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The case of office conversions in Rotterdam, the Netherlands**

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Planning Policy Instruments for Resilient Urban Redevelopment: The case of office conversions in Rotterdam, the Netherlands

Book chapter for: Resilience, Sustainability, and Change use Adaptations (RCSA)
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Abstract

Cities all over the world are searching for ways to become more resilient to climate change effects and related economic challenges. The general consensus seems to be that resilience refers to the ability of a system to respond to exogenous and endogenous pressures. Resilient urban redevelopment through sustainable building adaption could possibly be a strategy, which accommodates endogenous pressures such as socio-demographic change, changes the economic base of cities, and enhances urban environmental quality. Urban resilience can be built in part by reshaping real estate markets, in which institutions and organisations prefer adaptation of real estate over demolition and new built. However, this requires the utilisation of public planning policy instruments which correspond to changing real estate market demands and private actor needs. This chapter aims to illustrate that making urban areas more resilient by adopting existing real estate to new uses requires an effective mix of planning policy instruments and activities which is aligned with market needs at both city and local development levels. This is achieved by introducing some planning policy instrument classifications, providing case study examples of the utilisation of a variety of planning policies for the adaptation of obsolete office buildings in the city of Rotterdam, and concluding with some general implications for resilient urban redevelopment practice and research.

4.1 Introduction

Cities all over the world are searching for ways to become more resilient to climate change effects which enable them to thrive socially, economically and environmentally in the future (Pearson et al., 2014). However, resilience in the built environment remains an ambiguous concept, it is not all about responding to climate change or natural hazards (cf. Allan and Bryant, 2011; Van der Heijden, 2014; Gaaff, 2015). It can contain requirements such as energy efficiency through improvements in urban infrastructure, buildings, transport, food and water systems; decrease in resource consumption at household, neighbourhood and city levels; emphasis on distributed localize energy, water and food production, etc. (see Wiseman and Edwards, 2012). Resilience can also relate to (rapid) economic changes (e.g. financial crises), and the 'short-term ability of economic and social systems to cope with the fall-out of recession and the immediate needs of existing communities and businesses' (Raco and Street, 2012:1066).

With regard to the above, authors point out that resilience relates to systems' capabilities to respond to exogenous and endogenous challenges. For instance, Newton and Doherty (2014:7) define resilience as 'the capacity of an urban system – including the natural, built, social and economic elements – to manage change, learn from difficult situations and be in a position to rebound after experiencing significant stress or shock'. Van der Heijden (2014:5) argues that 'resilience may be considered a descriptive concept that gives insight into the particular properties of a city that make it capable to maintain functioning and recovering from disaster'. Others, like De Jong et al. (2015) argue that 'resilience means the ability of a system, community or society exposed to hazards to

resist, absorb, accommodate to and recover from the effects of a hazard in a timely and efficient manner, including the preservation and restoration of its essential basic structures and functions’.

The ambiguity of resilience can also be attributed to the fact that cities may face different challenges which drives them to develop specific planning policies in order to become more resilient in the future. For instance, Newton and Doherty (2014:15) argue that ‘achieving sustainable resilient cities requires a commitment to innovative long-term planning and design, appropriate regulation, nation building, global cooperation and community engagement’. Wilkinson et al. (2014:3) state that ‘the drive for climate change adaptation such as carbon neutrality ... is prompting city authorities around the world to implement legislation and policy to encourage sustainable building adaptation.’

Note that for such policies to become implemented, governance activities ‘undertaken by one or more actors seeking to shape, regulate or attempt to [change] human behaviour’ (Van der Heijden, 2014, p. 6) are necessary. In addition, Roberts (2014, p. 203) further states that governance for resilient cities should ‘be capable of developing integrated approaches to the delivery of policy’, which can be done through structures of partnerships and collaboration. This means that resilient policy-making essentially require the cooperation of public, private and civil stakeholders, as policy instruments are aimed to affect market behaviour and decisions. Christensen and Sayce (2014, p. 125) rightly point out that policies become implemented once ‘planners and policymakers ... understand the property development process, the risks and rewards that drive property developers and investors’. Moreover, effective policy implementation and governance are often supported by sustainable leadership (cf. Blakely, 2014) and finding (policy) windows of opportunity (cf. Roggema, 2014) to establish change.

