This article has officially not yet entered into force, but can already be used through the CRA. The plan has been successfully challenged several times by a company located in the area with an odor contour, which means that housing possibilities are now geographically limited. In addition, the municipality applies open standards, a specially developed plan map with some rules and a reporting obligation. By applying a reporting obligation, the municipality of Alphen aan den Rijn encourages the transformation process. If the set conditions are met, the function of current buildings can be converted into housing without requiring any permit, with a maximum of 720 units in the entire area. Only a report to the municipality is then required. In practice, however, an environmental permit for building appears to be necessary in most cases, because the parking requirement increases or because the current buildings are not suitable for occupation.
4.3 Noordpoort (Meppel)

Figure 4.3.1 Transformation area Noordpoort (Meppel) in purple.



Google Earth, edited by author

The Noordpoort transformation area, which is approximately 33 hectares in size, is a diverse area in the northwest of Meppel. The area contains several outdated business parks, a residential area and some other functions. Moreover, the area is located along the *Meppelerdiep*, where a few waterrelated companies are located. This diversity within the CRA area is a deliberate choice, because the municipality is experimenting extensively with a small-scale environmental plan. To this end, it also uses almost all possibilities within the CRA, with the exception of the notification obligation and using the assignation as an experimental development area (Ontwikkelingsgebied). Preliminary work has been done by dezoning a nearby industrial site and optimizing the EUS of companies in the plan area. The latter is guaranteed by making "reconsideration of business categories foreseeable (voorzienbaar)" in the municipal structural vision (Gemeente Meppel, 2013), as well as through extensive discussions with entrepreneurs. Through an extensive participation process, a flexible zoning plan was established, with the mixing panel catching the eye. Through the mixing panel, which is linked to the zoning plan by means of a local policy rule, initiators can consider for themselves how they want to shape their high-quality development in the area. These options for netting (salderen) offers initiators flexibility, within the framework set by the municipality, to ultimately create an attractive city entrance to Meppel. The plan has already been made available for inspection and received, probably because of the extensive participation process, hardly any views (zienswijzen). The plan is expected to be established early 2020.

4.4 Binckhorst (The Hague)

Figure 4.4.1 Transformation area Binckhorst (The Hague) in purple.



Google Earth, edited by author

Binckhorst is an area of approximately 144 hectares in the southeast of The Hague, located at a relatively short distance from the city center. Characteristic of the area are the inland port and the diversity of activities. Among others, a concrete plant, a beer brewery and graphic designers are located there. The municipality of The Hague intends to transform Binckhorst through organic (re)development into an attractive living and working area by enabling the development of (initially) 4.427 homes and maintaining business activity. Traditional area development, through the large-scale purchase of land by the municipality, turned out to be financially unfeasible. Through the CRA, the municipality has drawn up a flexible and inviting zoning plan, whereby the municipality has leeway to stimulate initiators to engage in desired developments. An extensive package of rules, including a unique reservation system and a netting method, has been set up to steer development in the right direction. Moreover, the plan is linked to local policy rules and has its own plan viewer. Unique is the general "Transformation area" function assignation, which covers all plots in the area, allowing virtually any function at any location up front. The high degree of internal plan flexibility does lead to objections, particularly raised by existing businesses. They therefore legally challenge the safeguarding of their EUS through local policy rules. The zoning plan is therefore still being discussed by the Council of State.

4.5 't Veen (Hattem)

Figure 4.5.1 Transformation area 't Veen (Hattem) in purple.



Google Earth, edited by author

In the southeast of Hattem' t Veen is located, an outdated and fragmented business park of 11 hectares. The business park now has an inner city location, as it is located in the middle of two residential areas. From the south in particular, the terrain is difficult to reach for freight traffic, as it is necessary to drive through narrow streets in a residential area. The desire to transform the area came into existence in 2005, when a new intermunicipal company site, H2O, was also constructed as a potential relocation area for companies. The transformation did not really start for a long time, partly due to the economic crisis. The municipality strives for a mixed living and working area to meet the housing needs in the municipality at a potentially attractive residential location. Another motive is reducing traffic nuisance for the residential areas. The municipality has purchased land on a small scale at an earlier stage, but the budget is too limited for continuing this strategy. That is why the municipality is now striving for organic transformation, whereby the CRA can be used to optimally facilitate the process. 't Veen has been assigned as a development area and for experimenting with a ZPBS. The municipality has already drawn up regular stamp plans for two plots in the area. This makes it clear that, with the registration for the CRA, the municipality has recently opted for a new and more integrated strategy.

4.6 Liebergerweg (Hilversum)

Figure 4.6.1 Transformation area Liebergerweg (Hilversum) in purple.



Google Earth, edited by author

To the southeast of Hilversum station lies the Liebergerweg business area, about 11 hectares in size. The site is located between the railway and a working-class neighbourhood and can only be reached through a narrow access road. On site there are several companies, such as a car rental company and the European Hunkemöller headquarters, as well as its distribution center. The traffic-attracting effect of the distribution center in particular is a problem due to the narrow access road through a residential area. Together with the rest of the neighbourhood, the site is part of the experimental area according to the CRA. The municipality foresees an organic transformation process, whereby the business area becomes a mixed living and working area. The number of jobs must therefore remain the same. The municipality also wants the redevelopment of the site to contribute to the quality of the adjacent neighbourhood, for example by spending part of the benefits on climate adaptive measures. Through an extensive participation process an area agenda has been established, in which the ambitions for the entire experimental area are stated. The municipality is currently working on a CRA zoning plan to facilitate the desired development direction.

4.7 Strijp-S (Eindhoven)

Figure 4.7.1 Transformation area Strijp-S (Eindhoven) in purple.



Google Earth, edited by author

Strijp-S is an area of 31 hectares, located to the west of the city center of Eindhoven. In addition, the area has its own train station. The former Philips site was sold in 2001 via a tender procedure for € 140 million to VolkerWessels and another party. After the second party withdrew, the municipality of Eindhoven entered via a public-private partnership [PPP] to redevelop the area. Together they transform the area into an innovative living and working area, with the addition of 3.600-4.000 new homes, innovative activity and recreational facilities. New technologies are tested within the area, such as smart street lighting and an innovative parking system. The characteristic buildings and elements also make this area unique. Furthermore, the ownership position offered opportunities for a global zoning plan, even by means of regular zoning plan methodology. It has nevertheless been decided to make use of the CRA for providing even more flexibility and accelerate the transformation process.

4.8 Stationsgebied OV1200 (Heerhugowaard)

Figure 4.8.1 Transformation area Stationsgebied (Heerhugowaard) in purple.



Google Earth, edited by author

Along the train track, in the north of Heerhugowaard, there is a strip of activity where the municipality foresees a transformation process in the upcoming years through the addition of houses and functions other than business, including in the healthcare segment. Due to the upcoming merge between the municipalities of Heerhugowaard and Langedijk, this area, which is approximately 66 hectares, will be located centrally within the municipality. Moreover, the train station is at the heart of the transformation area. Furthermore, various educational institutions are located in the area. It is notable that only a limited area, the station area, has yet been assigned as an experimental area within the CRA (figure 4.8.1). A vision has already been drawn up for the redevelopment of this station area. The municipality intends to expand the experimental area to the entire transformation area, which is a wider strip between the provincial road N242 and the municipal Westtangent road. Characteristic of the plan area is the limited nuisance current business activities cause, which translates into low business categories in the current zoning plan. Thus, the area seems easy to transform the area into a mixed area with housing. However, the integrality of the area transformation is complex, partly because there is still uncertainty about the rail tunnel to be realized, the future width of the track and the water infrastructure that runs parallel to it. The municipality hopes to be able to make all these (re)developments possible through a ZPBS, in which the municipality of Heerhugowaard considers to experiment with environmental values (omgevingswaarden).

4.9 Schieoevers Noord (Delft)

Figure 4.9.1 Transformation area Schieoevers Noord (Delft) in purple.



Google Earth, edited by author

Schieoevers Noord transformation area is a large inner-city business area of approximately 78 hectares. The transformation area covers a number of large business plots, one with the owner already willing to redevelop. Schieoevers Noord has a central location within the city, being located south of the Delft city center, west of the university campus, east of the Voorhof housing district and north of Schieoevers Zuid, the southern half of the business park. According to the municipality, the location is less suitable for a monofunctional business park than for an innovative and lively urban area. That is why the municipality is striving for a mixed and intensive living and working area with around 7.700 dwellings and around 5.500 jobs, mainly in the innovative manufacturing industry. The latter should be complementary to the technical education on the adjacent university campus. In addition to the large business plots, Schieoevers Noord is characterized by 1) the Schie, which flows through the area and 2) by the high business categories in the zoning plan. However, the actual nuisance of the companies is lower than these categories suggest. The municipality hopes, through the development of a ZPBS and the assignation as a development area according to the CRA, to enable an organic transformation process. The development plan adopted this year provides direction for this.

4.10 Case overview

Table 4.10.1

Case	Size	Assignment CRA-area		Current status
Soesterberg-Noord	20 ha.	2011:		CRA zoning plan irrevocably
(Soesterberg)		•	Experimental	established
		2014.	development area	
		2014.	7PBS	
Riinhaven-Oost	30 ha.	2015:	2.00	CRA zoning plan established
(Alphen aan den Rijn)		•	ZPBS	(status unknown)
Noordpoort (Meppel)	33 ha.	2015:		Public inspection procedure
		•	ZPBS	for the draft CRA zoning plan
		•	Postponing	finished
			compensation for	
			(Article 7w CPA)	
			Experimental	
			development area	
Binckhorst (The	144 ha.	2014:	•	CRA zoning plan established,
Hague)		•	ZPBS	waiting for treatment at
		2017		Council of State
		•	Organic cost	
			The covery (Article	
't Veen (Hattem)	11 ha.	2019:		Development vision in the
			ZPBS	making, CRA zoning plan
		-	Experimental	follows
			development area	
Liebergerweg	11 ha.	2019:		Area future agenda
(Hilversum)		•	ZPBS	established, CRA zoning plan
		•	experimental development area	in the making
Striip-S (Eindhoven)	31 ha	2018:	development alea	Transformation already
			ZPBS	underway, CRA zoning plan in
				the making
Stationsgebied OV1200	66 ha.	2019:		Development vision in the
(Heerhugowaard)	(only 44	•	ZPBS	making, CRA zoning plan
	ha.			follows
	assigned			
	as CRA- area vet)			
Schieoevers Noord	78 ha.	2018:		Development plan
(Delft)			ZPBS	established, CRA zoning plan
		•	Experimental	in the making
			development area	

Table by author

5. Results

In this chapter the results of this research are discussed on the basis of the formulated sub-questions. First of all, the motives of municipalities to transform business parks are examined. In 5.2 the bottlenecks are then discussed, after which in 5.3 it is explained which solutions the CRA currently offers for this. Section 5.4 makes a comparison between the CRA and the upcoming EPA, in order to provide a glimpse into transformation processes after the new planning law comes enters into force. The chapter concludes by dealing with the aspects of legitimacy and legal certainty in section 5.5, whereby various solutions mentioned in section 5.3 are examined.

5.1 Motives for transformation

This section first of all examines the motives of municipalities to transform business parks into mixed residential and working areas. After all, this is important to be able to understand which bottlenecks are involved and why. By discovering the motives, an attempt is made to formulate an answer to the first sub-question: "What are the motives for municipalities to transform inner-city business parks into mixed working and living areas?"

5.1.1 A multitude of motives

Municipalities have different motives for transforming an inner-city business park into a mixed living and working area. First of all, this has to do with the aging of the areas themselves. Structural vacancy exists on the site and especially during the evenings these business park form a deserted location within the city, which, among other things, promotes criminal activity. Most of the municipalities investigated also have access to a new, more peripherally located business park that still offers space for the relocation of, in particular, nuisance-causing businesses in the outdated transformation area:

Respondent 3:

Well, look, that business park H2O started just like that in the period 2005 for the three participating municipalities: Hattem, Heerde and Oldenbroek. HHO, hence H2O. And that has just started to get companies from those three centers there. So actually a kind of supra-local business park to attract companies there and these companies, which are located here ('t Veen), that is exactly for that purpose.

Traffic nuisance is another motive for municipalities to transform inner-city business parks. Because the site has become more and more central in the city over time, freight traffic is now forced to drive through the city to reach the business park. This leads to nuisance for nearby residential areas, for example in Hilversum (figure 5.1.1):

Respondent 8:

And in recent years that has become increasingly complicated, because the supply and distribution of that distribution center and that head office actually goes through a labour street. It is not a residential street, it is an access road, but it is a road with a very narrow profile and with many cars. With the associated nuisance. Figure 5.1.1 The Liebergerweg in Hilversum, the access road to the Hünkemoller distribution center.



Photo by author

Moreover, the business park in several municipalities forms the entrance to the city as visitors enter the city via the adjacent main infrastructure. Decorating the city entrance is therefore also an important motive for these municipalities for transforming the area.

Respondent 19:

(...) Because with that zoning plan that was established in 2009, the Rotterdamsebaan was made possible. (...) Yes, and then it is kind of the entrance to your city and such a traditional business park with all of those business halls is not very attractive as the entrance to your city. Hence the desire to make the area a bit more attractive and to make it a more mixed living and working area.



Figure 5.1.2 Construction of the Rotterdamsebaan through Binckhorst in The Hague

Photo by author

Furthermore, all municipalities investigated have a housing requirement, varying from a few homes per year in Hattem to a huge housing requirement in, for example, The Hague. The lack of expansion

possibilities, due to the compact city policy and the red contours, forces municipalities to look for inner-city (re)development locations. In this search, they soon end up with outdated inner-city business parks. Here structural vacancy exists, the sites are often close to the city center and several transformation areas are located along the water, while the businesses located there do not always carry out water-related business activities. These factors, living (living along the water and) near the city center, result in great potential for creating an attractive living area.

Soesterberg, as the smallest population core within the study with around 7.000 inhabitants, provides another motive for adding houses. The consequential increased number of residents also ensures that the level of facilities and services can be maintained and might possibly even be expanded. This benefits the quality of life in the village.

Respondent 9:

"That means that this business park should actually be transformed into a maximum category 2 nuisance site, with as many homes as possible. Why? Soesterberg has a huge need for more homes in order to maintain the level of facilities in the village. "

It also becomes clear from the interviews that municipalities deliberately strive for a mixed residential and working area for the industrial sites to be transformed, instead of a monofunctional residential area. In addition to providing identity to the area, the existing activities also offer innercity employment and are therefore considered valuable:

Respondent 8:

This is such an area that once arose along the track. What you would never develop in this way nowadays. But it contains a lot of employment.

5.1.2 Answering sub-question 1

Section 5.1 clarifies that there are several motives for transforming business parks and that these commonly link up with each other. The business park itself no longer functions satisfactorily, thus offering opportunities to (partly) solve the need for housing, with the additional result of an aesthetic impulse for the city and possibly also a higher level of facilities. Transforming business parks into a mixed living and working area is, however, not a simple task, as there are several bottlenecks involved. Section 5.2 highlights these.

5.2 Bottlenecks during transformation processes

Regarding organic area development by the market (through invitational planning), in particular when it concerns the transformation of business parks, it is not yet clear what exactly will happen, where exactly it will happen, when it will happen and finally who decides to invest in the redevelopment. This also depends on the possibilities that will arise on the site over time. Various companies are still active in these transformation areas, whereby land ownership is fragmented. Due to the environmental contours of neighbouring companies, even available plots cannot always be developed into sensitive functions, such as housing. A regular zoning plan requires the aforementioned prior knowledge to a large extent, which strongly impedes the organic transformation of business parks. This section discusses the most important planning, legal, financial and environmental barriers that arise during the transformation of a business site through a regular zoning plan. This section attempts to answer the second sub-question: *"What bottlenecks within current legislation are occurring during the transformation of inner-city business parks into mixed working and living areas?"*

5.2.1 Limitations regarding regular zoning plans

Transforming a business park into a mixed living and working area is a gradual process that generally takes more than 10 years, mostly due to issues with existing businesses. After all, buying out and/or relocating all hindering business activities is financially unfeasible for municipalities, since companies demand generous compensation for relocating themselves:

Respondent 12:

Yes, you know, the point is: they [the municipality] relocated a business at the time. That costs a great amount of money. That way, the 10 million is gone in a second, so you shouldn't do that. (...)

If you are going to pay for relocation, you have to be very careful with that. Relocating businesses is incredibly expensive.

Therefore, the initiative must increasingly come from the market. By means of invitational planning, both by drawing up an inviting planning-legal framework on the site to be transformed, and by providing an alternative location on a more peripheral business park, municipalities attempt to initiate the transformation with as few land purchases as possible.

Respondent 10:

Well, land is not worth much in Meppel and the costs are high. Well, then it means that you are going to put those two against each other and then it turns out not to be exploitable. So we had to become creative and we did that. That also means that we have chosen the approach that we are making a zoning plan in which we are primarily facilitating and not the developing party.

However, a regular zoning plan is not suitable for invitation planning due to its strict requirements. One of the requirements for a regular zoning plan is that the feasibility of the plan must be demonstrated. The zoning plan must be feasible within 10 years and the cost recovery (*kostenverhaal*) of the entire plan must be guaranteed, including the pre-investments made. This also includes the possible buying-out of a company. Feasibility studies must also demonstrate that there are no obstacles from a spatial and environmental point of view in the context of 'good spatial planning'. These obligations mean that the preparation of the zoning plan is primarily the final piece of a concrete planning process, instead of the beginning. Because of these requirements, zoning plans are not very suitable to provide direction:

Respondent 15:

You usually do not steer via the zoning plan. That is what I mean that the zoning plan is usually the end of the process, not the beginning. Steering with the zoning plan is usually not the place where you .. It is difficult to steer with the zoning plan.

With regard to the obligation to investigate feasibility, the maximum planning possibilities must be investigated. General zoning assignations therefore require extensive research up front. Furthermore, enabling housing in proximity to still operating businesses is complicated for environmental reasons. Respondent 19 illustrates these issues regarding feasibility:

Respondent 19:

It is difficult to record that in a zoning plan, a traditional zoning plan, because then you are stuck with the feasibility that you cannot prove .. (...) because you do not know, also regarding those 10 years, that (...). But also your financial feasibility, because you don't know exactly who will develop, and where. And that also makes conducting detailed research very difficult, because you don't know exactly where the developments will be.

Enabling the development of housing in proximity to businesses also regularly leads to legal procedures. Because a good living environment must be guaranteed for future residents, companies fear that they will be limited in their options once the homes have been realized. They fear that they will no longer be able to comply with environmental legislation, which means that they will have to invest in measures or reduce their (noise) emissions. They also see their possibilities for expansion disappear. These legal procedures usually last longer than a year and therefore considerably delay transformation processes. This delay can extract the positive momentum from the area transformation:

Respondent 6:

What remains a dilemma and can have an extremely delaying effect is, say, one or a few notorious objectors. (...) You occasionally see in procedures that there are a few people who know exactly when to do something in order to delay a process as much as possible.

One of the possibilities to guarantee the feasibility of the plan is the preparation of new small-scale zoning plans, so-called stamp plans, for every new development in the area. However, the pursuit of an integral area transformation is made more difficult.

In addition, this strategy leads to a particularly extensive process, whereby the transformation process can be hampered by an accumulation of legal procedures.

5.2.2 Transforming to mixed-use

As mentioned above, housing regularly conflicts with the presence of nuisance-causing activities. In general there are three ways to deal with this:

- 1. Respect the EUS of existing businesses and realize dwellings outside of these contours
- 2. Limit the EUS of existing businesses (optimization)
- 3. Purchase the land and/or relocate existing businesses

The first option, the realization of homes outside the environmental contours of existing businesses, is the safest form to transform a business park. On the other hand, it also offers the least possibilities for housing.

The second option, optimizing EUS, offers wider options for housing on a business park. Through the frequent use of the VNG publication "Companies and environmental zoning" (*Bedrijven en milieuzonering*), whereby various business categories with associated environmental circles are distinguished, companies sometimes claim more EUS than they actually need and/or have licensed for their business operations. The result is a wider environmental contour (spatial track) than the company actually needs on the basis of the EMAD (environmental zoning therefore leads to a grey area regarding EUS. However, taking away this latent EUS is a very sensitive measure and regularly leads to legal procedures at the Council of State. Moreover, the judicial test is very cautious regarding the limiting of EUS of existing businesses. Municipalities are therefore reluctant to opt for this second option:

Respondent 19:

So yes, it is just how the Council of State deals with this and they are, of course, very critical. We have of course seen that with other plans too, in particular protecting existing companies .. yes there are already a number of other plans that were set aside.

A third possibility concerns buying out and/or relocating hindering companies. This is a realistic option when one or a few companies are a major obstacle to the transformation. However, buying out is an expensive affair which rarely turns out profitable. Municipalities are therefore reluctant for choosing this option:

Respondent 6:

Well, we have situational land policy and that is actually the latter. If it makes sense in order to achieve something, acquiring a power plant, for example, and then let other things go there. And that we really have a case for that. Then we are willing to buy that. But we are not going to buy that whole area, we have had a bad experience in that rail zone in the past decades. We almost went bankrupt, so that is no longer an issue.

It has already been mentioned in section 5.1 that municipalities do not want to see all business activities leave the area, but sometimes companies are so bound to a specific location that relocation is not an option for them at all. This applies, for example, to the water-bound asphalt and concrete plant in The Hague (figure 5.2.1), to Agrifirm in Meppel and to the galvanizing plant in Heerhugowaard. Buying them out is therefore not a realistic option. However, they cause so much nuisance that they restrict residential functions in a wide circle.

Figure 5.2.1 Haagse AsfaltCentrale (asphalt and concrete plant) in Binckhorst.



Photo by author

However, it is not to be expected that such companies will relocate anytime soon. Respondent 19 says the following about the galvanizing plant in Heerhugowaard:

Respondent 17:

That is a company .. Previously it once thought of .. that company is part of a very large concern, also active in Europe. And he has actually done a study to look at closing down their location in Heerhugowaard and moving it elsewhere, more centrally in the country. Only because of the size of the zinc baths it is so unique that they will not move it. (...) They can't locate it anywhere else. And here it happens to be, so they will never move it.

Finally, there is a fourth option, which has been applied in the transformation area Noorderhaven in Zutphen, for example. There, the municipality paid nuisance-reducing measures for a company, which enabled houses to be built at a shorter distance from the company without exceeding the standards from the AD:

Respondent 12:

(...) Or you limit it and you pay for measures. The judge will accept that. I also experienced it in Zutphen. There was a car company there, a plan for developing housing around it was drawn up, in Noorderhaven. And that company wanted 100 meters and that company got 50 meters from the municipality. And to reach that 50 meters, a measure had to be taken at that company. The municipality said 'we pay that measure' and that company said 'no, no, 100 meters in accordance with that target distance'. And then the Council of State put that aside.

In addition, architectural measures are also an option, in addition to taking measures at companies. For example, applying a deaf façade (*dove gevel*) is a commonly used solution.

Contrast: general function assignations in a regular zoning plan at Strijp-S

In section 5.2 it has become clear that transforming business parks is highly complex, all the more because the feasibility requirements of regular zoning plans obstruct organic invitational planning strategies. However, one case study in this study shows that organic area development can also be made possible with a regular zoning plan, though not via invitational planning. In Eindhoven, the former Philips site Strijp-S is being transformed into an innovative and mixed living and working area, whereby the area zoning plan technically consists of several sub-areas with general function assignations where, among other things, housing is made possible (Gemeente Eindhoven, 2018).

Figure 5.2.2 Strijp-S in Eindhoven



Photo by author

The special feature of this plan is that the transformation is led by a public-private partnership between the municipality of Eindhoven and VolkerWessels, a major Dutch real estate developer. In 2001 they bought the land for \leq 140 million. Because the majority of the land is owned by only one developing PPP-party, Park Strijp Beheer BV, the only environmental contour issue in the area could easily be solved. In addition, the program to be realized has been laid down in the zoning plan, making feasibility studies easy to carry out, also with regarding general function assignations. Legal problems are avoided this way and problems can be solved internally thanks to the presence of internal plan flexibility:

Respondent 13:

That means that the offices that we would initially create there should eventually come back to phase 4. Because that program must remain the same. So in phase 4 we have a flexible program that has yet to be filled in. (...) If you look at the map, it is also one large area where we can adapt for change, like 'where exactly are we going to do what?'. But the exchange of functions has certainly taken place. And that is why we actually made that new zoning plan in 2017.

The fourth sub-area, which is yet to be filled in, therefore currently serves primarily as an adaptive area. In spite of all these advantages of this PPP construction, the project has a long duration and the question is whether it will ultimately be profitable. In order to stimulate the transformation process, Strijp-S is now also working on a ZPBS in accordance with the CRA.

5.2.3 Answering sub-question 2

It is concluded that the requirements for a regular zoning plan in particular hamper organic development. In addition, environmental zoning aspects make it complex to mix living and working. Besides legal deviations that are possible in the zoning plan, however, also several other solutions are conceivable to deal with this. The disadvantage is that these (engineering) measures are often expensive. In the following section, the added value of the CRA for transformation areas is extensively explained.

5.3 Solutions provided by the Crisis and Recovery Act

The EPA offers a new and flexible legal-planning framework for municipalities to deliver customized zoning plans. The EPA can be anticipated by already using the CRA for all kinds of experiments regarding zoning plans, including the laying of a framework for organic area development and therefore the stimulation of internal plan flexibility. This is the main reason for municipalities to apply for an experiment in the CRA.

The transition to the EPA, with a completely different way of working, requires a cultural shift in Dutch planning practice:

Respondent 4:

So I think, municipalities, yes there will be a culture change and people will be able to, but if everyone can do that .. But this applies to developers and contractors even more. They have to make that change much more.

Therefore, the second reason for municipalities to register for the CRA is for their own learning process. An experiment can already be used to practice with some new instruments and the new way of working.

The result is that there is ample experimentation with the CRA in the Netherlands, currently more than 300 times. Halfway through 2019, 147 out of a total of 355 municipalities made use of the act (Ministerie van Infrastructuur en Waterstaat 2019a). In fact, the CRA offers four different types of experiments, namely:

- 1. Experimental development area
- 2. Sustainable innovative experiment (in particular zoning plan with broadened scope)
- 3. Project implementation decree (Projectuitvoeringsbesluit)
- 4. Local or (supra)regional project with national significance

Only the first two types of experiments were investigated in this study. After all, no project implementation decree is applied in transformation areas yet that we know of. The fourth type of experiment, a project with national significance, does not apply to business parks to be transformed. This is about larger areas, such as airports and wind farms. These last two types of experiments are therefore not included in this study.

Experimental development areas and sustainable innovative experiments have been intensively investigated through this research. In five cases, the combination of both experiments were also applied, but only in Soesterberg it was already used. The possibilities and utilization of both experiments are discussed below. The aim is to formulate answers to the third sub-question: "What are the motives for municipalities to make use of the Crisis and Recovery Act for transforming innercity business parks into mixed working and living areas?"

5.3.1 Experimental development area

In this research, five transformation areas have been assigned as experimental development area under the CRA, namely:

- Soesterberg (Soesterberg-Noord)
- Meppel (Noordpoort)
- Hattem ('t Veen)
- Delft (Schieoevers Noord)
- Hilversum (Liebergerweg)

The status of experimental development area offers the possibility of temporarily deviating from environmental standards for a maximum of 10 years. If the environmental standard is still not met after 10 years, the Municipal Executive Board (*College van B&W*) [the Board] must indicate how this standard will be met (Article 2.3(7) CRA). The explanation of the CRA plan Soesterberg-Noord states the following:

(...) The area development plan specifies which (environmental) measures will be taken to be able to meet the (environmental) standards again at the end of the plan period. (p. 12)

In addition, unused EUS can be optimized through this experiment if (Article 2.3(5) CRA):

- no use has been made under normal operating conditions for a period of three years or
- it is reasonably expected that, considering expected changes or expansions of business activities on short notice, no use will be made of unused EUS.

At this moment, the possibilities of the experimental development area have only been applied in one of the transformation areas in this research, being Soesterberg-Noord. To date, there has been no need for this in Meppel, while the other three areas are still preparing the CRA plan.

Both aspects of the experimental development area have been utilized in Soesterberg. On the one hand to temporarily deviate from noise standards, often the most problematic environmental zoning aspect when mixing living and working. Deviating from sound standards can be deviated from, as long as the interior noise value in the houses (with windows closed) is guaranteed at a maximum of 33 dB, according to Article 2.3(7)(f) CRA. The municipality of Soest has used this option because part of the homes to be realized is located within the environmental contours of a company. If this company is still located on the site in 10 years and the applicable environmental standards are still not being met, the municipality will install a noise barrier to protect the living environment for the occupants. The 2017-2018 progress report states from the Ministry of the Interior and Kingdom Relations [the progress report] (2019):

"The practice is now that the municipality allows housing in the noise contour. The exceedance may continue with the help of the CRA (experimental development area) for a maximum of ten years. If the situation has not changed, the municipality will install a noise barrier between the company and the houses, as a result of which the noise load on the houses will decrease to the norm." (p. 17)

By choosing this option time, effort and possibly a lot of money is being saved. In this way it avoids a possible legal conflict with these companies about limiting EUS. After all, they are not limited now, while the zoning plan can already be established, the houses can be built and then immediately inhabited as long as the noise level within the house meets the standards. Without this instrument, the company would have to be limited in its possibilities, a screen might have to be placed unnecessarily or the development of housing would be seriously delayed and/or limited.



Figure 5.3.1 Elma company in Soesterberg

Photo by author

On the other hand, the municipality of Soest used status as an experimental development area to optimize the EUS of existing activities. This issue has been legally challenged by Elma (figure 5.3.1). Although this company, according to the municipality, had latent EUS, Elma successfully disputed that sufficient consideration had been given to their expansion plans. This example illustrates the value in Dutch case law that is attached to legal certainty for existing business activities. Respondent 19 says the following about this:

Respondent 19:

It is just how the Council of State deals with this and they are of course very critical, we have of course seen that with other plans too, especially protecting existing companies .. yes several other plans have already been annulled for that reason.

The example of Soesterberg illustrates that the temporary deviation from environmental standards through the "experimental development area" experiment can be an attractive option for realizing homes on a business park which is to be transformed. The instrument can accelerate housing construction and offers opportunities to make customized agreements with companies, instead of creating a conflict. Temporary deviation is, however, the criterion, which means that it is necessary to actually be able to resolve the environmental overrun. Near location-dependent companies with a high environmental impact, for example, the concrete plant (environmental category 5) in Binckhorst, this seems unrealistic.

In order to establish homes permanently within the environmental circle of existing activities, other measures must be taken. In addition to taking nuisance-reducing measures, latent EUS can also be limited. The jurisprudence surrounding the Soesterberg plan once again demonstrates its complexity, but also shows that this solution is indeed possible. Extensive consultation with the existing businesses is of great importance. Respondent 9 explains how he cooperated with businesses to create a customized solution:

Respondent 9:

Well, we think we have been able to help the companies very well with that. To this day, we have very good contact with all parties that we have helped. And as a government actor, we have really done everything to help them procedurally. So we didn't tell the company "you must leave here, you will leave here, because that is our decision." No, 'we would like to see with you how we can fit you in this area and if that really does not work, we will help you move to a new location'. And that really went all the way up to the permit process and everything.

The Soesterberg case shows the potential added value of the experimental development area status for the transformation of business parks. That is why it is logical that more recent transformation projects, such as those in Delft, Hattem and Hilversum, have also signed up for this experiment.

5.3.2 Sustainable innovative experiment

In this study, all nine transformation areas have been assigned as a sustainable innovative experiment. The sustainable innovative experiment consists of various options, of which Article 7c is the most common. All nine areas therefore make use of this specific article of the act. The article offers the possibility to draw up a ZPBS, which offers a wide range of new possibilities. In this way, municipalities can anticipate the EPA for (part of) their territory. In addition, there are a few other forms of sustainable innovative experiments within the CRA, for which specific areas have been assigned. For example, some of the transformation areas in this study make use of Article 7v (organic cost recovery) and 7w (postponement of compensation for planning blight (*planschade*)). Based on the bottlenecks mentioned in section 5.2, the possible solutions that the sustainable innovative experiment offers for this are discussed. Unless stated otherwise, this concerns possibilities from Article 7c CRA to establish a ZPBS, in anticipation of the EPA.

Feasibility: effectuation period

As already mentioned in section 5.2, the feasibility requirement for regular zoning plans is an obstacle to the organic transformation of a business park. Demonstrating that this can be achieved within 10 years on the basis of the regular zoning plan to be established is problematic, in particular because the municipality depends on the pace of initiators in the area. For zoning plans with a broader scope, however, a plan horizon of 20 years applies, as stated in Article 7c(2) CRA. Due to this doubling of the duration, the time pressure associated with regular zoning plans is eliminated and this bottleneck of organic area development is easily removed:

Respondent 11:

Zoning plans contain a 10-year effectuation period. You must also demonstrate that what you make possible in the zoning plan can actually be implemented within those 10 years. Yes, there is

actually no clear-cut program here, so you can never demonstrate that, so you always run into it. Now with the Crisis and Recovery Act, it is now running for at least 20 years and you can simply work with a kind of organic area development. The feasibility requirements are simply different than with a regular zoning plan.

Feasibility: cost recovery

Another bottleneck in regular zoning plans is the safeguarding of cost recovery. The implementation section of a zoning plan must justify how the municipal costs of the proposed area development are covered, but in the case of organic area development this is not yet clear. After all, (most) anterior agreements (*anterieure* overeenkomsten) have not yet been concluded. Therefore, an exploitation plan (*exploitatieplan*) must be drawn up, but this is, besides extensive work, also complicated in the case of organic area development.

To eliminate this bottleneck, the CRA offers solutions through Article 7c(10) and Article 7v. As a result of these articles, the zoning plan does not have to be accompanied by a exploitation plan which covers all costs, but an appropriate exploitation plan can be postponed until the moment of a permit application. As a result, a detailed overview of all costs does not have to be fully clear and covered at the time of the establishment of the ZPBS. Respondent 11 states:

Respondent 11:

You don't have to start making the exploitation plan right now, because the same applies to that: that you make something for what may or may not come. So, also here you can say that 'at the time of the permit I will either make an exploitation plan, or I will cover the costs through an anterior agreement'.

This solution therefore facilitates organic area development and municipalities make great use of it. However, respondent 6 immediately mentions a defect of article 7c(10), namely that the organic method of recovering costs only applies between the establishment of the zoning plan and the first permit application:

Respondent 6:

But then you had to calculate it at the first environmental permit application. You had to demonstrate what you were going to do. So it was exactly between the establishment of the zoning plan and the first environmental permit application that you had it organic. And then you were just in a kind of blueprint thinking again. Well, we gave it a go in order to adjust it to the way it is written in 7v in that Supplementary Act. And that seems to be settled now. But there it went wrong, as far as I am concerned, that you could not continue that lump-sum character for many years.

Moreover, Article 7v offers broader possibilities for drawing up a tailor-made cost recovery scheme, for example per sub-area. The use of Article 7v in addition to 7c therefore seems advisable to provide an appropriate cost recovery arrangement for organic transformation processes.