To make it more concrete, we need to consider what type of system we aim to govern or aim to develop policies for. One dominant discourse seems to be that cities need to redevelop existing built up areas and real estate, as ‘with 1-2% of new buildings added to the total stock annually, human-kind needs to adapt its existing buildings, and quickly... as much of the built environment that will exist in 2050 has already been built’ (Wilkinson et al., 2014:xiv). Wilkinson et al. (2014:15) also emphasise that ‘due to the contribution and impact of the built environment on carbon emissions, adaption [of buildings] is perceived to be an area where significant positive outcomes are possible.’ As of now it is understood that ‘adaptation is inherently environmentally sustainable because it involves less material use (i.e. resource consumption), less transport energy, less energy consumption and less pollution during construction (Johnstone 1995; Bullen, 2007)’ (Wilkinson et al., 2014:5).

But can building adaptation also make urban areas and cities more resilient? We argue that urban resilience can be built by reshaping real estate markets (see Heurkens et al., 2015), by preferring adaptation of obsolete real estate to future uses over demolition and new build (cf. Remøy, 2015). Especially, since adaptations often occur as ‘a result of legal, economic, physical, social and environmental drivers’ (Wilkinson et al., 2014:2), a structurally changing (decreasing) market demand for offices for example can be considered as an important (endogenous) pressure for real estate markets to become more resilient. In that sense, urban redevelopment through building adaption could accommodate socio-demographic change, change the economic base of cities, and enhance urban environmental quality (cf. Newton and Doherty, 2014).

Considering the above, it comes as no surprise that this chapter considers resilient urban redevelopment as the ability of public and private stakeholders to respond to changes in real estate market demand by adopting existing offices to new usages. This chapter aims to illustrate that making urban areas more resilient by adopting existing real estate to new uses requires an effective mix of planning policy instruments and activities which is aligned with market needs at both city and local development levels. Therefore, first we explore various conceptual planning policy instruments which could assist in realising resilient urban redevelopment. Additionally, the effectiveness of such planning policy instruments is demonstrated by case study examples from the city of Rotterdam in the Netherlands. The chapter concludes with some comparative case study lessons for policy makers and general conclusions for research on resilient urban redevelopment.

4.2 Conceptual planning policy instruments

Policy instruments play a pivotal role in the delivery of resilient urban areas. The choice of policy instruments, however, is no easy matter for policy makers and legislators. This section conceptualises policy instruments by elaborating on some of the difficulties involved in choosing the ‘right’ policy instrument.

4.2.1 Classifications of policy instruments

Policy instruments can be classified. Classifications aim to illustrate the variety of policy instruments that can be applied to shape market behaviour targeted at realising resilient urban redevelopment through office conversions. In policy terms, the vacancy of offices is a societal problem in major parts in the Netherlands (and many other countries), which has been designated by politicians as a policy problem. To reach its policy objectives, government chooses policy instruments. There are many different classifications of policy instruments. An extensive overview of classifications is given by Fobé et. al. (2014) and by Schram (2005). Such classifications can be used for the analyses of policy. It can give insight into the instruments that are chosen in practice to steer the actions of actors within a policy area, such as the vacancy and reuse of offices. Thereby it also gives insight into which instruments were *not* chosen (cf. Fobé et. al., 2014, 63).

Some of the classifications are generic, which means they can be applied to any policy area. This is, for instance, the case for a classification of disciplines (Van den Heuvel, 2005). This is an often used classification (see table x.1). It is a generic classification which can be applied to any policy area in any country. Each of the three disciplines can be subdivided, but for the purpose of this chapter, it not necessary to do so.

Table 4.1. Policy instruments: classification of disciplines (Van den Heuvel, 2005).