General zoning

General function assignations in the zoning plan are desirable to stimulate organic area developments. However, this entails complications, certainly when, among other things, it enables the realization of sensitive functions (such as housing) near nuisance-causing activities. After all, to determine a regular zoning plan, the maximum planning options must be investigated, both for the existing functions and the functions that may be established in the future. Companies regularly challenge these general function assignations, for fear of being restricted in their options when housing is delivered. They therefore claim compensation for planning blight when the zoning plan is established. General zoning assignations in order to transform a business park are therefore problematic.

The CRA offers opportunities to eliminate the problems surrounding general function assignations. This applies in two ways. First of all, the obligation for detailed research is postponed to the permit application phase by means of Article 7c(9), so that basic research can suffice when determining the zoning plan. The second way in which general function assignation is simplified concerns the postponement of compensation for planning blight, also shifting to the moment of granting the

permit. This is done via Article 7w CRA. Respondent 10 discusses this shift to the granting of permits in relation to the open standards in the zoning plan in Meppel:

Respondent 10:

We also work with open standards in the spatial framework. Yes, with open standards you always have to start from a worst case. Worst case always turns out very expensive. So in that case, you should now pay compensation for planning blight for something that probably will not happen. Well then it was said "you should not want that and you can postpone it." Just as with an obligation to do research, you can postpone that until an initiative presents itself. And then you can calculate the damage very concretely, because then you know exactly what the initiative is.

The increased possibilities for general zoning are frequently used by the municipalities that have been investigated in this thesis. These general function assignations are already being used in the transformation areas in Alphen aan den Rijn, The Hague and Meppel. To keep the number of dwellings within bounds and to actually realize a mixed area, the municipalities of Alphen aan den Rijn and The Hague even appoint a maximum number of dwellings in their zoning plan. An extensive reservation system has even been created for this in The Hague (see Appendix 1.4).

Environmental utilization space & compensation for planning blight

It has been explained above that the CRA offers broader possibilities for general zoning, which does not immediately exclude housing within the environmental contour of existing companies. After all, detailed research to determine its feasibility is dealt with in a possible permit application. However, this study would regularly show that the EUS of companies, derived from a target distance in the VNG booklet "Companies and environmental zoning" (*Bedrijven en milieuzonering*), is wider than what the company actually needs for its business activities (Faber, 2019 p. 164). Respondent 14 also mentions this discrepancy:

Respondent 14:

And if you look at the old method indeed, where you work with target distances, you quickly see that, if you really look at the actual noise production of metal companies, for example, sometimes less noise was made than the target distances indicate.

This unnecessary limiting of developable space forms a bottleneck for the transformation possibilities, because homes must be built at a greater distance from companies than is strictly required under environmental legislation. If construction is nevertheless carried out within the target distance, companies regularly claim compensation for planning blight because they find themselves limited in their business activities. After all, their EUS would be limited by the emergence of sensitive objects, for example housing:

Respondent 19:

And yes, there is the greatest concern among these companies, because they are afraid that the initiators will use it and that they will be more or less forced to take measures. (...) that there may still be complaints at the moment that more and more homes are delivered. About noise, or about odor, or depending on which aspect applies and that, if there are enough complaints, they are eventually forced to take measures or, in the worst case, even have to move.

Claiming compensation for planning blight causes a considerable delay due to the legal procedure. In addition, companies often win these legal procedures. Compensation for planning blight then constitutes a substantial financial burden for the transformation process. The CRA also offers solutions for the bottlenecks regarding EUS and compensation for planning blight again via two paths.

First of all, article 2.19 EMAD can already be used via article 7c(12) CRA, while this article has not yet officially entered into force. The provision offers the municipality the possibility to work with emission and immission standards for protecting sensitive functions. In this way, testing is carried out against the actual burden of businesses' environmental emissions on housing or other sensitive functions. This option is applied in Alphen aan den Rijn for example. The explanation of the Rijnhaven Oost zoning plan (Gemeente Alphen aan den Rijn, 2019) states that:

"There are various companies in the plan area with a sound influence that goes beyond the boundaries of the establishment. In order to be able to respond optimally to the proposed change in the nature of the plan area from a business area to a mixed area, a set of noise rules has been included in the environmental plan using Article 2.19 Activities Decree."

The second way concerns limiting the right claim compensation for planning blight by extending the foreseeability (*voorzienbaarheid*) *via* Article 7c(8) CRA. This makes it less easy for companies to invoke on opportunities for expansion, so that their EUS can be optimized by the municipality. This means that their EUS is adjusted to what they really need. The discrepancy between the actually required EUS of companies and the EUS licensed via the spatial track, the latent space, is thus eliminated. The municipality of Meppel has used this approach for transformation area Noordpoort. In the structural vision dating from 2013, the municipality announced that it wanted to revise the business categories, after which it entered into discussions with all business owners in the area:

Respondent 10:

One of the things we do is that we reconsider the business categories, together with the owners of the companies.

The expansion possibilities for companies and the right to claim compensation for planning blight during the transformation process have shrunk considerably, because the three foreseeability requirements (Article 7c(8) CRA) have been met, namely:

- 1. this revision has been announced at least three years before the adoption of the zoning plan;
- 2. the intended review has been notified to the owners in the area, and
- 3. during this period it was possible to realize the constructing or usage possibilities

Restricting EUS without compensation for planning blight is a drastic measure from a legal point of view. This makes it very complex to do this well, considering case law. This is because the Council of State regularly decides in favour of businesses, for example in Alphen aan den Rijn and partly also in Soesterberg.

The examples above illustrate how the CRA can offer solutions to bottlenecks with regard to EUS and plan damage compensation. Optimizing EUS and at the same time limiting the right to claim compensation for planning blight with regard to latent EUS offers important tools for transformation.

Acceleration of the process

One of the mentioned bottlenecks in an area transformation concerns the long duration of the transformation process. The CRA offers multiple options for acceleration.

The first option concerns the inclusion of a notification obligation via Article 7c(5) CRA, instead of a permit requirement. This makes it easier and quicker for initiators to realize their initiative. Alphen aan den Rijn is experimenting with this notification obligation in Rijnhaven Oost. For example, functions are obliged to report instead of requiring a permit if the relevant conditions in the zoning plan are met, such as not increasing the parking requirement compared to the current situation. For the first 720 dwellings in Rijnhaven Oost, it is possible to convert the function of an existing building into a residential function without having to apply for permits. The municipality can monitor this and intervene if necessary via a notification obligation. In practice, however, it appears that an environmental permit for building is often necessary, among other things because the current business premises are not suitable for habitation. In the meantime the capacity of 720 dwellings has already been filled, which means that a permit is now required for altering a function to 'living' at all times.

Figure 5.3.2 Construction of housing at Rijnhaven Oost in Alphen aan den Rijn



Photo by author

A second possibility for procedural acceleration involves being able to include higher values in a ZPBS in accordance with Article 7c(9) CRA. For regular zoning plans, the request for higher noise values must be made through a separate decision. For example, the municipalities of The Hague and Meppel already use this procedural acceleration in their transformation areas. Moreover, the higher values in the zoning plan offer possibilities netting while still providing sufficient environmental quality. After all, when the higher noise values are applied for an initiative, another aspect must be submerged above average.

Finally, the CRA also offers legal acceleration. For example, treatment of a CRA plan at the Council of State usually takes place within 6 months, while for regular zoning plans this is often more than a year. With their experimental nature, CRA plans therefore have priority. Respondent 9 also states that this quick treatment enabled keeping pace during the transformation process:

Respondent 9:

And in the end those companies, that is of course their right, went to the Council of State. And there came something very beautiful. Because you were in that Crisis and Recovery Act, it had to be dealt with in a certain period of time, around 6 months. That is a super advantage, because you will not lose another year or a year and a half of time, in which all focus would disappear.

Although the treatment period for CRA plans has been shortened to 6 months, this term is not always met, for example regarding the appeals against the zoning plan for Binckhorst in The Hague. The Council of State needs more time for this. The progress report on the CRA also mentions the shortening of the legal procedures:

"The CRA has a rule to speed up the appeal procedures by binding the ruling of the Council of State, among others, to a period of six months. In recent years it was increasingly manageable to meet this term." (p. 7)

Moreover, filing a pro forma appeal is not possible with CRA plans. This means that the legal grounds must be submitted immediately in accordance with Article 1.6(2) CRA. This forms the basis for the accelerated procedure:

Respondent 2:

For example, what is a very important rule in the Crisis and Recovery Act: you are not allowed to object or appeal pro forma against an environmental permit or a zoning plan that applies to your territory. So that means that you must immediately submit your grounds, your legal grounds for that. And that is all to prevent time racking.

It is clear that the CRA offers various options for speeding up procedures, both when determining the zoning plan and with regard to specific initiatives. In section 5.5 the obligation to report in Alphen aan den Rijn will be further dealt with in the context of legitimacy and legal certainty.

Internal plan flexibility

Internal plan flexibility is an important aspect of organic area development. The aforementioned options that the CRA offers for general function assignation are an important aspect in this regard. However, a general function assignation says something about the possible functions, not about its details and the mutual coherence between functions. For invitational planning it is also important to offer initiators flexibility during the development of their initiative. This enables customized solutions.

Via Article 7c(6) CRA it is possible to include open standards in the zoning plan. In addition, a zoning plan can link to a local policy rule. The advantage of this is that a hard, closed standard does not have to be met and that there is therefore room for customization and integrality. The competent authorities can then make a consideration about the quality and the desirability of the proposed solution(s). The transformation projects examined make frequent use of the possibilities to incorporate open standards and to refer to local policy rules. The netting options in Meppel and The Hague and the flexible chameleon function assignation are interesting examples of this.

The Noordpoort zoning plan in Meppel refers to the "Qualitative assessment framework for the Noordpoort Transformation Area" (*Kwalitatief beoordelingskader Transformatiegebied Noordpoort*), which is subdivided into three steps (Gemeente Meppel, 2019a). In step 1, for housing construction initiatives, an open standard is used to test compliance with the "extraordinary living" criterion. In step 2, an initiative is tested against the mixing panel, a system with 7 aspects on which to score (see Figure 5.3.3). The outcome should at least be 0 (standard level) on average and not one of the aspects should be scored below -1, the basic level (Gemeente Meppel, 2019b). The assessment of the individual aspects is formulated as quantitatively as possible in the local policy rule, with the aim of creating certainty and clarity. In this way, the municipality largely provides the initiator with a scope for consideration. Finally, part 3 of the local policy rule includes a spatial assessment framework.





Municipality of Meppel (2019)

In Soesterberg, the internal plan flexibility is provided in a completely different way. This is because a chameleon function assignation has been devised, a kind of provisional function assignation that automatically changes colour from a business function to a residential function, depending on the moment of occurrence of one of the criteria set up for that purpose (Gemeente Soest, 2018, p. 109). This meant that the business 'De Ridder' could continue its functioning, while houses were being built in the vicinity of it, within the environmental contour.

The CRA therefore offers ample opportunities for internal plan flexibility. This is extensively experimented with in the cases studied. In the following section it will become clear how the municipalities of The Hague use this internal plan flexibility, while keeping the scope for consideration to a greater extent to themselves, contrasting with the municipality of Meppel.

Maintaining control within a flexible framework

Before, it has been discussed how the CRA can offer additional options for internal plan flexibility. This offers room for consideration for initiators to shape their plan and to solve problems through netting and possibly customized solutions for specific issues. For municipalities, on the other hand, open standards, whether or not incorporated into a local policy rule, are also a means of maintaining control within a flexible framework. The zoning plan activity (*bestemmingsplanactiviteit*), an instrument made possible through Article 7c(14) CRA, is an example of this.

When a function assignation enables a certain function and an initiator is willing to realize it, he must apply for an environmental permit for the zoning plan activity, in addition to an environmental permit for construction. In this way, despite a general function assignation, municipalities can still make a more detailed assessment of the functional implementation at a specific location. To do so, it checks the initiative against the preconditions as included in the plan rules or the related local policy rule which is referred to.

Moreover, local policy rules are not officially part of the defined zoning plan. As the changing of local policy rules cannot be impeded by an objection and appeal procedure, the municipality can easily change local policy rules for new insights, for example when a rule does not work as expected or if the situation has changed over time:

Respondent 11:

So it may be that after working with the plan for a while, you may think, "Well, here we have to do something else in that local policy rule." Or, after a few years, when the area is filled in completely different than now, you may also look at certain things differently.

In this way the municipality can still keep control over the development of the area. A general function assignation, combined with requiring a permit for a zoning plan activity, is therefore future-proof. Changing a local policy rule can be a role of the municipal council, but this role can also be delegated to the Board via article 7c(13) CRA.

An example of this is Binckhorst in The Hague, where the municipality can control the functional interpretation of a general function assignation in the zoning plan through referring to open standards in local policy rules. It does so by applying the zoning plan activity instrument. Moreover, due to new insights, the local policy rules can easily be changed by the Board, to which the authority has been delegated by the municipal council (with the exception of local policy rules on aesthetic preconditions and cost recovery). This is controversial regarding the local policy rule about 'existing business activities', since the EUS is also protected via an open local policy rule which can easily be changed. No fewer than thirteen companies consider their legal certainty insufficiently protected and have started an appeal procedure at the Council of State (Ministerie van Binnenlandse Zaken en Koninkrijksrelaties, 2018, p. 18). This is further discussed in section 5.5. In Binckhorst it is also possible for initiators to net the quality of diverse (environmental) aspects. The rules here are formulated in an open manner, which means that initiators must reach an agreement with the municipality on a proposed netting option. The municipality of The Hague can thus maintain control over the area, even by applying an organic and invitational area development strategy.

Even by applying an organic and facilitating development strategy, the municipality of The Hague can steer the ratio of the functional program in the zoning plan. It does so by linking the development of homes to the realization of workplaces in the local policy rule 'Jobs' (*Beleidsregel Arbeidsplaatsen*) (Gemeente Den Haag, 2019 pp. 16-17). In this way, the municipality ensures that a mixed area actually emerges instead of an area where initiators are only willing to develop homes. After all, housing construction is more profitable than realizing business space (Gemeente Den Haag, 2019).



Figure 5.3.4 Businesses in Binckhorst (The Hague)

Photo by author

The EPA strives for more flexibility and fewer rules, but the Binckhorst case shows that these ambitions, at least in the CRA, are difficult to combine:

Respondent 19:

(...) So that ensures that you are limited again and that a lot of rules are still included in the plan. And it has become a fairly hefty package, and also quite complex. (...) But yes, that of course also has to do with that.. On the one hand you want flexibility, but on the other hand you also want to lay down all those preconditions in order to be able to comply with that existing policy, with that existing legislation, with those existing standards, say in terms of the environment aspects.

Abandoning zoning plan requirements

Regular zoning plans must comply with the SVBP2012, the national standard for zoning plans. This makes them easily readable and mutually comparable. This standard format also ensures that zoning plans can easily be uploaded on <u>www.ruimtelijkeplannen.nl</u>, where all zoning plans and structural visions are gathered. For standard zoning plan practice, this standardization provides a well-workable situation:

Respondent 10:

The RO standards from 2012 are very good, you can do a lot with them. We have only deviated from the standards on one component, really only on one component and that is: We have a link to the local policy rule in the zoning plan and that is not allowed according to the standard.

These requirements however, creates obstacles for CRA plans, in which the current system can be deviated from in various ways. To facilitate these deviations, Article 7c(9)(a) CRA offers the possibility to deviate from the current RO standards in the SVBP2012. For example, a customized zoning plan can be drawn up, for example through the creation of new function assignations. The general function assignation "Transformation Area" in the Binckhorst zoning plan is an example of this. Respondent 7 states:

Respondent 7:

But you do have a lot less requirements which you have to obey, because every CRA area also has its own problems as to why the application was submitted to become a CRA location.

In addition, the structure of the rules can be adjusted, such as a set of rules per sub-area such as in Meppel and a direct link can be included to the relevant local policy rules. An own plan viewer can also be made which fits in better with the system of the customized CRA plan. The condition is that this alternative plan viewer can also be consulted via ruimtelijkeplannen.nl. The municipality of The Hague in particular has developed its own viewer for Binckhorst. However, they have also been working on this in Soesterberg and an alternative visualisation has been drawn up in Alphen aan den Rijn.

These possibilities for deviation seem logical given that CRA plans often involve a ZPBS. Central to this is not the pursuit of 'good spatial planning', but the 'achievement and maintenance of a safe and healthy physical living environment and good environmental quality and the efficient management, use and development of the physical living environment for the fulfilment of social functions', just like in the upcoming EPA. Article 7c(1) CRA therefore states that additional rules may be set for this purpose in the zoning plan. This sometimes leads to new rules:

Respondent 14:

You get ... You can see that, for example, from those law-interpreting local policy rules that we have made with the plan rules, that you sometimes get very different rules than you are used to.

Although it is beneficial for the specific transformation projects to create a customized zoning plan, the release of the RO standards in CRA plans does lead to a diversity of plan forms:

Respondent 7:

There is a whole range of plan forms. You have plans such as Soesterberg, which looks like a regular zoning plan in which new possibilities are used for complex locations. But there are also plans that look quite similar to the environmental plan. Many different types of CRA plans are made between these two extremes.

This diversity does not improve the transparency and comparability of the plans, as is also concluded in the progress report (2018):

In its advice on the amendment of the CRA, the Council of State states that "... different planning forms arise with each their own legal basis - in the regular regime or in the CRA. For municipal practice, this can cause an unclear whole, " (p. 43)

5.3.3 Extra creativity and a stick behind the door

In addition to the direct solutions that the CRA offers to remove bottlenecks, the CRA also contributes to promoting the creativity of individuals. Instead of following the usual procedures, people dare to think more freely when it comes to experimental plans:

Respondent 9:

(...) And we saw through that pilot of the CRA, and that is why I am so much in favour of what the Ministry of the Interior and Kingdom Relations is now also doing for the CRA, those pilots ensure that you a completely different attitude and behaviour .. and let that be one of the most important components of the EPA.