Legal policy instruments
Financial policy instruments
Communicative policy instruments

Another classification concerning the degree of pressure, is generic too (Van den Heuvel, 2005:23) (see table 4.2), and can also be applied to any policy field.

Table 4.2. Policy instruments: classification of the degree of pressure (Van den Heuvel, 2005:23).

<i>Degree of pressure</i>	<i>Examples of instruments</i>
Coercion	Act, levy

Transaction	Agreement, subsidy
Persuasion	Advice, information

Note that a classification of degree of pressure does not coincide with a classification of disciplines. For example, an act and an agreement both are legal instruments, but differ as far as degree of pressure is concerned.

A third and final classification to be discussed here, is a classification of planning policy instruments (Adams et al., 2005, 64; Adams and Tiesdell, 2013, 134–35) (see table 4.3).

Table 4.3. Policy instruments: classification of planning instruments (Adams et al., 2005, 64; Adams and Tiesdell, 2013, 134–35).

Instruments	Impact on markets	Sub-types	Examples
Shaping	Shape decision environment of development actors by setting broad context for market actions and transactions	Development/investment plans	Public (infrastructure) investment plans
		Regulatory plans	Statutory plans, policies, strategies
		Indicative plans	Non-statutory plans, policies, strategies
Regulating	Constrain decision environment of development actors by regulating or controlling market actions and transactions	State/third party regulation	Planning permission, property rights
		Contractual regulation	Development agreements
Stimulus	Expand decision environment of development actors by facilitating market actions and transactions	Direct state actions	Reclamation, infrastructure, land acquisition
		Price-adjusting instruments	Grants, tax incentives, bonuses
		Risk-reducing instruments	Policy certainty, place management
		Capital-raising instruments	Loan guarantees, funds, partnerships
Capacity building	Enable development actors to operate more effectively within their decision environment and so facilitate the operation of other policy instruments	Market-shaping cultures, mind-sets, ideas	New perspectives, ways of thinking
		Market-rich information	Market/development process logics
		Market-rooted networks	Formal/informal interaction arenas
		Market-relevant skills	Human capital, individuals

This classification is not generic, but specific for the policy area of (spatial) planning, which makes it suitable for the topic of resilience in urban development. The classification of planning instruments is especially useful for the topic of this chapter since it specifies the impact of each of the four instruments on markets. As explained above, markets play an important role in the pursuance of resilient urban development and in order to improve its effectiveness, planners must behave as market actors that strategically deploy planning instruments to influence market behaviour

(Heurkens et al., 2015). A further feature is that the classification of planning instruments incorporates a wide range of planning policy instruments. This includes ‘capacity building’, which essentially is a multi-governance form of facilitating that in policy terms can be regarded as a form of policy formation.

4.2.2. Complications when choosing a policy instrument

It is likely that the choice of one or more policy instruments is determined by the effectiveness of that instrument. However, there are complicating factors. The choice for a policy instrument is not entirely free. Some instruments come with more costs than others. For example, keeping a vacancy register (Dutch: leegstandregister) in the framework of a municipal vacancy ordinance (Dutch: leegstandverordening) comes with the necessary costs. High costs may make the choice of a policy instrument unattractive. Furthermore, one policy instrument has more side effects than another instrument. For example, a subsidy for the demolition of vacant offices may give a wrong signal to the owners-investors of these offices: the problems will be solved by the subsidy, and there is no need for owners-investors to take measures themselves under this policy instrument.

Moreover, it may be necessary to choose and design the policy instrument in consultation with actors in the policy area. If government is heavily dependent on private actors for the realisation of its policy, it is very conceivable that these actors influence the choice of instrument(s). For example, if government wants to set up a fund for the demolition of vacant offices and this fund largely has to be filled by contributions from developers of new offices, it is necessary to gain support from the developers. In sum, the choice of one or more policy instruments may depend on more factors than just the perceived effectiveness of the instrument.