It even appears that, due to the opened attitude of individuals, solutions are regularly found within the regular laws and regulations. Then, the extra options that the CRA offers are not even necessary. The progress report (2018), for example, concludes the following about the experimental development area instrument:

"(...) The reports on these projects indicate that the assignation for experimental development area - also without legal application of the experimental space - provides new impetus. The extra set of instruments tempts the people involved to think more freely and as a result, existing instruments set up solutions in stalled projects "(p. 8) Respondent 5 compares this indirect effect with the City and Environmental Approach (*Stad- en milieubenadering*), where the third step, actually deviating from environmental standards, is rarely activated because creative solutions have already been found within existing legislation in the first two steps:

Respondent 5:

(...) So in those first two steps, just looking at current laws and regulations and exploring alternatives, a lot of problems were already solved. And that is a strange kind of phenomenon, which we often notice at platform31 at the moment we start pilots or experiments. That just stirring people up a bit, that they become more creative, that often helps to achieve something. And I think that, yes, experimenting with the CRA also contributes tot that.

It is concluded that the CRA is not only an instrument that creates new possibilities in the direct sense, but also promotes creativity within the regular laws and regulations.

Another advantage of the CRA is that the instrument can work like a stick. For example, companies are more willing to cooperate and think along with a solution if the municipality has more options on the one hand to impose restrictions and on the other hand to achieve more customization in cooperation with companies. Then, the second option naturally appeals to companies more:

Respondent 4:

(...) For me it is mainly in .. First, what you indeed say, where nuisance plays a role, you can use it [CRA] as a crowbar.

In this way, the CRA offers a stick behind the door and thus stimulates cooperation between the various parties in order to arrive at tailor-made solutions. This phenomenon is also recognized in the progress report (2018):

The availability of additional legal options can in itself be sufficient to achieve a breakthrough in an area, without the rules actually being applied. (...) This creates new opportunities with a mandatory legal rule only in the background. (p. 6)

The aforementioned chameleon function assignation for the company "De Ridder" in Soesterberg is a clear example of such an opportunity that has arisen thanks to the CRA. Due to De Ridder's high degree of noise pollution, it was initially not possible to build houses in the vicinity of the company. The municipality of Soest and De Ridder found a solution for this together through the chameleon function assignation, so that the homes could be realized while De Ridder was still operating. The business function assignation of De Ridder would automatically change to a residential function assignation once one of the four criteria was met. In this way the company knew for certain that they could continue to function temporarily and that the land could then be sold at a high price due to the future residential use of their land. See Appendix 1.1 for a more detailed description of this case, including the details of the chameleon function assignation.

Figure 5.3.5 Construction of housing at Soesterberg-Noord



Photo by author

The Soesterberg case also makes clear how the cooperation between the municipality of Soest and De Ridder company brought mutual benefits. The municipality of Soest therefore emphasizes that it prefers cooperation over a hostile attitude.

Respondent 9:

No, because then I would totally ridicule myself in Soesterberg, because we came to an agreement with all the companies. Besides, Soesterberg is very small and where could I ever enter the door again?

The respondent emphasizes the importance of good contact and the role of transparency and mutual trust. He also emphasizes the value of the companies for the village, since the companies in Soesterberg-Noord also provide employment.

From the foregoing, it can be concluded that the CRA offers more options for municipalities to enter into discussions with parties and to come to a customized solution together. With this, a tailor-made zoning plan can ultimately be drawn up that can facilitate the area transformation in a way that fits mutual interests.

5.3.4. Providing examples

Until now, the already developed zoning plans in The Hague, Soesterberg, Alphen aan den Rijn and Meppel form the base for this chapter. It is clear that these are four very different plans, each with their own systematics. However, this research also highlighted five transformation projects that have recently been assigned as experimental areas through the CRA, being:

- 't Veen (Hattem)
- Liebergerweg (Hilversum)
- Strijp-S (Eindhoven)
- OV1200 (Heerhugowaard)
- Delft (Schieoevers Noord)

During the interviews with relevant officials from these municipalities concerned, these people appeared to be aware of (a few) already developed CRA plans for transformation areas. These play

an exemplary role, both in a positive and in a negative sense. For example, officials from the municipalities of Heerhugowaard and Hilversum visited Binckhorst and learned about its experimental zoning plan. In Hattem, contact was made with Soesterberg, as both areas have been assigned as experimental development areas as well as experimental areas for a ZPBS:

Respondent 3:

Yes, I once had someone from Soesterberg-Noord, the project manager. He gave a presentation, well, for a number of entrepreneurs who also attended the meeting. We are now planning to pay a visit too. With entrepreneurs, with a number of councillors too, with a few people from the organization, to go there. (...) Yes, they were of course one of the first. Anyway, they have done innovative things there. And in terms of the case, it looks very much like this, in this area. And they are of course just a few steps further. So it is mainly illustrative and educational for entrepreneurs who are located here to experience that.

The Meppel mixing panel also seems to be replicated in all kinds of different ways. For example, the municipality of Woerden has made a variant on this, the spider web diagram. This spider web diagram will also be used in Hilversum.

Comparisons have also been made between the already developed CRA plans with the aim of taking over best practices and learning from each other's mistakes. In Meppel, for example, it was decided to explicitly include the determination of higher noise values in the zoning plan, in a different way than was done in the Binckhorst zoning plan in The Hague.

5.3.4 Answering sub-question 3

It is clear that the use of the CRA can stimulate (organic) transformation processes considerably, both through direct and indirect effects. In particular, the experimental development area offers solutions for environmental zoning issues environmental violations, while the experiment with the broadened scope also offers opportunities to bypass the strict requirements of regular zoning plans. However, environmental issues can also be resolved through the broadened scope. The most important added value of the CRA seems to be that it offers municipalities the opportunity to draw up a customized zoning plan in collaboration with other parties. In this way new and specific solutions can be found for bottlenecks. The following section discusses how the CRA relates to the EPA.

5.4 Comparing the Crisis- and Recovery Act with the Environment and Planning Act

In recent years, the CRA has become the predecessor of the EPA, with over 150 municipalities experimenting with new possibilities. On the one hand, municipalities can already practice with the new set of instruments. On the other hand, the experiments offer the legislator the opportunity to make necessary adjustments to the EPA if the insights from the CRA give cause to this, even before the EPA enters into force. In the previous section it became clear how municipalities use the various experimental provisions for transformation areas. The CRA appears to have an important added value in solving problems and facilitating organic area development. As a precursor to the EPA, there should be many similarities between the new possibilities that the CRA offers and the new possibilities that the EPA will eventually offer when it enters into force. However, the EPA offers a completely new system while the CRA "only" allows deviations from the current system in anticipation of the EPA. That is why this section looks for differences between these two, formulating an answer to the fourth sub-question: 'To what extend are there differences between new opportunities for business area transformation within the Crisis and Recovery Act and the upcoming Environment and Planning Act?'

This section therefore discusses differences in legal procedures, plan requirements, options for deviation, environmental zoning aspects and financial aspects. Regarding environmental zoning aspects, only the sound aspect is discussed, since this is the most relevant environmental issue in transformation areas. This aspect is therefore often normative for the determination of EUS. For external safety, odor and dust, matters also change in the EPA, but discussing these issues is beyond the scope of this thesis.

5.4.1 Procedural differences and format

Legal procedures

One of the advantages of CRA plans, compared to regular zoning plans, is the shortened procedure at the Council of State, whereby the aim is to receive treatment within six months instead of over a year. This acceleration keeps the momentum in the process and ensures that positive flow is not lost. The accelerated procedure is deleted for environmental plans in the EPA. After all, these then no longer concern experiments. Another difference in legal procedures concerns the pro forma appeal. For environmental plans this is possible again after the EPA enters into force.

Plan horizon and ongoing non-compliant activities

Another clear difference between the CRA and the EPA concerns the plan horizon. Whereas with CRA plans the plan horizon has been extended from 10 to 20 years compared to regular zoning plans, environmental plans do not have an effectuation period. This is because there is also no obligation to update environmental plans, except for ongoing non-compliant activities (*voortdurende buitenplanse omgevingsplanactiviteiten* [ONCA]) (Faber, 2019 pp. 301-302). This is because ONCA's are licensed long-lasting activities that deviate from the possibilities in the environmental plan. According to Article 4.17 of the EPA, the environmental plan must be brought into line with an ONCA within five years of the permit being granted. With regard to the ONCA, it is relevant that an application for this cannot simply be refused by the competent authority. In the event of a refusal, the competent authority must justify that the initiative is not in line with the ambitions formulated for the area or rules of instruction of the province or the central government (Van der Velde & Zebel-Vaudo, 2019 pp. 213-215). In the EPA, therefore, the options for deviating from the plan do not seem to be diminishing at all.

Plan viewer

The CRA and EPA also differ on the digital aspect. Although the format of environmental plans will not have a strict format requirements, as is the case with current regular zoning plans, their requirements are less limited than CRA plans (Van der Velde & Zebel-Vaudo, 2019 pp. 254-256). The possibility to develop an own plan viewer according to article 7c(9) CRA is a difference with the EPA, where environmental plans must be uploaded in the Digital System for the Environment and Planning Act (*Digitaal Stelsel Omgevingswet* [DSO]), the national digital system for environmental plans. There is still a lot unclear about DSO. For the time being, exactly indicating the differences between the digital system of the CRA and the EPA is therefore impossible. However, municipal freedom to develop their own plan viewer via the CRA will inevitably disappear.

5.4.2 Environmental zoning aspects

There are some differences between the CRA and the EPA in terms of EUS and environmental zoning. However, certain cases are also being continued. In both cases, for example, emission and immission standards can be used (Faber, 2019 p. 137).

With regard to the development of noise-sensitive buildings, a national norm framework is established in the EPA for the noise aspect, containing a standard value, an interior value and a maximum value. If the standard value is met, then no acoustic investigation is required. If the standard value is exceeded, but the maximum value and the interior value are met, the competent authority can allow the development. If the maximum value is also exceeded, the development can be permitted in exceptional situations if the interior value is acceptable (Van der Velde & Zebel-Vaudo, p.104). If it is not reasonably possible to stay within any of these standards, the EPA still offers various options for deviating.

Firstly, the step 3 decision in the City and Environmental Approach will be given a place in the EPA. Similar to the assignation as experimental development area, it is then possible to deviate from the environmental standards, as long as the interior noise quality in sensitive objects is within legal standards (Aan de slag met de Omgevingswet, n.d.(a)).

Secondly, the EPA adds, currently via Article 5.78x of the Environmental Noise Supplementary Decree (*Aanvullingswet Geluid*), that the seaport standard is declared applicable to transformation areas. This is possibly due to the destruction of the CRA plan for the Hembrug site in Zaandam by the Council

of State, where the seaport standard was incorrectly applied. The seaport standard extends the maximum noise load in transformation areas that are hindered by seaports. The maximum value can therefore be increased by 5 dB.

Another possibility to deviate from noise standards is to increase the permitted interior value for noise from 33 to 41 dB via Article 3.49(4)(a) Supplementary Noise Decree (*Aanvullingsbesluit Geluid*). This is possible for the functional change of existing buildings to a noise-sensitive function, such as housing, when it is located in the focus area of an industrial site. This is because taking sound-insulating measures to achieve a 33 dB interior value is often expensive for these buildings (Van der Velde & Zebel-Vaudo, p. 106).

What does differ is the regulation regarding higher values. Higher values can be included in the zoning plan via the CRA, whereas previously a separate decision had to be taken for this. These higher values disappear as a specific element in the EPA. A minimum requirement must be met in the environmental plan, while the municipality has freedom of choice for filling in the rest.

Finally, an important difference between the current legislation including the CRA and the upcoming EPA is that projected sensitive objects are protected according to environmental legislation, whereas this is not the case based on the EMAD in current legislation (Aan de slag met de Omgevingswet, n.d.(b)). Plots on which, for example, houses are possible according to the environmental plan, but which have not (yet) been built, might thus impede the business activities of existing companies if no arrangement has been included for this in the environmental plan:

Respondent 12:

Soon, under the EPA, the system is such that a projected home is protected against the noise of a company. Ergo, a company must meet the standards on the projected home, wherever that is. The standard applies there, unless it is stipulated in the environmental plan that this protection only takes effect when the home is established.

This could lead to planning blight as a result of general function assignations that, among other things, make housing possible, while exactly these types of function assignations are desirable for organic transformation processes.

It is clear that various issues concerning environmental legislation will change with the transition to the EPA, even compared to what the CRA is already making possible. However, this mainly concerns procedural details and deviation options, such as the disappearance of higher values, the widened application of the seaport standard and the continued existence of the City and Environmental Approach. That the environmental plan, if no specific regulation is included, will also protect projected sensitive objects is certainly an important change which municipalities must keep in mind when drawing up an environmental plan. To this end, being able to apply emission and immission standards via the CRA is an important option that will be continued in the EPA.

5.4.3 Financial aspects

Compensation for planning blight

In the current system, compensation for planning blight (*planschade*) constitutes a significant bottleneck in the transformation of business parks, because it is determined on the difference between the maximum planning possibilities in the old and the new plan. Through the CRA, the methodology for planning blight has already been adapted for organic area development. For example, the moment of indirect planning blight is postponed to the granting of permits and latent EUS can be optimized under certain conditions without compensation. The latter is an intermediate step to reduce planning blight based on maximum plan possibilities.

The systematic of the EPA is more direct because the difference in maximum planning possibilities between the old and the new plan no longer needs to be investigated. In the EPA, the difference between the actual old situation and the actual new situation is investigated to determine the damage. This happens at the moment an initiative emerges, so that the actual damage can be accurately assessed (Van der Velde & Zebel-Vaudo, pp. 37-40). In addition, foreseeability is broadened by adopting the provisions from the CRA. As a result of the changes, general function assignation is

simplified and companies are less likely to be entitled to receive compensation if latent EUS is being limited. The systematic used via the CRA is thus largely continued in the EPA. An important substantive difference is that the standard societal risk (*normaal maatschappelijk risico*) of 2% of the value of the property in the EPA is increased to 5% (Faber, 2019 pp. 323-324). Now a larger share, being the first 5% of the decrease in value, is at the expense of the owner and that the amount of compensation for planning blight to be paid decreases. This way, transformation processes are simplified by postponing and reducing compensation for planning blight.

Cost recovery

Regarding cost recovery, the conclusion of anterior agreements remain the basis. However, in current planning practice, this only works when the zoning plan is the final piece of the planning process, because otherwise an exploitation plan must be drawn up. This is problematic for an inviting zoning plan for organic area development, because anterior agreements have not (all) been concluded yet and the unknown elaboration makes drawing up an exploitation plan complex. The CRA therefore made it possible to recover the costs organically, by enabling a exploitation plan per initiative to be drawn up. This would then be done at the moment of a permit application. The EPA will support both variants, by enabling cost recovery in two ways. Firstly, the municipality can recover all costs for integral area development. In addition, the municipality can then only recover costs with regard to works and measures for the plan area itself and for non-exploitable land. At the end of the (transformation) process, a final settlement will then take place between the municipality and the initiators (Van der Velde & Zebel-Vaudo, pp. 142-144). The EPA therefore effectively merges the regular and CRA legislation so that municipalities can opt for a method of cost recovery that is most appropriate for the task. The conclusion of anterior agreements, however, remains the starting point.

5.4.4 Answering sub-question 4

Section 5.4 provides a global overview of the relationship between the CRA and the EPA, which provides insight into the extent to which the CRA actually anticipates the EPA. It is concluded that there are strong similarities in terms of system. The CRA instruments are continued in the EPA, with the EPA also transferring various methodologies and possibilities of deviation from the regular legislation. In this way the EPA offers municipalities the possibility to choose an appropriate approach for each area development, whether it is integral or organic in nature. This is in fact also what the CRA does to supplement the regular legislation. The only aspects from the CRA that do not return are the legal acceleration and the ability to create your own plan viewer. This is easy to explain, since these are really two provisions for the experimental nature of the CRA. The CRA therefore seems to be an excellent precursor for the EPA due to its corresponding methodology. However, the question is whether the simplified options for ongoing non-compliant activities will not lead to "deviation planning" (*afwijkplanologie*).

5.5 Maintaining legitimacy

Section 5.3 lists all kinds of examples of how the CRA offers opportunities for solving bottlenecks. This includes facilitating general function assignations, referring to open standards in local policy rules, delegating powers to the Board, introducing a notification requirement instead of a permit requirement, limiting/optimizing EUS and related postponing and limiting of compensation of planning blight. The CRA thus offers a flexible legal framework for municipalities to make a complex transformation process possible through organic redevelopment. However, with regard to the aforementioned solutions, legal certainty can be called into question. This section therefore discusses the options mentioned and relates them to the aspects of legitimacy and legal certainty. This way, it is attempted to find answers to the fifth sub-question: "How is the increased flexibility provided by the Crisis and Recovery Act and the Environment and Planning Act legitimized in transformation processes?"

5.5.1 General function assignations

In section 5.3, it became clear how general function assignations can be facilitated more easily via the CRA, because the feasibility requirement has been relaxed and the exploitation plan, the detailed investigation obligation and the moment of compensation for planning blight can be postponed to the

moment the permit is granted. This promotes organic area development. In CRA plans, just like in future environmental plans, the environmental permit gains weight. Although "postponement" implies that there is no loss of rights, reservations can certainly be made about this in various cases. Among other things, the uncertainty about the filling in of the area is mentioned. After all, the general function assignation does not say much about that, such as the general "Transformation area" function assignation in The Hague. First of all, this is responded to by stating that current zoning plans also offer little certainty about the future interpretation of the area. After all, they mainly anchor the current situation and future developments simply require a new zoning plan:

Respondent 1:

(...) but of course, if you look at the current plans that are often highly detailed, a lot happens with exceptions. So with environmental permits, or with deviations from the zoning plan and things like that, which makes you think that a certain development is certain in an area. But it never really is.