4.2.3. Policy networks

As stated above, there may be circumstances under which it is necessary for policy makers to choose and design the policy instrument in consultation with the actors in the policy area. Here, the concept of policy networks is useful (Van den Heuvel, 2005:38; Klijn en Koppenjan, 2004:11). A policy network entails that the approach of a policy problem happens in a network in which public (municipalities, regional authorities) and private parties (investors, developers, builders, housing associations) are active.

The policy processes around the reuse of vacant offices occur in a policy network (for the concept of policy network, see Van den Heuvel, 2005:38; Klijn en Koppenjan, 2004:11). According to Van den Heuvel (2005:43 – translation from Dutch) policy networks are appropriate:

- ‘For policy problems where the policy actors are dependent on each other and thus co-production is needed, because no one of the policy actors by themselves have enough knowledge, expertise, powers and means to realise the intended policy;
- For new and complicated policy problems (...);
- To steer complex policy areas – where many relationships of dependency exist and the steering of one actor has consequences for the other – from a central point (...)’

The office vacancy problem meets these suitability requirements. As far as the first point is concerned: the knowledge and expertise about vacant offices is spread over different actors. For example, local authorities are experts regarding legal procedures and owner-investors have expertise regarding market potential. Both fields of expertise are necessary. As far as the second point is

concerned: largescale office vacancy is a relatively new phenomenon in the Netherlands (and many other countries). Certainly, it is not a traditional problem with a proven 'solution'. As far as the third point is concerned: in the area of office vacancy many relationships of dependency exist in which the steering of one actor can have consequences for the other. For example, if a municipality appoints locations for the development of new offices, it will be positive for developers. But, in principle it will hinder the reuse of vacant offices of owner-investors.

In sum, approaching a policy problem via a policy network appears to be an effective approach to understand actor goals and move towards subsequent policy formation and development. Of course, in a network each actor will seek after his own goals. That is, each actor has its own vision on the desired policy (Van den Heuvel, 2005:41). However, public and private actors generally realise they are dependent on each other: to reach their own goals, they will have to cooperate and search for common goals. For instance, on the one hand investors own vacant offices which have a relatively low financial value; they need governmental effort to decrease or solve their problems. On the other hand, local authorities are confronted with problems regarding quality of life and safety issues in areas with large scale office vacancy and want to activate owner-investors to tackle these problems by investing in building adaption for new uses.

Hence, in a policy network, the parties take note of each other standpoints, conflicts of interest will occur and – if things work out well – conflicts can be solved by negotiations and parties will formulate a policy for the common problem (Van den Heuvel, 2005:41). In effect, a policy network contributes to the successful implementation of policies. It is precisely the mutual dependency of parties that can be regarded as a stimulus to overcome contrasts between organisations. In addition, Van den Heuvel (2005:39) states that the degree of dependency is also determined by the degree in which actors possess important or indispensable instruments or sources to attain the common policy goal. For example, only the municipality can change land-use plans or grant permit to deviate from a land-use plan (Hobma and Jong, 2016:55). On the other hand, investors dispose of private investor capital, which is outside the sphere of influence of public organisations.

4.2.4. Effectiveness of policy instruments

The effectiveness of achieving urban resilience through office conversions based on the use of policy instruments is a difficult and complex matter to assess. It is often pointed out that the use of a singular instrument has limited effectiveness (Schram, 2005:192). In many cases, the policymaker decides not to choose one instrument, but several at the same time. Indeed, using several instruments at the same time can be suitable to attain the policy goal. The idea is that instruments complement each other (Van den Heuvel, 2005:29).

To be more precise: the variety of possible instruments (see section Classification of policy instruments) raises the question: which instruments are suitable for which situation? Under which circumstances should which instrument, or mix of instruments, be chosen? This question lies in the field of instrument theory and – in general – is very hard to answer (Schram, 2005:190). The work of Klok (1991) shows that many factors influence the success of a policy instrument. One cannot simply say: for situation x, policy instrument a (in combination with policy instrument b) is most suitable to attain the policy goal. Klok, in his instrument theory, distinguishes three groups of variables which influence the effectiveness of a policy instrument (Klok, 1991:403). These are the:

- 1) characteristics of the actual policy instruments;

- 2) variables that determine the process of policy implementation, and;
- 3) variables that determine the process in the policy field.