Formally, the process may not change much. Research must in any case be conducted with regard to initiatives and the possibility of objection remains. The difference is only that this now takes place at the time of the permit application, whereas this previously took place in particular in the zoning plan establishment procedure. In conclusion, and relating to Scharpf (1999) and Schmidt (2013), the throughput does not change in such a way that it would affect the output. Respondent 15, however, states that this shift may be unfavourable for stakeholders:

Respondent 15:

So with a decision you can lodge an objection and appeal, but the moment you are not paying attention and you just do not keep an eye on the municipal newspaper, then if a home is being allowed in your environmental utilization space and you do not appeal against this in time, then your company is in big trouble. (...) You have to be very careful, because the procedure has become so short that I think things are going to happen there.

In Alphen aan den Rijn this problem has been solved by activating Article 2.19 EMAD via the CRA and working with emission standards for companies and immission standards for sensitive objects, such as homes. Because the use of existing buildings in the transformation area can be converted into homes without needing a permit for a zoning plan activity (for the first 720 homes), the EUS of companies seemed to be in danger. If the conditions in the plan are met, then only a notification obligation applies. After all, businesses cannot appeal against notifications, as a result of which companies seemed to be dependent on the vigilance of the municipality. The advantage of the emission and immission standards, however, is that companies only have to be concerned with the nuisance they cause. This is in fact only limited by the emission standard, a maximum emission at a certain distance from the company. For sensitive functions, the immission standards apply, the maximum load on the facade. If a residential function is realized at a location where the load of an existing company on the facade is too high, then the company is not liable for that as long as it meets its emission standard. In this way the EUS of existing business activity is assured for the further course of the transformation process.

However, one company, Van der Bijl (figure 5.5.1), has successfully challenged the plan several times already before the Council of State. This animal feed producer was limited in its business operations when the plan was established. After all, the municipality had limited its EUS, an odor contour, when adopting the CRA zoning plan. The example of Alphen aan den Rijn thus shows how the EUS of companies is protected via multiple ways.

Figure 5.5.1 Van der Bijl company at Rijnhaven Oost (Alphen aan den Rijn)



Photo by author

The municipality of The Hague facilitates and regulates housing development in Binckhorst in a different way, namely through a reservation system. This system offers a guarantee for initiators, because it gives them the certainty that they can develop if they have made a reservation for their initiative and can meet all the conditions in the plan. After all, the reserved planning capacity is retained for six months, so that initiators can further develop their initiative during that period and can carefully carry out all detailed feasibility studies which are needed for the permit application to realize the initiative. Without the reservation system, there would be a risk that the total planning capacity would be filled while an initiator was busy preparing the permit application. Binckhorst offers space for 4.427 homes, spread over the entire transformation area through one general function assignation "Transformation Area". The increasing flexibility within Binckhorst as a whole is therefore supported by extra procedural certainty for initiators (Gemeente Den Haag, 2018), provided they manage to reserve planning capacity.

It is remarkable that when the CRA zoning plan was established, seven reservations were already granted in the plan rules, which moreover had a longer duration of two to five years. This concerned anterior agreements concluded in advance and it can be said that these initiators have obtained a more favourable position. After all, they did not have to compete with other initiators for a reservation and have longer time to prepare the permit application. It is not inconceivable that the municipality of The Hague took advantage of this during the negotiations on the anterior agreement through higher financial contributions from these initiators. According to the municipality, however, this was not consciously considered.

It is concluded that the use of general function assignations can be legitimized in different ways. The new instruments offer the possibility of providing more clarity for both companies and initiators through the use of emission and immission standards. It makes them responsible for complying with environmental standards. If feasibility requirements are carefully examined, living and working can be properly mixed in transformation areas. A reservation system such as in Binckhorst can offer initiators the certainty and time to conduct these investigations in a good way and to develop a feasible plan.

5.5.2 Open standards and referring to local policy rules

Through the CRA and in the near future also through the EPA, the plan rules can refer to local policy rules in which open standards can be applied. The municipalities investigated in this thesis make

frequent use of these opportunities, or want to make use of it in their CRA zoning plan to be drawn up. This is because they can draw up a flexible plan with sufficient room for consideration for the municipality. However, this administrative freedom is not without risks, as is also concluded in the progress report (2018):

The municipalities also mention a number of concerns when including the system with open standards in their plan. By far the most mentioned is the trade-off between the expected benefits of flexibility and the effect that flexibility can have on legal certainty. (...) However, they also mention the more qualitative nature of the standards, and the associated scope for interpretation. (p. 83)

Therefore to risk is present that the formulated open standards are too subjective, as a result of which they offer insufficient certainty and clarity for initiators with regard to their initiative. Legal certainty is also at stake for third parties, since they would have to rely on the competent authority's assessment. The black box of governance, as Schmidt (2013) calls it, plays a dominant role in this. Respondent 2 states:

Respondent 2:

For example, zoning plan rules, these are hard rules. That is clear, you must adhere to it, or you apply for a permit to deviate from it. But with local policy rules it is such a grey area. And, what make it really difficult.. one municipality is holding on to it a lot and the other is a little loose about it.

Open standards, whether or not in local policy rules, therefore offer municipalities scope for consideration. Respondent 19, however, states that they can also be beneficial for initiators. They too can come up with customized solutions when they are not bound by strict standards. Together with the competent authority, a good solution can be reached:

Respondent 19:

And indeed we deliberately did not want to record it, also to give those initiators the opportunity to come up with ideas themselves. We may not have thought of those in advance either.

As mentioned earlier, the municipality of Meppel has tried to formulate the mixing panel in the qualitative assessment framework as quantitatively as possible. In this way, it tries to increase the clarity and largely places the consideration room with initiators:

Respondent 11:

In principle, that local policy rule must be so clear that everyone knows what to comply with. So that is actually ... We tried that, and the question is whether that is really the case, but I tried to write it down so clearly that you know 'I score excellent, standard or basic'.

This methodology benefits legal certainty. However, what remains a point of discussion is that local policy rules can easily be changed by the city council and/or the Board, containing no participation or objection procedure for citizens. This makes it attractive for municipalities not to include the open standards in the zoning plan itself, but to include them in a local policy rule referred to in the plan.

This is particularly arbitrary in Binckhorst in The Hague. Thirteen companies have started legal procedures at the Council of State, largely because the safeguarding of their EUS is covered by a local policy rule. The court still has to rule on this. Articles 7.2.1 (n) and 10.2.1 (f) of the plan rules state the following: "The business operations of existing companies are taken into account and are not disproportionately harmed."

In addition to the fact that an open standard is used here, where the question is what is "disproportionate", reference is made to the local policy rule for implementing this, which seeks to safeguard the legal position of existing companies. New initiatives must demonstrate that existing companies can continue their business activities. The companies would rather have their rights "respected" (*in acht genomen*) than "taken into account" (*rekening mee gehouden*) because this would provide them certainty that their EUS is protected. Moreover, the local policy rule can easily be changed, even after the zoning plan is irrevocably established. Ensuring the legal certainty of

companies through a local policy rule is unlikely to result in companies' EUS being sufficiently protected, even if the local policy rule states that it must be 'respected'.

Respondent 19 somewhat legitimizes this by firstly stating that the municipality only issues an environmental permit for the realization of sensitive functions within environmental contours if the initiator has reached an agreement on this with the company concerned:

Respondent 19:

(...) But what we have as a condition for this is: if it is indeed possible to start building within that contour of that company, then they must show that they have reached that conclusion in consultation with the company, based on their research. And that the company can agree with that.

After all, the city council has stated as one of the starting points that existing companies should not be restricted. If this is adhered to, this system will actually place companies in a strong position, as initiators are bound by the maximum period of their reservation (six months). For initiators, there seems to be time pressure to come to an agreement with a company. Legal certainty for companies is then legitimized via throughput.

Secondly, respondent 19 emphasizes that there is still a democratic guarantee behind changing a local policy rule, even if the authority to change it has been delegated to the Board. After all, the city council, which is democratically elected, can instruct the Board to make adjustments:

Respondent 19:

But due to this monitoring, which takes place every six months, the Council can of course instruct the Board to adjust if certain ambitions that they have are not met. And so, for example, to adjust such a local policy rule when it does not work as expected. Or take other measures.

This reasoning based on a democratic stick behind the door ties in with legitimacy based on input.

There is therefore a debate about open standards in local policy rules, including at municipalities themselves. Yet they make frequent use of this to be able to manage the area transformation in a flexible manner. Moreover, they argue that this flexibility can also be beneficial for promoters. For third parties, however, it seems a different story. Guaranteeing existing rights through local policy rules, which can be changed easily and without consultation, has been a reason for no fewer than thirteen companies in Binckhorst to start legal procedures against the municipality at the Council of State. After all, legal certainty does not seem to be guaranteed and the confidence in the municipality that it will (continue to) protect existing business activity against new initiatives appears insufficient. With regard to new initiatives, open standards, incorporated into local policy rules and anchored by a zoning plan activity permit requirement, do offer municipalities legitimate opportunities to maintain control over the area.

5.5.3 Optimizing environmental utilization space and limiting compensation for planning blight

Perhaps the biggest point of discussion regarding legitimacy concerns the optimization of environmental utilization space and the limitation of compensation for planning blight. It has already been discussed how the protection of EUS in Binckhorst is arbitrary. The municipality of The Hague tries to protect the position of companies, but the question is whether this has been achieved through a local policy rule. However, the CRA also offers possibilities to consciously optimize the EUS and to limit the right to compensation for planning blight. Optimizing EUS has been done, for example, in Soesterberg and Meppel, while the municipality of Delft also intends to do this at Schieoevers Noord:

Respondent 6:

Well what we have agreed in the development plan is that we respect existing companies. That they can continue to operate in their current business operations. That we will therefore also provide that environmental utilization space. But if they have now been granted more in their permits than they need, we will optimize them, read: take it. In favour of the idea of the plan. Optimize in line with the need for other functions. A party may have just received 100 through the
permit, but in fact only uses 70. Then he will receive a permit of 70 and maybe 75 as far as we are concerned, because he has shown that he has ambitions to grow. But not necessarily 100 anymore.



Figure 5.5.2 Business activity at Schieoevers Noord (Delft)

Photo by author

The question can be asked to what extent it is legitimate to limit the existing rights of companies on the basis of experimental legislation, while this is a lot more difficult through regular legislation. For example, Article 2.19 of the EMAD can only be used via the CRA. The foreseeability is also broadened via Article 7c(8), as a result of which the right to compensation for planning blight can lapse.

Respondents legitimize this taking (*wegbestemmen*) of latent EUS, without the right of receiving compensation for planning blight, both via input, throughput and output arguments. With regard to input legitimacy, for example, respondent 15 states the following:

Respondent 15:

Well, if it is in the law then it is legitimate right? (...) Look, the basis is the legislation. (...) The question is also "is that a good law or is that a bad law?" Whether there is protection. But yes, I mean .. There are safeguards behind fixing those things. Because the moment you determine something, other rules, you can still go to court for it.

Although the respondent realizes that laws are not flawless, he does believe that the legal guarantees ensure a legitimate outcome.

Respondents 3 and 12 also state that the environmental categories on which companies usually rely in the case of compensation for planning blight are only indicative in nature. These categories say nothing about the actual environmental nuisance they are allowed to cause:

Respondent 12:

So you start investigating, and that is more difficult in itself, "how much space does a company actually need?" And those target distances are a first small indication of that, but no more than

that. Because the chance that a company, especially in a lower category, needs more is quite high. And the chance that a company in a higher category needs less, is also very high.

The throughput legitimations are mainly based on transparent communication between the municipality and existing companies. For example, for their zoning plan for the transformation area, the municipality of Meppel has made an inventory of how much EUS the companies need, including their specific expansion plans. The municipalities of Hattem and Delft are now also working on this by taking baseline measurements (*nulmetingen*), together with the companies:

Respondent 6 (Delft):

And the first step made in the monitoring plan is a baseline measurement at all companies. (...) And the idea of course is that those companies also approve that. That we do not do this on our own, but that we do this together with them 'this is your zero situation, do you think that's okay?' "Yes, I am fine with that."

The municipality of Soest has gone even further and together with the company De Ridder it has developed a chameleon function assignation, a customized function with which the company could still function temporarily while the adjacent houses are constructed. In addition, companies at Soesterberg-Noord have been offered an alternative location on the Richelleweg business park. The municipality has optimally facilitated companies, by being very energetic and flexible in granting permits. In this way, a good process in cooperation with existing companies is their justification for optimizing EUS via the CRA.

With regard to the limitation of compensation for planning blight, respondent 1 formulates a different justification based on throughput legitimacy. However, she goes back in time and states that companies do not have to earn on the EUS which they basically received for free:

Respondent 1:

Well, they get that space for nothing, thrown into their lap for zero euros and we have to buy it back for millions. So I think you should actually buy environmental utilization space up front. So that you first have to pay for your environmental utilization space and then we are on speaking terms to pay for it later on.

Optimizing EUS is not only legitimized based on the process, but also output legitimations are mentioned. Respondents 5 and 7, for example, mention the public interest as a justification:

Respondent 5:

We are here in a country, all close together, so let's say .. claiming more space than you actually need, that does not fit in completely.

Respondent 7 also mentions the increasing housing shortage, making it important to create opportunities for housing:

Respondent 7:

We are in a small country and the housing shortage is getting bigger and you just have to look at how you can reach a good solution together and make developments possible, taking those interests into account, as I just said.

In fact, she seems to argue that a better societal outcome can be achieved as a result of the broadening of legal options. This reduction in regulatory pressure also ensures that there is more room for a collaborative process to achieve a solution that all stakeholders can agree with. By doing so, government action seems to be legitimized through input-, throughput- and output reasoning.

It is clear that EUS is a tricky issue in the transformation of business areas into mixed residential and working areas. Although there is concern about the legitimacy of optimizing EUS and the upholding of legal certainty for companies, there seem to be sufficient guarantees for this. After all, municipalities are aware that they are moving on slippery ice and are proceeding carefully, in consultation with existing companies. Transparency is the key word here, certainly when the right to compensation for planning blight is limited.

5.5.4 Answering sub-question 5

Section 5.5 investigates the way in which municipalities legitimize the use of new (more flexible) instruments of the CRA and the EPA in transformation areas. Woestenburg et al. (2019) state that all three justifications - input, throughput and output - are required for legitimizing government interventions. Table 5.5.1 therefore illustrates how the mentioned contention points were legitimized, with an attempt being made to classify them into input, throughput and output reasoning. The table makes clear that the issues are legitimized by the respondents via input, throughput and output reasoning. However, this is a cumulative overview of all the cases investigated. The figure only points out that it is possible to legitimize the points of contention through all three aspects of legitimacy if the zoning plan is carefully drawn up by taking the rights and interests of all stakeholders into account. It therefore seems possible to use the flexible new legislation in a way that meets the legitimacy criterion of Woestenburg et al. (2019).

As several respondents strongly emphasize that the CRA encourages collaboration with stakeholders in order to achieve a solution that all stakeholders can agree with, the logic of appropriateness and the logic of consequentiality seem to be able to reinforce each other. The way in which the CRA instruments are used ultimately makes the difference.

Twistpunt	Input legitimacy	Throughput legitimacy	Output legitimacy
General function assignations - leads to uncertainty for third parties	- Participation and possibility of appeal remains, but only shifts to the permit phase	 Specific function assignation also says little, because regular zoning plans offer false certainty 	 Detailed spatial and environmental research remains necessary, but only shifts to the permit phase Emission and immission standards guarantee the EUS needed by companies
Local policy rules with open norms - subjective and changeable, legal certainty at stake	- Democratic guarantee through city council, even with delegation to the Board	 Consideration space and customization can be beneficial for all stakeholders Describing the assessment of open standard in local policy rule as qualitatively as possible for netting offers certainty and clarity Extensive participation process for establishing rules/system of the plan 	 Enabling customized solutions leads to a better result Being able to change local policy rules based on new insights ensures a future-proof plan
Optimizing environmental utilization space without compensation for planning blight - legal certainty for companies at stake	 Legal possibilities developed in a democratic way Possibility of legal procedures Environmental category only indicative, no rights can be derived from it 	 Joint process between municipality and companies 	 Public interest for housing outweighs business interests Offering an alternative location
Table by author			

Table 5.5.1 Legitimizing points of contention

6. Conclusion

Transformation is a hot topic, because many municipalities want to transform their outdated innercity business sites into a mixed residential and working area. In addition, they hope to give (the entrance to) the city a qualitative boost and at the same time reduce the housing shortage. Although Stec (2019) shows the high potential and possibilities for mixed use, area transformations still remain complex challenges. Mixing living and working is faced by environmental zoning bottlenecks, mainly due to nuisance-causing business activities. Regarding other bottlenecks, such as high costs and fragmented land ownership, municipalities are hoping to solve these issues through organic area transformation by facilitating market parties. However, organic area development strategies are hampered by the strict requirements of regular zoning plans. Moreover, market parties first want certainty about possible bottlenecks before they are willing to invest.

The CRA, which serves as a precursor of the EPA, turns out to be a suitable instrument to remove many of these bottlenecks. The issues related to general function assignations, environmental zoning issues, compensation for planning blight and significant delay as a result of legal procedures can all be removed or reduced by the CRA, temporarily or definitive. Through the CRA, municipalities can draw up customized plans, so that cooperation can be sought with stakeholders for reaching tailor-made solutions. The cooperation between the municipality and the nuisance-causing businesses in Soesterberg and the extensive participation process in Meppel are clear examples of this. This freedom does, however, cause highly diverse CRA zoning plans to be drawn up, so that the mutual comparability that the SVBP2012 provides for regular zoning plans is now lost. Customization logically seems to lead to a reduction in the comparability of plans, which makes it more difficult to fully understand their unique internal systematic.