So far, this chapter framed 'resilient urban development' and conceptualised planning policy instruments. After these rather theoretical notions, it is now time to turn to the empirical side of planning policy instruments used for resilient urban development. For this purpose, the case of the city of Rotterdam in the Netherlands is used. Rotterdam can be seen as a national and international frontrunner in the re-use of vacant offices. The city is confronted with substantial office vacancy, but has been remarkably successful in its active policy to have owner-investors re-use vacant real estate (Remøy et al., 2015).

4.3 Planning policy instruments in Rotterdam

Rotterdam is the Netherlands' second biggest city. Since 2008, vacancy rates in the office market have increased to almost 20 per cent. The municipality of Rotterdam had the task to choose policy instruments to combat the vacancy of offices, promote its re-use and thereby increase urban resilience by improved spatial quality and liveability of the city centre. Hereafter we discuss the various policy instruments and related activities used recently to align public and market interests in relation to office conversion, followed by two case studies of office conversion examples.

4.3.1. Covenant, land use plan and transformation team

In particular, in this section we reflect on the Rotterdam *Covenant Tackling Office Vacancy* (Dutch: *Convenant Aanpak Kantorenleegstand*) (Karakus, 2011). The Rotterdam covenant was part of the city's vacancy policy from 2011 to 2014 and was reflected in the new programme vacancy policy, wherein the municipality stated its aim to match planned new developments with demand, use new construction to improve urban quality, deploy temporary use and conversions for urban redevelopment, and to continue stimulating and acquiring conversions in collaboration with market parties. This covenant is the central policy instrument that was used by the municipality of Rotterdam to tackle the vacancy of offices, in combination with a transformation team assigned by the Rotterdam Department of Urban Development to stimulate land use change developments, including conversions from offices to housing.

The covenant between the municipality and market parties stated targets for 1) square metres to be converted, 2) square metres converted should be higher than square metres for new-build offices, and 3) knowledge sharing between the municipality and market parties should be increased; the municipality should become a knowledge centre facilitating private parties. The covenant upheld the concept of 'best effort obligations'. This means that no 'hard targets' were given for the market parties, and no measures would be taken to penalise parties who did not adhere to the covenant. As such, the covenant was intended to get market parties moving. The municipality had the idea that attaching hard targets to the covenant, would result in endless conferring with lawyers and little would change, whereas with the covenant, the different actors involved became enthusiastic and took action right away (Remøy et al., 2015).

Meanwhile, during the covenant term, national legislative changes were implemented that were in favour of conversion. It is necessary to elaborate on these changes as they affect the way other planning tools can be used by municipalities to support conversions. The most important changes were made as part of the Building Decree 2012 which set a new (lower minimum) quality level for conversions and renovations. Another important amendment was made to the Environmental Law

Decree 2014 (Dutch: Besluit Omgevingsrecht), which effectively enables the terms of the land use plan to be waived more easily. Additionally, the required timespan of municipal procedures was shortened. This way, municipalities gained more freedom to promote conversions. After a change to the Environmental Planning Decree (in November 2014) the land use plan (Dutch: bestemmingsplan) lost some of its effect too. Although the municipality must approve all land use changes, the land use change application (for conversions) does not have to be accompanied by a spatial quality motivation, as was the case before 2012. This means that, although planners can reject a conversion scheme, it cannot be rejected based on the (lack of) quality of the development. Hence, unsustainable and poor quality conversions can be developed in undesirable places, i.e. far removed from social facilities or local infrastructure.

Other important issues for Dutch municipal planning departments with regard to office conversions, are managing the demand for new uses, and (keeping or upgrading) the architectural and technical quality of the converted buildings. Especially in central urban areas, the municipality advocates the use of spatial and building quality as criteria for land use change, in order to enhance the attractiveness of the city. However, according to the recent amendments, changes to the land use plan cannot be rejected based on insufficient spatial, urban, and architectural quality. Nonetheless, some municipal planning tools still exist though to manage urban development. The municipal parking regulations can be used, together with air quality and noise nuisance regulations, the architectural review committee's advice, and, in the case of listed buildings, the cultural heritage preservation act (which is legally binding). Altogether, this means that it has become more difficult for municipalities to steer urban development according to local wishes. Whereas the planning regulations have become simpler on the larger scale, it has resulted in less room to manoeuvre for the local government.

For the municipality of Rotterdam, stimulating building conversion as an approach to reduce office vacancy, increase housing density and enhance spatial quality in the city centre and central urban areas has worked out well. Due to the pro-active involvement of the Department of Urban Development, more than 300,000 m² of vacant offices were converted into housing and other functions from 2011-2015 (Gemeente Rotterdam, 2015). The municipality has so far kept control over planning. At the end of the covenant, all of the initial targets set were achieved. While traditional planning tools such as strict environmental plans, land use plans and building decree are losing their effect, the municipality of Rotterdam has developed its own planning tools to steer land use, remedying some of the restrictions that the changes enacted by national government have placed on those responsible for planning and development at the local level. These are so-called 'soft' tools based on decision making by agreement and acceptance, consisting of dialogue, co-creation and cooperation. These tools are based on trust and transparency.

Heurkens et al. (2014; 2015) in this regard argue that the Rotterdam Department of Urban Development gradually adopted a facilitating role to assist market actors in the city to make development and investment decisions. Exemplary for the usefulness of the facilitating municipal role is the fact that the cooperation between the municipality and market parties improved significantly in the period in which the covenant was effective (Remøy et al., 2015). The market parties who had signed the covenant felt involved and responsible. All market parties reported being pleased with the work of the 'transformation team'; the team assigned to pull land use change developments, and ascribed successful redevelopments partly to the team's work. Cooperation in

urban redevelopment was the main success factor. Albeit many obstacles for conversions were removed at the municipal level, private parties still see strict building regulations and procedures as bottlenecks for conversions.

Table 4.4. National measures and measures taken by the municipality of Rotterdam to increase the conversion potential

Measures	Aims
Covenant – part of vacancy policy	Match planned new developments with demand, use new construction to improve urban quality, deploy temporary use and conversions for urban redevelopment, and to continue stimulating and acquiring conversions in collaboration with market parties
Specific ‘transformation team’ to increase dialogue, co-creation and cooperation	Increase cooperation, streamline processes, increase private involvement
Building decree 2012, specific quality level for conversion	Reduce costs of conversion
Environmental law decree 2014	Enable the terms of the land use plan to be waived more easily, shorten time span of procedures
Land use plan policy amendments	Changes to the land use plan cannot be rejected based on insufficient spatial, urban, and architectural quality

4.3.2 Examples of office building conversion in Rotterdam

To illustrate the use of policy instrument to change building use, hereafter two office conversion cases in Rotterdam are discussed: Admiraliteit and Student Hotel (see case overview table 4.5).

Table 4.5. Office building conversions in Rotterdam (based on Kops, 2014; Gemeente Rotterdam, 2015).

Project/building	Admiraliteit	Student Hotel - Former premises of Social Affairs and Labour
Address	Admiraliteitskade 40-50-60 3063 ED Rotterdam	Oostzeedijk 182-220 3063 BM Rotterdam
Sqm floor area	31,400 GFA 27,475 converted LFA	8,451 converted LFA
Residential function/units	587 studios/apartments 2 commercial spaces	Student housing
Initiator	ABB; U Vastgoed	Student Hotel (1st phase) Van Omme and de Groot (2nd phase)
Owner	IM Bouwfonds	Student Hotel

The redevelopment of the former office building Admiraliteit (see figure 4.1 and 4.2) has been initiated by ABB and U Vastgoed. Together with the Rotterdam municipality they set up a planning team and proposed a land use plan change. City Pads was added to the team as a concept developer and end user annex property manager. U Vastgoed withdrew after irrevocability of the plan. ABB and