Although Van den Hoek (2017) states that flexibility can in fact improve legal certainty, the present study shows that this statement is not always valid. In some cases, due to increasing flexibility, legal certainty for third parties appears to be at stake, in particular for nuisance-causing companies when the competent authority has ample opportunity for reconsidering their existing EUS. The local policy rule for protecting existing business activity in Binckhorst is an example of this, all the more so because it contains open standards. It remains to be seen how the Council of State will decide on this matter in the upcoming legal procedure. The emission and immission standards that are applied in Alphen aan den Rijn seem to provide more certainty for both nuisance-causing companies and for initiators, while at the same time providing flexibility for organically transforming the area.

The possible loss of legal certainty that is identified in this research is legitimized by municipalities in various ways. They justify each of the contention points through input, throughput and output reasoning. Among other things, it has been stated that there is no loss of legal certainty at all, certainly not in comparison to the false certainty in current zoning practice. Although at a later stage, detailed research still needs to be conducted to determine the feasibility of initiatives, and if one disagrees with the way an area is about to be filled in, they can still object and appeal. It is also stated that the public interest (in a substantive aggregative way) must sometimes prevail. However, what municipalities are most keen on is throughput legitimacy. A transparent dialogical process, in which companies and other stakeholders are involved up front, is the key for them to achieve a widely supported organic area transformation. In this way, through the CRA flexible solutions can be sought to facilitate transformation and at the same time guarantee legal certainty for vested interests. Input, throughput and output legitimacy thus appear to be interdependent, with the broadened input being used during the throughput phase to achieve a better output for all stakeholders.

When comparing the CRA and the EPA, it becomes clear that they are very similar in terms of the possibilities they offer for the organic transformation of a business park into a mixed living and working area. After all, through the CRA it is possible to add weight to the permit phase, just as is the case in the upcoming EPA. Furthermore, it enables municipalities to draw up a customized planning framework, which can optimally facilitate organic transformation processes. With regard to environmental zoning, the system revision does change some things in the way of working, but the CRA already offers ample opportunities for experimenting with the new way of working.

The following main question was central to this study: "In which ways can the Environment and Planning Act, and in anticipation of that the Crisis and Recovery Act, offer legitimized solutions for Dutch municipalities to tackle bottlenecks in transforming business parks into mixed working and living areas?"

Now that the five sub-questions have been answered, an answer to the main question can also be formulated. The new instruments in the EPA, which can already be anticipated via the CRA, offer ample opportunities to facilitate the organic transformation of business parks into mixed residential and working areas through invitational planning strategies. However, it also provides options for a comprehensive approach. Current legislation mainly facilitates a planned approach whereby the land is purchased up front, such as at Strijp-S in Eindhoven. However, even here the added value of the CRA is recognized. For example, applying general zoning assignations is no longer "punished", environmental zoning can be handled in a realistic manner and the plan can easily remain up-to-date through the adaptability of local policy rules which can be referred to in the plan rules. Moreover, open standards can offer consideration space for both municipalities and initiators. All these increased possibilities for flexibility can make a major contribution to the organic transformation of outdated business areas. It is, however, important to guarantee legal certainty, in particular with regard to third parties. After all, in a mixed living and working area, it is also important that existing businesses can continue their activities. The CRA zoning plans regarding the investigated transformation areas make clear that protecting legal certainty while providing flexibility is not always easy, but that it is certainly possible. Clear communication with stakeholders up front is crucial for drawing up a legitimate, flexible and legally secure planning framework for transforming a business area.

7. Discussion & reflection

The final piece of this report contains the reflection on the research and its outcomes. Reflection takes place with regard to the representativeness of the investigated CRA transformation zoning plans for other CRA plans and for environmental plans in the EPA. The stage of the recently designated CRA transformation projects is also discussed, after which the way in which the legitimacy of CRA solutions was investigated is reflected on. Expectations regarding the functioning of DSO and ongoing non-compliant activities in the EPA are then mentioned briefly, after which a reflection on a recent news article about a shortage of business space in an increasing number of municipalities concludes this final chapter. Several commendations for follow-up research are made in the meantime.

This research clearly illustrates the potential added value of the CRA for area transformations. Because the research has also compared the CRA to the EPA, it could also be valuable in the future. However, I do not expect that environmental plans will to a large extent resemble the CRA plans that were investigated in this research, since environmental plans cover the entire territory of a municipality and are therefore predominantly conservative in nature. The CRA plans examined, on the other hand, are aimed at facilitating functional change. The municipality of Meppel is making a good attempt for drawing up CRA zoning plan which is representative for an environmental plan, because all sorts of different sub-areas are included in the area that the CRA is experimented with. The plan also illustrates how it can be advisable to draw up a separate set of rules for each sub-area. This provides clarity.

With regard to this research into the CRA, a number of nuances are appropriate. First of all, this study does not make it clear to what extent CRA plans for transformation areas are representative of the functioning of the CRA as a whole, for example for the development of sustainable energy landscapes. In addition, only the 'experimental development area' experiment and the "sustainable innovative experiment" (in particular zoning plan with broadened scope) were investigated in this study. Although the research provides insight into the operation of both experiments, the new systematic for cost recovery, for example, is not yet completely clear. On the one hand this is due to the fact that the Supplemental Land Property Act is not yet completely clear and on the other hand because the investigated transformation processes are not yet ready to draw conclusions about the organic method of cost recovery. They simply need to be in a further stage for that, which requires additional research at a later stage. The other two possible experiments in the CRA, the 'project implementation decree' and the 'local or (supra) regional project with national significance', have not been addressed in this study because they are not (yet) being used for transforming business parks. If this will take place at a later stage, it is interesting to conduct research into the functioning and possibly the added value of these CRA experiments.

In the EPA it also becomes possible to set environmental values, which enables specific objectives for an area to be pursued in a quantitatively verifiable manner. This possibility is not yet applied in the transformation areas, but the municipality of Heerhugowaard is considering this for their transformation area. The possible added value of environmental values on area transformations could perhaps be investigated in further research.

In a broader sense, it is also advisable to carry out further research into the five recently assigned experimental areas from this study. At the time of this study, the municipalities were not yet far enough in the process to be able to indicate exactly how they wanted to use the CRA. Area visions were only recently drawn up or are even being drawn up at the moment. Once they have a draft CRA plan ready, it is interesting to see to what extent they have actually learned lessons from the previously developed plans in other municipalities. The draft of these plans will have to be made available for inspection before December 31 2020, provided that the EPA actually enters into force in January 2021. Regarding the four municipalities that already drew up a CRA plan, at that moment it is also interesting to investigate how their plans function in practise and in what way the transformation process has progressed in the meantime.

A number of nuances can also be placed in the context of legal certainty and legitimacy. This research focused the perception of municipalities. Municipal project leaders therefore formed the majority of the respondents group, alongside some experts in specific areas. Municipalities mainly emphasized throughput legitimacy, also referred to as the black box of governance by Schmidt (2013). Intensive and transparent communication up front is repeatedly mentioned by them as a legitimation for the way in which the CRA possibilities have been applied. However, the municipal perspective is of course not the only one. Suchman (1995) defines legitimacy as 'a generalized perception or assumption that the actions of an entity are desirable, clean or appropriate within some socially constructed system of norms, values, beliefs, and definitions'. The perception of other stakeholders, such as initiators and entrepreneurs in the transformation area, is therefore also important for determining legitimacy. Further research is needed into the perception of initiators and third parties about the legitimacy of the way in which the new instruments of the CRA/EPA can be applied. For example, it is important to investigate whether other parties have also experienced the process as pleasant, or whether they completely disagree with the positive municipal perception of the process. After all, the additional options in the CRA also offer municipalities sufficient opportunities to exert pressure on opposing parties in order to make them cooperate. However, this form of applying the CRA is clearly denied by most respondents. On the basis of this research, this cannot be refuted, because stakeholders other than the municipality have not been interviewed. It is important to do so in any further research.

An important conclusion from this research is that the CRA offers municipalities opportunities to develop a customized zoning plan that optimally matches the transformation process and its unique contextual characteristics. However, this results in a great diversity of plan forms, whereby the mutual comparability of zoning plans decreases. During this research I also experienced that myself. Only a total of three interviews were conducted for three of the four cases where a CRA plan has already been drawn up. An attempt was made to understand the plan as well as possible in advance, but during the interviews the internal plan coherence turned out to be more complex than expected. Several times a new insight emerged a few weeks after the interview, after which additional questions were sent to respondents by email. However, these were not always answered, so the insights are not always verified or denied by respondents. Therefore, it would have probably been better to conduct multiple interviews for each case, so that follow-up questions could be asked during successive interviews. As a glimpse into the future, it may even be argued that the content of specific environmental plans may become more important in practice than detailed knowledge of the EPA itself.

With regard to the EPA, I am also hesitant about the (initial) functioning of DSO in combination with the diversity of plan forms that municipalities are allowed to draw up in the EPA. The problems regarding the development of DSO have led to its ambitions being lowered. In my opinion, it is crucial that DSO is able to display environmental plans simply and clearly, precisely because of their magnitude, diversity and complexity. My concerns about ongoing non-compliant activities add to this. I am very curious how this deviation method will be applied in practise. Only after five years must the deviation be adjusted in the environmental plan. In the meantime, to me it seems unacceptable for legal certainty and clarity if these deviations are not easily visible in DSO.

Finally, in a newspaper article in *Trouw* Beekmans states (In: Vollebregt, 2020) that an increasing number of municipalities are struggling with a shortage of available business space. A link with transformation was not made, but it seems interesting to investigate whether there is a relationship between these trends. For example, transformation could be a cause for the shortage of business space if business plots are transformed into residential locations. On the other hand, it may also be that transformation is actually hampered by a lack of relocation opportunities for nuisance-causing businesses that are now located in transformation areas. It seems recommendable to conduct research into this matter.

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Appendix 1 - Case description

In this appendix, the nine cases investigated are discussed separately, addressing the situation, the transformation ambition and the (expected) bottlenecks therein, the motives for registering with the CRA, the use of the CRA and finally the current plan status. This appendix is therefore purely informative, with the aim of offering context to the reader. Unless stated otherwise, the information about the cases was obtained from interviews with respondents related to these cases. See Appendix 4 for the overview of respondents and the case study to which they are connected.

1.1 Soesterberg-Noord (Soesterberg)

Figure A1.1.1 Transformation area Soesterberg-Noord (Soesterberg) in purple.



Google Earth, edited by author

1.1.1 Situation

Between the residential areas of Soesterberg and the airbase closed in 2009 is the Soesterberg-Noord business park. A number of companies are located on this 20-hectare site that cause a great deal of nuisance, particularly in the form of noise emissions. The location next to the airbase made the area suitable for nuisance-causing companies. After all, a lot more noise came from the airbase. Strangely enough, there have been homes on Soesterberg-Noord for quite some time, and the question arises how this is technically possible with so many noise sources in the area. However, these houses are insulated in such a way that no noise nuisance is experienced inside. As a result of the closure of the airbase, the municipality of Soest intends to realize housing on and around the site. Soesterberg-Noord would thus be enclosed by residential areas, which would result in an undesirable situation. That is why there has been a desire to transform Soesterberg-Noord, where homes are given a more prominent role at the expense of business activity.

1.1.2 Transformation ambitions

The municipality of Soest wishes to expand Soesterberg from approximately 7.000 to 10,000 residents. This, among other things, to maintain and possibly even extend the level of services in the village. The site of the closed airbase offers possibilities to meet this expansion ambition. However, the Soesterberg-Noord business park will then be located centrally in the village. This is an undesirable situation, as a result of which the municipality of Soest wants to transform the business park into a more mixed living and working area.

1.1.3 (Expected) bottlenecks

It is undesirable for the Soesterberg-Noord business park to be located centrally in the village, because current business activities there cause a great deal of noise (see figure A1.1.2) This nuisance limits housing construction at and around the site, because the regular environmental standards can only be met at greater distances. The nuisance of existing business activities must therefore first be reduced. This can be done by taking measures, but also by buying out/relocating companies to other areas. For this purpose, the municipality of Soest has business park Richelleweg available. However, the options mentioned entail high costs.

Figure A1.1.2

Photo by author

1.1.4 Motives for applying as a CRA-Area

The municipality of Soest has applied for becoming an experimental area in the CRA in order to make housing on and around Soesterberg-Noord possible. In 2011, the municipality applied for the experimental development area, but this did not get the transformation started. That is why the municipality of Soest applied again in 2014, this time to experiment with a ZPBS. The municipality has a very pragmatic motive, namely making housing possible the way it was planned.

CRA assignations:

- 2011: experimental development area
- 2014: zoning plan with a broadened scope

1.1.5 Applying the CRA-status

The municipality of Soest has applied the CRA in different ways, since it wanted to reach tailor-made solutions together with the most nuisance-causing companies. That this has not always been successful is demonstrated by the jurisprudence that arose around the drawn up CRA zoning plan. For example, the companies SITA and Elma have successfully argued that they were unlawfully restricted

in their business operations. A tailor-made solution has been created for De Ridder company, via an innovative "chameleon function assignation".

After all, the municipality has given the De Ridder plot a temporary business function assignation for a maximum of 10 years, which, depending on four possible criteria, automatically changes to a residential function assignation. Only one of the following requirements must take place, according to Article 8.4.1 of the plan rules for CRA area Soesterberg-Noord (Municipality of Soest, 2018):

- The municipality terminates the business activities on site on the basis of the Enforcement Process EMAD
- De Ridder itself terminates its business activities on site and has reported this to the municipality by means of a letter
- New homes are delivered in chamber 1 (eastern part of Soesterberg-Noord) or at the former airbase north of chamber 1, insofar as these homes are located within the 50 dB (A) contour of De Ridder, but not before 13 July 2018
- Within 10 years after the zoning plan becomes irrevocable (12-03-2028)

In regular zoning plans, a provisional function assignation is valid for a maximum of five years and a separate decree must be made to change this function assignation again. Then it would again be possible to appeal against this decision , something the municipality finds undesirable because the plan has already been decided on.

The chameleon function assignation was possible through the experiment "zoning plan with a broadened scope". For example, it was possible to deviate from the SVBP2012, the national standard format for zoning plans. A new function assignation could therefore be created. At the time of writing (January 2020), the business activities of De Ridder on Soesterberg-Noord have already ended and dwellings are being built.

Theoretically, the company could still have functioned for several years after the housing was delivered thanks to the assignation of Soesterberg-Noord as an experimental development area. As long as the maximum interior noise value was not exceeded in the homes, De Ridder's noise emissions could temporarily be higher than is allowed by legal standards.

The 'experimental development area' offers the possibility to deviate from applicable environmental standards for a maximum period of ten years if the interior noise value of sensitive objects is acceptable and it is demonstrated that the environmental standards can be met again after ten years. In Soesterberg this offered a solution, because the construction of houses could already be started while SUEZ is still operating its business activities in the same way. This company causes a great deal of nuisance, so that costly measures would have to be taken in order to meet environmental standards for nearby housing. The municipality considers this unnecessary because the nuisance may be back within legal norms within ten years. If this is not the case, the municipality will place a noise barrier between the company and the houses, as can be read in the progress report (2018). In this way it is guaranteed that the environmental standards will be met within ten years.

1.1.6 Current plan status

The CRA plan Soesterberg-Noord was irrevocably established on December 3 2018, after several legal procedures have been conducted for this. Construction of houses began at the beginning of 2019, the first of which was already completed by the end of 2019.

1.2 Rijnhaven-Oost (Alphen aan den Rijn)

1.2.1 Situation

On the north side of Alphen aan den Rijn 'Rijnhaven Oost' is located, a slightly obsolete 30-hectare dezoned business park where several companies and hardware stores are located. Water-related business activities are hardly ever available anymore, which means that the location on the water is not used optimally.

Figure A1.2.1 Transformation area Rijnhaven-Oost (Alphen aan den Rijn) in purple.



Google Earth, edited by author

1.2.2 Transformation ambitions

The municipality of Alphen aan den Rijn wishes to transform Rijnhaven Oost into a mixed living and working area, while fulfilling the potential of the waterfront. This makes the entrance to Alphen aan den Rijn from the north more attractive, while at the same time meeting part of the housing demand of the city.

Figure A1.2.2 Waterfront Rijnhaven Oost



Photo by author

1.2.3 (Expected) bottlenecks

The municipality of Alphen aan den Rijn sees an important bottleneck in environmental zoning. That is why it has already bought out two companies at Oude Rijn, a zoned industrial site on the western side of the water. However, there are also companies that cause nuisance on Rijnhaven Oost, with animal feed producer Van der Bijl most notable. This company has a substantial odor contour that restricts housing in the north of the site. The company has successfully challenged the CRA plan for Rijnhaven Oost several times, because its EUS was unjustly limited by the municipality. As long as Van der Bijl is located at its current location, housing in the northern part of Rijnhaven Oost is not yet possible. The municipality is therefore considering buying out the company

1.2.4 Motives for applying as a CRA-area

On the one hand, the municipality of Alphen aan den Rijn uses the CRA to anticipate the EPA. This way, the organization can get used to the new legislation and the use of new instruments. On the other hand, the municipality uses the CRA to facilitate an organic transformation process in Rijnhaven Oost.