City Pads were involved in the development, whereas IM Bouwfonds was introduced as an investor after completion. City Pads remained property manager. Despite changes in the team, the process went smoothly. The planning team started in July 2013, and the concept design was submitted in September. The final design and the building permit application were completed in June 2014, after which the permit was issued in July 2014. The municipality advised to organise resident evenings to inform neighbours about the project, and these meetings were held by the developing parties. Two parties objected the development. The developer approached these parties and found valid solutions, and the process was not unduly delayed. The municipality posed some requirements to the project that were not anticipated upon by the developer: one requirement was to increase the quality and size of the houses, reducing the number of houses that could be created. In addition, the municipality regarded an adjustment to the facade necessary for the exterior appearance of the building. Specific fire safety requirements regarding fire spread imposed considerable (unforeseen) costs. The municipality was closely involved in the entire conversion process, and drew the agreement on development contributions for the recovery of costs for infrastructure, started the land use plan changes, supported the developing parties in drafting the environmental building permit application, helped in obtaining the building site permit and guided in construction management.

Figure 4.1. Case study 'De Admiraliteit' during construction (source: Remø).

Figure 4.2. Case study 'De Admiraliteit' after completion (source: Remø).

The conversion to the Student Hotel took place in two phases. The first building was purchased by Student Hotel itself, the second was purchased by Van Omme & De Groot through a public tender held by the municipality, and sold to Student Hotel after the conversion. The process of the first phase was delayed by a disagreement with the committee for building aesthetics (Dutch: Welstandscommissie) and a complaint from a local resident against the new use and changes in the facade. The conversion of the second phase went somewhat easier, and moreover things like environmental studies could be applied directly from the first trial. Meanwhile, between the first and second phase, the parking ratio applied to the area was decreased. The municipality was very involved in the transformation process, and co-operated in changing the land use plan, and advised on the process. In addition, the municipality helped to accelerate the development process by assessing the plan changes informally a couple of times, to avoid further disagreements with the committee for building aesthetics and neighbours. Because of this, it took some time before the environmental building permit was obtained. Nowadays the Student Hotel functions as a popular source of housing for foreign students studying at the Erasmus University Rotterdam, due to its proximity to the university campus, and the high quality of the rooms and the amenities and services.

4.4 Classifying and evaluating policy instruments in Rotterdam

The previous section discussed some of the instruments used in Rotterdam to convert offices into housing in order to become more resilient to economic and market changes, in particular the Rotterdam Covenant Tackling Office Vacancy. This section evaluates the policy instruments used in Rotterdam by classifying them in accordance with classifications used in the second section. This is followed by some lessons drawn about the effectiveness of a mix of policy instruments used in Rotterdam to reduce office vacancies and increase urban resilience.

4.4.1 Classifying Rotterdam office conversion policy instruments

Table 4.6 indicates the main policy instruments used in the conversion of offices in Rotterdam from 2011-2015, brought in relation to the main policy instrument classifications used in literature.

Table 4.6. Classification of policy instruments used in Rotterdam office conversion.

Policy instruments (Rotterdam)	Disciplines (Van den Heuvel, 2005)	Degree of pressure (Van den Heuvel, 2005)	Planning instruments (Adams et al., 2005)
Covenant 'Tackling Office Vacancy'	Legal	Transaction	Regulating; contractual regulation
Policy network 'Platform Market Sector'	Communicative	Persuasion	Capacity building; market -rich information
Land use plan	Legal	Coercion	Regulating; state/third party regulation
Transformation team	Communicative	Persuasion	Capacity building; market and development process logics

(Source: Authors).