CRA assignations:

• 2015: Zoning plan with a broadened scope

1.2.5 Applying the CRA-status

Various experimental provisions are used in the CRA plan for Rijnhaven Oost. The municipality uses open standards, for example through local policy rules. For example, the municipality has consideration space, which is also future-proof. New insights can easily be processed by changing the relevant local policy rule. This, also in combination with the introduction of the zoning plan activity, makes it possible to create general function assignations without limiting the steering options for the municipality completely. In addition, Article 2.19 of the EMAD is applied via the CRA, as a result of which emission and immission standards are used to investigate the miscibility of companies and sensitive objects (houses). Customizated solutions are thus possible, in contrast to the often rigid use of business categories and target distances in other plans. In this way, existing companies and initiators are themselves responsible for complying with their own emission/immission standard, so that they cannot hinder each other.

What is unique about the CRA plan Rijnhaven Oost is the notification requirement instead of a permit requirement for the functional modification of a building, including changing it to a 'housing' function.

Under certain conditions, it is possible to change the use of buildings to housing without needing any permit. For example, these conditions in the plan rules state that the parking requirement may not increase and that the number of 720 homes in the entire transformation area may not be exceeded. If these conditions are not met, then a permit obligation applies.

1.2.6 Current plan status

After several legal procedures by compound feed company Van der Bijl, in which the company was proven right, the CRA zoning plan was amended and has now been re-established. However, the status "unknown" is remarkable. It is possible that the plan is again being treated by the Council of State. The first homes in the area are currently under construction (figure A1.2.3).

Figure A1.2.3 Construction of housing at Rijnhaven Oost



Photo by author

1.3 Noordpoort (Meppel)

1.3.1 Situation

In the northwest of Meppel contains various outdated business parks and a residential area. Together, this area has been renamed as transformation area Noordpoort, with a size of 33 hectares. The area is close to the city center and is intersected by the Meppelerdiep, a waterway to which several companies in the transformation area are bound. For road traffic, the area forms the city entrance from the north.

Figure A1.3.1 Transformation area Noordpoort (Meppel) in purple.



Google Earth, edited by author

1.3.2 Transformation ambitions

The municipality intends to transform Noordpoort into a high-quality mixed urban area, which provides an attractive entrance for the city. The municipality of Meppel considers it important that the area retains its business function to a significant extent. Companies should therefore not be pushed away by housing.

1.3.3 (Expected) bottlenecks

Nuisance-causing business activity is one of the obstacles to realizing homes in the Noordpoort area. Although several nuisance-causing companies have already left in recent years, the shipyard, for example, is still located in the area. The shipyard might leave the area, but this is not yet completely clear. However, the municipality has already dezoned a nearby industrial site and has reduced business categories, in consultation with the companies. Another bottleneck concerns the business case. Because land in Meppel is not worth much, it is difficult to create a positive business case for the area. The municipality therefore prefers market parties to redevelop the area and hopes to encourage them to develop by facilitating them. Organic area development is therefore the motto, but this results in bottlenecks with regard to the requirements to regular zoning plans, such as demonstrating the feasibility of the plan.

Figure A1.3.2 Shipyard in Meppel



Photo by author

1.3.4 Motives for applying as a CRA-area

The aforementioned bottlenecks have been a reason for the municipality of Meppel to register as a CRA area. Moreover, the municipality wants to anticipate the EPA by already experimenting extensively with the CRA. The boundary of the plan area is extremely suitable for this, because it contains all kinds of different sub-areas, such as a residential area, business parks and even an agricultural plot. This way, a small environmental plan can be drawn up that is largely representative of an environmental plan according to the EPA.

CRA assignations:

2015: zoning plan with a broadened scope / postponement of compensation for planning blight / experimental development area

1.3.5 Applying the CRA-status

The municipality of Meppel has used the CRA to experiment with almost all new possibilities. Only the experimental development area option has not (yet) been necessary and, in addition, the notification obligation and provisional function assignation have not been included in the draft CRA plan. Article 7w has been used to postpone the moment of compensation for planning blight to the permit phase. As stated above, almost all options have been utilized from Article 7c. The SVBP2012 standards have been released in order to be able to work with sub-areas in the plan rules and to formulate other types of rules. Furthermore, the feasibility period has been increased to 20 years, a tailor-made exploitation plan (if needed) is only drawn up in the permit phase, the decision for higher values is included in the plan itself and various competencies are delegated to the Board.

The possibility of being able to refer in the plan to local policy rules with open standards is the aspect most worth mentioning in Meppel. The municipality has drawn up a local policy rule on the basis of the participation process which contains a qualitative assessment framework with three steps for the transformation areas. In step 1, for housing construction initiatives, a justification must be given as to how 'special living' will be realized. Step 2, the mixing panel, offers a flexible netting system. Based on seven sliders with environmental aspects, an assessment can be made for an initiative, with the result that a high overall area quality is ultimately achieved. It can be scored between -1 and +1 on each slider, as long as the average score is at least 0. Initiators can largely complete this mixing panel themselves, because the municipality has quantified the assessment criteria as much as possible. This creates clarity for initiators and third parties. The result is that the municipality of Meppel has limited discretion in step 2. Step 3 of the local policy rule concerns the spatial assessment framework. This contains the conditions against which building initiatives are tested. If a plan complies with the plan rules and all steps in the qualitative assessment framework are successfully completed, the environmental permit will be issued by the municipality.

The qualitative assessment framework is future-proof and therefore very suitable for organic area development, because it is laid down in a local policy rule. Based on new insights, the local policy rule can easily be changed by the municipality, without having to go through a completely new zoning plan procedure.

1.3.6 Current plan status

The draft CRA plan was made available for public inspection on September 10 2019 for a period of six weeks. According to the municipality, the number of views on this was low, which it explains in particular because of the extensive participation process that ultimately led to the draft plan. The definitive CRA zoning plan will probably be established in 2020.

1.4 Binckhorst (The Hague)

1.4.1 Situation

The Hague is a city with a substantial housing demand. The municipality sees Binckhorst, a large business park of 144 hectares, as a suitable location to solve part of its housing needs. The business park is now located in the east of the city. However, the city center and the station are nearby and with the completion of the Rotterdamsebaan in 2020, the accessibility of Binckhorst will be considerably improved. There is a diversity of companies in the area, such as a concrete and asphalt plant, but also, for example, creative companies, car companies and a beer brewery. The municipality has a number of land positions in the area, which were purchased before the economic crisis.

Figure A1.4.1 Transformation area Binckhorst (The Hague) in purple.



Google Earth, edited by author

1.4.2 Transformation ambitions

The municipality of The Hague wishes to transform Binckhorst into a mixed living and working area that forms an attractive view from the almost completed Rotterdamsebaan, a new entrance for the city. The area and the current infrastructure enable the development of 4.427 homes, but as a result of future development this number can be increased even further, for example after the realization of a possible tram line.

1.4.3 (Expected) bottlenecks

One of the bottlenecks for the transformation concerns the high costs. Initially, the municipality tried to take the transformation for its own account through active land policy. When this proved financially impossible, partly as a result of the economic crisis, the municipality opted for a different development strategy. Via organic area development, the municipality is now trying to invite market parties to gradually redevelop the area. This includes a facilitating zoning plan that initially allows housing at all locations. However, mixing residential and business functions is problematic, partly because Binckhorst contains a several companies with a high business category. In addition, the feasibility requirement in regular zoning plans is problematic for the transformation of Binckhorst, because the 10-year planning period is too short and the covering of costs in advance is unrealistic.

1.4.4 Motives for applying as a CRA-area

The municipality of The Hague considered the CRA as an ideal opportunity to facilitate the organic transformation process of Binckhorst through an inviting zoning plan. The choice for a new inviting

strategy did not fit well with the requirements of a regular zoning plan. Via the CRA, the EPA could also be anticipated, so that the municipality could already experiment with new instruments.

CRA assignations:

- 2014: zoning plan with a broadened scope
- 2015: organic cost recovery

1.4.5 Applying the CRA-status

With the help of the CRA, the municipality of The Hague has drawn up an extensive invitational zoning plan for Binckhorst, making particular use of the freedoms that Article 7c offers to deviate from the SVBP2012, shifting the detailed duty of investigation to the permit phase and the possibility to refer the plan rules to local policy rules, in which open standards are used. For example, the municipality has devised a reservation system for initiators. In this way, initiators can reserve part of the planning capacity for six months. For six months, they can then further elaborate the plan and perform all spatial and environmental investigations, knowing that the planning capacity is not full when they want to apply for a permit to realize their initiative. The reservation system thus offers certainty for initiators, which increases the willingness to invest. The capacity for homes (4.427 units) in the reservation system turned out to be filled within a day.

It is remarkable that a few reservations had already been included in the plan, for a total of 1.333 homes and various other functions. Moreover, these reservations have a considerably longer duration than six months, ranging from two to five years. These included reservations contain anterior agreements concluded in advance and these initiators concerned therefore have the advantage that they are guaranteed to be able to develop homes. This is in contrast to new initiators. After all, the reservation system was full within one day, so there are also landowners who initially failed to reserve planning capacity.

In addition to this form of certainty for initiators who are able to make a reservation, the CRA plan also offers flexibility, in particular through referring to local policy rules. For example, it is possible to balance with various aspects. Of course, legal norms must be respected, which means that balancing will in any case lead to a more than acceptable environmental quality. Higher maximum noise values are therefore included in the plan, so that sound can also be easily balanced with. Contrary to the municipality of Meppel, the municipality retains full discretionary space to grant or reject the netting requests of initiators. The starting point of the netting system is that it ultimately brings about a higher environmental quality than when only the minimum standards apply. The local policy rules offer further flexibility by applying open standards for the assessment of aspects.

One of the local policy rules concerns the provision of business space for every housing initiative. Based on this local policy rule, a certain amount of square meters of business space must be realized in proportion to the number of new residents thanks to the initiative (based on the surface of the dwellings). This way, the municipality guarantees that Binckhorst will actually become a mixed-use area, instead of an area with mainly homes.

Another local policy rule, regarding existing business activities, in particular is controversial. The municipality tries to safeguard the EUS of companies through open standards, which can easily be changed because of its placement in a local policy rule. Moreover, it does not seem like a "hard" guarantee to companies that existing business needs to be taken into account, since they prefer their rights to be "respected". During the interview, however, the municipality stated that initiators must have an agreement with companies if they want to realize sensitive functions within their environmental circle. Without approval they will not receive a permit.

To reduce the complexity of the CRA plan, the municipality of The Hague has created its own plan viewer, which is also a CRA option. This viewer is fed from multiple sources and thus shows an up-to-date overview of all kinds of aspects in Binckhorst.

With the help of the CRA, the municipality of The Hague has drawn up an extensive and complex zoning plan for Binckhorst, which is unique in form in the Netherlands. The plan is organic, inviting,

offers room for consideration for the municipality, while it also provides initiators with more security and flexibility. However, the legal position of existing companies is disputed.

1.4.6 Current plan status

The CRA plan for Binckhorst was adopted by the municipality of The Hague on November 29 2018. Thirteen companies have started legal procedures against this plan at the Council of State, in particular because they are afraid of being able to be limited in their business operations. The case is currently pending and a ruling is expected sometime this year (2020). Binckhorst is therefore the example in which the accelerated procedure (within six months) is not achieved at the Council of State. The case is too complex for this. Although the CRA plan is not yet irrevocable and may still be destroyed, it already provides the basis for housing. After all, the reservation system is used extensively and the first plans are (almost) ready for applying for a permit.

1.5 't Veen (Hattem)

1.5.1 Situation

Halfway through the 20th century, the first businesses located themselves on business park 't Veen in Hattem. The site is approximately 11 hectares, contains many businesses and landowners and is located southeast of the historic city center of Hattem. To the southwest of the business park an old residential area is located dating from the beginning of the 20th century. The IJssel and Natura 2000 area *Veluwe* are a short distance from 't Veen (see figure A1.5.1).

Figure A1.5.1 Transformation area 't Veen (Hattem) in purple.



Google Earth, edited by author

1.5.2 Transformation ambitions

In the beginning of the 21st century, around 2005, the ambition arose to transform this business park. The business park is outdated, is located between different residential areas and is therefore also difficult to reach for freight traffic. To reach the highway, a route must be travelled through the narrow streets of a residential area.

In the structural vision from 2012, which has never been established, the transformation wish has been laid down. The new inter-municipal business park Hattemerbroek is also discussed, which is shared by Hattem, Heerde and Oldebroek. This new site, popularly referred to as H20, is partly intended to facilitate the business activities from 't Veen. Its better accessibility compared to 't Veen should be an important pull factor. The relocation of 't Veen to a (mixed) living and working area should start via relocation. The municipality of Hattem owns very limited land within the plan area.

The ambition is to let (the majority of) the activities of 't Veen leave and to develop approximately 500 homes for this. With a housing demand in Hattem of approximately 35 homes per year, the site thus meets the housing needs for the coming fifteen years. In addition, the municipality intends to give this new residential area a strong, sustainable character.

The municipality plays a facilitating role in the transformation process. This is due to the fact that the municipality hardly owns any land within the area, but does have an alternative location for the activity, namely the intermunicipal business park Hattemerbroek. The municipality does not have a lot of budget, but it is possible that a subsidy may still be obtained from a provincial fund or from the European Union.

1.5.3 (Expected) bottlenecks

The municipality of Hattem foresees some bottlenecks during the transformation process. The first point of interest concerns the EUS of companies that may hinder the transformation of the area to mixed use with housing. Secondly, creating a positive business case is a challenge, all the more so because an overhead power line must be laid underground to make the transformation possible. The third problem concerns the feasibility requirements of regular zoning plans, such as the feasibility period and the assurance of the cost recovery. To date, the municipality has therefore worked with stamp plans, but for an optimal area development, an integral zoning plan is preferable.

1.5.4 Motives for applying as a CRA-area

In 2019, 't Veen was assigned as a CRA area. The area has been assigned as an experimental development area, but also as an experiment for the ZPBS. In this way the municipality of Hattem has various new instruments at its disposal to promote the transformation of 't Veen. The municipality has several reasons for registering as a CRA area. The extra possibilities for flexibility and the ability to postpone the feasibility requirements make organic area development possible on the basis of one inviting zoning plan. In addition, the CRA status can act as a stick in the search for cooperation with companies. Optimization of EUS, for example, is simplified.

CRA assignations:

• 2019: zoning plan with a broadened scope / experimental development area

1.5.5 Applying the CRA-status

The municipality of Hattem does not yet know exactly how it will apply the new set of instruments. The CRA zoning plan still needs to be drawn up after the development vision has first been established. Presumably the CRA status will be used to remove the feasibility requirements of regular zoning plans, to enable an organic variant of cost recovery and to remove environmental zoning restrictions regarding housing near businesses.

1.5.6 Current plan status

The municipality of Hattem is currently working on the development vision for 't Veen, which describes the desired development direction. This will probably be established at the beginning of 2020, after which the CRA zoning plan can be drawn up. Before 31 December 2020, the municipality will want to make the draft of this available for inspection. With regard to the two locations for which stamp plans have been made, it may already be possible to start developing housing.

1.6 Liebergerweg (Hilversum)

1.6.1 Situation

Immediately southeast of the Hilversum station the Liebergerweg business park is located, which is 11 hectares in size. The site is located between the railway and a working-class neighbourhood. There are several companies on the site, some with a large lot. Here you will find the European headquarters and the Dutch distribution center of Hünkemoller and a car rental company. There is also an international fragrance and flavor company and a few smaller companies. In particular, Hünkemoller and the car rental company ensure a major traffic-attracting effect, while the infrastructure is not suitable for this. The Liebergerweg is in fact a narrow street where houses are located directly next to it.



Figure A1.6.1 Transformation area Liebergerweg (Hilversum) in purple.

Google Earth, edited by author

1.6.2 Transformation ambitions

The municipality of Hilversum intends to give the entire postcode area 1221 a qualitative boost. This concerns both the residential area and the Liebergerweg business park, which is particularly outdated (figure A1.6.2). The 1221 area agenda has therefore been established through an extensive participation process. A consensus has emerged to transform the Liebergerweg business area into a mixed residential and working area. The substantial demand for housing in the municipality of Hilversum is partly met by offering space for residential construction on the site. Space for this is created by the expected departure of the Hünkemoller distribution center and possibly some other companies. It has been established that the number of jobs must be preserved.

Figure A1.6.2 Hünkemoller distribution center in Hilversum



Photo by author

With regard to the residential area, the municipality intends to take climate adaptive measures, with the aim of making the residential area future-proof. The municipality approaches the entire postcode area as one integral task, whereby the transformation of the business park also benefits the residential area.

Figure A1.6.3 Messy appearance of business area Liebergerweg



Photo by author

1.6.3 (Expected) bottlenecks

One of the bottlenecks for the municipality is the comprehensive development of postcode area 1221, because the area has many owners and the municipality owns no land. In addition, for example, the detailed investigation obligation in regular zoning plans is problematic. This complicates the organic area development advocated by the municipality.

1.6.4 Motives for applying as a CRA-area

On the one hand, the municipality of Hilversum desires to use the possibilities in the CRA to anticipate the EPA. This way she becomes familiar with the new instruments. On the other hand, the CRA offers opportunities to facilitate the organic transformation process, in particular through Article 7c. In addition, by means of the development area experiment the environmental standards can be deviated from for a maximum of 10 years. Although the municipality expects no problems with companies about their EUS, this instrument may prove to be of value with regard to the noise impact of road traffic.

CRA assignations:

• 2019: zoning plan with a broadened scope / experimental development area

1.6.5 Applying the CRA-status

As the CRA plan is still being drawn up, it is not yet clear how exactly the new options will be used. The broadened scope of the plan is probably used, in combination with extensive options for flexibility. For example, the municipality is considering introducing a spider web, a variant of the mixing panel in Meppel, in order to be able to balance with various aspects.

1.6.6 Current plan status

The future agenda for postcode area 1221 was established in 2019, after which the entire area was assigned as an experimental area according to the CRA. The CRA plan is currently being drawn up. The draft will probably be made available for inspection at the end of 2020.

1.7 Strijp-S (Eindhoven)

1.7.1 Situation

Strijp-S is a 31-hectare business park in the north-west of Eindhoven. The site is easily accessible by car, but also via public transport via Strijp-S station. The former Philip site was previously a closed entity, to which only Philips personnel had access. After the relocation of its business activities, Philips sold the site in 2001 via a tender procedure for \leq 140.000.000 to VolkerWessels and another party. After the second party withdrew, the municipality of Eindhoven stepped into the project through a Public-private partnership [PPP] construction with VolkerWessels. Through this PPP construction Park Strijp Beheer B.V. is responsible for the transformation of Strijp-S.

Figure A1.7.1 Transformation area Strijp-S (Eindhoven) in purple.



Google Earth, edited by author

1.7.2 Transformation ambitions

VolkerWessels and the municipality of Eindhoven want to transform Strijp-S into an innovative living and working area, where residents, innovative companies and smart city experiments find their place. Strijp-S offers space for 3.600-4.000 homes. Strijp-S also offers a place for recreation, including cafes, sports facilities and several large events per year.

Figure A1.7.2 (The construction of) housing at Strijp-S



Photo by author

1.7.3 (Expected) bottlenecks

The bottlenecks on Strijp-S are limited, in particular because the PPP construction owns almost all of the land. Only along the track is a different PPP construction being developed, but VolkerWessels is also part of this. The complexity is precisely in the scope of the development, but also offers room for manoeuvre. In addition, dealing with current residents and companies is a challenge. After all, they should experience as little nuisance as possible. It is also important that renting companies do not slow the area transformation. Finally, the requirements for regular zoning plans are limiting flexibility.

1.7.4 Motives for applying as a CRA-area

Although the transformation of Strijp-S does not appear to contain any major bottlenecks, the municipality of Eindhoven has nevertheless registered the area as an experimental area via the CRA. The application was awarded in 2018. On the one hand, the municipality wants to practice with the new EPA system. On the other hand, the CRA offers possibilities to create more internal plan flexibility and to postpone the detailed research obligation until the permit phase. The shortened legal procedure is also a motive for registering as an experimental area.

CRA assignation:

• 2018: zoning plan with a broadened scope

1.7.5 Applying the CRA-status

As the CRA plan is still being drawn up, it is not yet clear how exactly the new options will be used. The broadened scope of the plan is presumably used, in combination with extensive options for flexibility.

1.7.6 Current plan status

A zoning plan with general function assignations has already been established in 2017. There is already plenty of construction work going on at Strijp-S. A new zoning plan, with the help of the CRA, is now being prepared to offer even more options for flexibility and pace. The draft will probably be made available for inspection at the end of 2020.

1.8 Stationsgebied OV1200 (Heerhugowaard)

1.8.1 Situation

To the north of the railway track along Heerhugowaard is a strip of business activity of 66 hectares. In Heerhugowaard, companies are physically separated from the houses, which are located south of the track. The business strip, where a number of educational institutions are now also located, is becoming obsolete and will become a central location within the new municipality as a result of the merger between the municipalities of Heerhugowaard and Langedijk in 2022. The municipality of Heerhugowaard is therefore aiming to transform the area.

Figure A1.8.1 Transformation area Stationsgebied (Heerhugowaard) in purple.



Google Earth, edited by author

1.8.2 Transformation ambitions

The aging of the business strip, the proximity of the station and the central location in the municipality as a result of the upcoming municipal merger mean that the municipality of Heerhugowaard wants to transform the area into a mixed living and working area. In addition to housing, the municipality also wishes to add several care functions to the area. This way the housing needs of Heerhugowaard can be met and at the same time employment in the municipality increases. The station is also located in the center of the transformation area. By transforming the station area into an attractive area, the municipality hopes to turn it into an appealing area of the city.

Figure A1.8.2 The business area in Heerhugowaard is directly adjacent to the station.



Photo by author

1.8.3 (Expected) Bottlenecks

The transformation process contains a few bottlenecks, in particular because of the integrality of the assignment. For example, the railway and the station must be adjusted in collaboration with the Dutch Railways and ProRail. A tunnel under the track must also be constructed at the Zuidtangent road. The water infrastructure along the track is also a challenge. In addition, the municipality wants the area to develop in phases, so that the area is not temporarily locked in terms of infrastructure. Other problems concern fragmented land ownership and the limitations of regular zoning plans regarding organic area development. The feasibility requirements are, after all, a problem. The environmental nuisance of companies does fortunately not seem to be a bottleneck, as there is no heavy activity in the area. Only a galvanizing plant to the north of the transformation area can possibly impede housing on the north side.

1.8.4 Motives for applying as a Chw-area

The municipality of Heerhugowaard has several motives for experimenting with the CRA. The reduction of feasibility requirements is one of the reasons. The municipality also wants to create consideration space throughout the transformation process by referring to local policy rules in the plan and applying open standards. In this way, the municipality hopes to enable customized solutions. With the broadened scope of the zoning plan, the transformation process can be approached more integrally. Finally, the municipality of Heerhugowaard may also be experimenting with environmental values.

CRA assignation:

• 2019: zoning plan with a broadened scope

1.8.5 Applying the CRA-status

As the CRA plan is still being drawn up, it is not yet clear how exactly the new options will be used. The broadened scope of the plan is probably used, in combination with extensive options for flexibility, also with regard to cost recovery. In addition, the municipality is considering using environmental values.

1.8.6 Current plan status

The process was delayed by slight disagreements with the municipality of Langedijk about the building heights to be realized in the station area. The CRA plan is currently being drawn up. The draft will probably be made available for inspection at the end of 2020. In all likelihood, the CRA area will be expanded in the meantime, as only 44 out of the total of 66 hectares have now been assigned as an experimental area. This is because only the immediate vicinity of the station area is marked during the first assignation (see figure A1.8.1).

1.9 Schieoevers Noord (Delft)

1.9.1 Situation

In the south of Delft the business areas Schieoevers Noord and Schieoevers Zuid are located. These are two industrial sites with high environmental categories, as a result of which many companies causing nuisance are established. Delft Campus station (former: Delft Zuid) is located between both sites. The station area of Delft is located almost immediately north of Schieoevers Noord, followed by the city center. The university campus of TU Delft is located east of Schieoevers Noord, which means that the business park is centrally located and has high potential. The municipality of Delft therefore intends to transform Schieoevers Noord, the size of more than 75 hectares. There are a few companies located in the area mainly containing very large business plots. The number of owners is therefore low. The railway line is on the west side of Schieoevers Noord, while the Schie (a waterway) runs through the area. Schieoevers Zuid continues to function as a monofunctional business park, which offers potential relocation options for companies on Schieoevers Noord.

Figure A1.9.1 Transformation area Schieoevers Noord (Delft) in purple.



Google Earth, edited by author

1.9.2 Transformation ambitions

Schieoevers Noord business park still functions sufficiently and there is little vacancy. Nevertheless, the municipality of Delft believes that the potential of the location is insufficiently fulfilled due to its current monofunctional business function. The location along the Schie waterway and near the city center, two train stations and TU Delft makes the location of Schieoevers Noord very attractive. Delft is also struggling with a considerable need for housing. The municipality therefore wants to transform the site into a mixed and intensive living and working area which ultimately offers space for around 7.700 homes and 5.500 jobs. In terms of activity, the municipality strives for an innovative manufacturing function that is complementary to technical education on the adjacent university campus. An organic transformation process is planned for Schieoevers Noord and because the area is characterized by a few large plots, it is easy to develop per released plot.

1.9.3 (Expected) bottlenecks

The municipality foresees some bottlenecks for the transformation process, including potential resistance from companies. Since they have high environmental categories, they may be hindering the development of homes, because limiting business operations can lead to high claims for
compensation of planning blight. This while the actual environmental contour of the companies is often less than is assumed according to their environmental category. Latent EUS can therefore hinder residential functions. In addition, the infrastructure is currently below par for the ambitioned capacity. Moreover, the municipality is dependent on market parties for development, since it wants to actively minimize active land policy. Only in exceptional cases does the municipality wish to purchase land, for example if this is necessary to remove extensive environmental contours.



Figure A1.9.2 nuisance-causing business activity along the Schie at Schieoevers Noord

Photo by author

1.9.4 Motives for applying as a CRA area

Removing bottlenecks is the most important motivation to experiment with the CRA in Schieoevers Noord. For example, the municipality of Delft wants to use the CRA to reduce environmental circles to the real needs of companies. Moreover, through the experimental development area status the environmental standards can be temporarily deviated from, which can start the transformation without directly limiting companies. Compensation for planning blight can also be reduced via the CRA and the feasibility requirements for regular zoning plans are alleviated. The municipality wishes to apply for Article 7w of the CRA, in order to make the organic method of cost recovery possible for the whole transformation process. In this way an organic and adaptive zoning plan can ultimately be drawn up.

CRA assignations:

• 2018: zoning plan with a broadened scope / experimental development area

1.9.5 Applying the CRA status

As the CRA plan is still being drawn up, it is not yet clear how exactly the new options will be used. The broadened scope of the plan is presumably used, in combination with extensive flexibility options, in particular regarding environmental standards and cost recovery.

1.9.6 Current plan status

The definitive development plan was established in June 2019, setting out the direction for the redevelopment of Schieoevers Noord. The CRA plan is currently being drawn up. The draft will probably be made available for inspection at the end of 2020.

Appendix 2 - Topic list A

Date:

Topic list

Duration:

Case:	Respondent:
Introduction	Audio recording & anonymity
	Interviewer/respondent introduction
	Small talk about the municipality/city
	Optional: role of institution regarding the project

History of the business area	Construction period
	Original target group (type of area)
	Size
	Geographical location

Current situation of the business area	Geographical location (now)
	Functions (now)
	Land ownership structure
	Local problems
	Approach municipality

Ambitions for the business area	Starting moment (transformation ideas)
	Ambitions for the area itself
	Ambitions regarding wider spatial issues
	Bottlenecks
	Partners
	Opponents

Process	Motive
(zoning plan with broadened scope)	Moment of registration (as experimental area)
	Reference projects (lessons learnt?)
	Knowledge level institution (Omgevingswet)
	Practical experiences municipality
	Practical experiences other actors
	Solving bottlenecks? Success?
	Benefits in contrast to current planning legislation
	Project expectations (future)

Omgevingswet	Difference with current planning system and Chw
	Expectations
	Legitimacy: Flexibility vs. legal certainty
	Learning process respondent
	Trust (both in the law and in own organization)

Ending	Receiving end result
	Recommendations (contacts same project/other projects)
	Optional: follow-up appointment

Appendix 3 - Topic list B

Date:

Topic list

Duration:

Case:	Respondent:
Introduction	Audio recording & anonymity
	Interviewer/respondent introductions
	Optional: role of institution on research topic

Spatial issues	Housing shortage
	Outdated inner-city business areas
	Transformation bottlenecks
	Specific projects

Omgevingswet	Difference with current planning system
	Principles/pillars
	Legitimacy: Flexibility vs. legal certainty
	Learning process respondent
	Respondent perspective (expectations/trust)

Crisis- en herstelwet/transitiewet	Motives
	Degree of usage
	Nature of application
	Experiences
	Advanced insight

Ending	Receiving end result
	Recommendations
	Optional: follow-up appointment

Appendix 4 - Respondent table Table A4.1 Respondent overview

Respondent number	Respondent name	Specific case	Private/public actor
1	Monique Arnolds	None / general	Public
2	Anonymous lawyer	None / general	Private
3	Sybold Herder	Hattem	Public/Private
4	Arno Kleine Staarman	Hattem	Public/Private
5	Maarten Hoorn	None	Private
6	Derk van Schoten	Delft	Public/Private
7	Annette Zebel-Vaudo	Soesterberg / general	Private
8	Marije Drost	Hilversum	Public
9	Reinier Kalt	Soesterberg	Public
10	Jan Cas Smit	Meppel	Public
11	Joske Poelstra	Meppel	Private
12	Rein Bruinsma	Soesterberg / general	Private
13	Rick van Kempen	Eindhoven	Public/Private
14	Esther Poot	Alphen aan den Rijn	Public
15	Willem Korthals Altes	None	Private
16	Patricia Langman	Heerhugowaard	Public
17	Kees Kruithof	Heerhugowaard	Public
18	Saskia Jansma	Heerhugowaard	Public
19	Maayke Houtman	The Hague	Public

Table by author

Appendix 5 - Code tree ATLAS.ti

Figure A5.1

Code (steden)bouwkundige oplossingen	Grounded	Density
Afwijkplanologie	11	4
Ambitieniveau	15	9
Bestuurlijke afwegingsruimte	30	14
Bottleneck - Kosten	41	
Bottleneck - Lange looptijd	16	4
Bottleneck - Milieuzonering	44	11
Bottleneck - Mobiliteit Bottleneck - Llitvoerbaarheid	6	-
Bottleneck - Versnipperd grondeigendom	10	6
Bottom-up	2	ŧ
Case-info Alphen aan den Rijn	24	1
Case-info Delft	11	
Case-info Eindhoven	20	4
Case-info Hattem	9	
Case-info Heerhugowaard	35	1
Case-info Hilversum	4	1
Case-info Soesterberg	39	
Chw - Diversiteit aan plannen/maatwerk	9	4
Chw - Ontwikkelingsgebied	9	6
Chw - Verbrede reikwijdte	16	25
Chw TW - Afwijken van wetgeving	19	1
Chw TW - beleidsregels / open normen	21	
Chw TW - Delegeren aan College	2	
Chw TW - Doorschuiven naar	7	4
vergunningsaanvraag		
Chw TW - Expertise ministerie BZK	3	2
Criw I W - Globaal bestemmen	10	8
ambities/plan	8	4
Chw TW - Juridische procedure	7	5
Chw TW - Kosten	14	1
Chw TW - meldingsplicht	6	
Chw TW - Milieugebruiksruimte	19	5
Criw I W - Planschade uitstellen	3	
Chw TW - programma/omgevingswaarden	3	
Chw TW - Stimuleren duurzaamheid	3	-
Chw TW - stok achter de deur	4	3
Chw TW - stramien loslaten/flexibele	14	2
planvorm	0	
Chw TW - Unvoeringstermijn Chw TW - Voorbereiding Omgevingswet	9 27	
Chw TW - Voorlopige bestemming langer	3	2
Creativiteit/mogelijkheden binnen huidige	32	7
wetgeving		
Dichtgetimmerde bestemmingsplannen	8	10
Instrumentenkist	9	11
Legitimiteit - Aankomende Omgevingswet	1	
Legitimiteit - Alternatieve bedrijfslocatie	6	7
Legitimiteit - Categorie indicatief	5	8
Legitimiteit - Democratisch systeem	4	7
Legitimiteit - Maatschappelijk belang	13	16
Legitimiteit - Rechtsbescherming	10	20
Legitimiteit - Transparantie/goed overleg	18	
Maatregelen (BBT/ALARA)	4	8
Mengen op gebouwniveau	1	4
Migratiegedrag bedrijven (volggedrag)	3	3
Motieven transformatie	32	13
Omgevingswet - Geest Ow	8	17
Omgevingswet - globale functieaanduiding	2	12
Omgevingswet - instrumenten faciliteren	3	Ę
ambities		
Omgevingswet - Omgevingsplan	12	16
	5	10
Omgevingswet - reaeldruk	7	
Omgevingswet - transparanter	10	10
Omgevingswet - zorgplicht	2	4
Omgevingswet - Zwaartepunt bij	9	16
Omvong/functioneren embeliik ennereet	26	
Onduideliikheid/continue wisseling wetgeving	7	12
Organische gebiedsontwikkeling	43	23
Overgang naar Omgevingswet	23	11
Overlappende wetgeving	11	9
Participatie	12	13
namingcultuur - cultuuromslag	22	10
Planningcultuur - Sectoraal denken	6	
Precedentwerking jurisprudentie	11	
(voorbeelden)		
Rechtszekerheid vs flexibiliteit	41	18
Reterentieprojecten/kennisuitwisseling	36	
Reserveringssysteem	10	
Rol gemeente	88	1
Rol gemeente - Actief	21	
Rol gemeente - faciliteren	34	1:
Rol gemeente - switch van rol	7	1(
Rol gemeente - uitnodigen	14	1
kui gemeente - verbinden Rolneming bestaande bedrijvigheid	8	6
Salderen	34	
Stad- en milieubenadering	2	1
Stelselherziening	10	10
Subsidie	7	3
I echnische innovatie	6	1
i vekomstbestendig (adaptiet) plan	9	16
	3	

Appendix 6 - Overview of events visited Table A6.1 Overview of events visited

Date	Event	Location	Added value
24-09-2019	Urban transformation program (Programma stedelijke transformatie)	Rho adviseurs (Rotterdam)	 Recruit cases/respondents In-depth information about cases Learning about environmental zoning aspects
28-10-2019	Day of the City (Dag van de Stad)	World Forum (The Hague)	 Visiting Binckhorst Learn about contrasting case (Plaspoelpolder - Rijkswijk) Additional learning in general
18-11-2019	Practical Festival Environment and Planning Act (Praktijkfestival Omgevingswet)	Rijtuigenloods (Amersfoort)	 Additional learning about the Environment and Planning Act In-depth information about cases Additional learning in general
06-12-2019	Real Estate Symposium (Vastgoedsymposium)	CBRE (Amsterdam)	 In-depth information cases from the view of private parties More insight into the financial aspect
09-12-2019	Urban transformation program (Programma stedelijke transformatie)	Seats2meet (Utrecht)	 In-depth information about cases In-depth information about deviating from environmental standards Meet again with some respondents

Table by author