The Rotterdam Office Covenant, in terms of disciplines, is located in category 'legal policy instruments'. As said, a covenant in essence is an agreement. It can be an agreement between administrative authorities, or between an administrative authority and societal or private organisations. The latter is the case of the Rotterdam Office Covenant. A characteristic for a covenant is that the status of the agreements (whether or not legally binding) is determined by the covenant itself (Van den Heuvel, 2005, 65). However, the degree of binding in this covenant is light (an obligation of effort) and not heavy (an obligation of result). In terms of the degree of pressure, the Rotterdam Office Covenant is located in category 'transaction', for a covenant in essence is an agreement. Since the vacancy of offices is seen as a planning problem, the Rotterdam Office Covenant can be located in the planning policy instrument classification and can be seen as a 'regulating instrument', a sub type being 'contractual regulation'. This follows from the covenant being an agreement.

The policy network around office vacancy in Rotterdam is known under the name of '*Platform Market Sector*' (Dutch: Platform Marktsector) (Remoy et. al., 2015:8). In this network, the policy goals and the policy instruments were chosen more or less collectively. The local authorities, in the formulation of the policy and the choice of instrument, did not stand above the other parties, but between them. All parties who undersigned the Rotterdam covenant, are members of the policy network 'Platform Market Sector' (Remoy et. al., 2015:8). The policy instrument that resulted from the interactions between the parties in the Rotterdam policy network around office vacancy (as described in the previous section) is the *Covenant Tackling Office Vacancy* (Karakus, 2011). Therefore, the policy network Platform Market Sector can be classified as having a communicative discipline, a form of persuasion, and a capacity building planning policy instrument which provided market-rich information to develop the Covenant.

Additionally, in Rotterdam the land use plan has been used to alter the functional destinations of vacant office buildings from offices to housing, hotel, mixed-use etc. This is essentially offers coercion

as degree of pressure and involves a legal type of discipline. In terms of planning policy instruments, it can be regarded as a regulating instrument used by the local public authority, which enables or permits the change of use and actual office conversions. Nonetheless, as can be noticed in the Rotterdam case, this regulating tool has been handled flexibly instead of strictly, with an acceleration of office conversion building permits issued as a result.

An important policy instrument used in Rotterdam was the municipal Transformation Team. This team acted as a first communicative front office for questions and requests regarding office conversions from market actors. Moreover, it played a role in accelerating internal municipal decision-making process on instance establishing land use plan changes. This 'soft' instrument therefore can be regarded as communicative, persuasive tool. Moreover, it aimed to understand the market needs and obstacles regarding office conversions which made it a capacity building policy instrument enabling public planners to understand market and development process logics.

4.4.2 Evaluating Rotterdam office conversion policy instruments

In the Rotterdam policy for the reuse of vacant offices there is no use of 'vertical instruments', like a municipal Vacancy ordinance, at all. As is evident from the evaluation of the Rotterdam covenant, neither the municipality nor the private parties see any use in the deployment of vertical instruments (Remoy et.al, 2015:4). As far as the choice of a covenant as policy instrument for the municipal approach of vacancy is concerned, 73% of real estate professionals that participated in a survey indicated that a covenant is a very helpful instrument (Remoy et.al., 2015:18). In-depth interviews with persons involved with the Rotterdam reuse policy revealed though, that private parties are more positive about the use of a covenant as instrument as compared to municipal civil servants. Municipal civil servant are less positive, because in case of a covenant it is difficult to determine whether the changes in vacancy are the result of the covenant or autonomous processes (Remoy et. al., 2015:24 and 28). Private parties acknowledge that, but value the covenant more positively because it is a good means to bring all parties together. Further, private parties appreciate that the process of making a covenant implies they help to decide on the formation of the municipal policy (Remoy et. al., 2015:24 and 28).

In Rotterdam, the interactions between the public and private parties in the policy network around office vacancy led to the use of a covenant as policy instrument. The covenant was evaluated and it proved that its goals are achieved (Remoy et al., 2015). From that, it can be concluded that the instrument in itself – that is, taking its own goals – was effective. We conclude – as far as the choice for the instrument 'covenant' in the Rotterdam case is concerned – with the following observations:

- The approach of the Rotterdam office vacancy problem through a policy network appears to be a good one, because the suitability requirements for policy networks were met;
- The choice of a covenant as policy instrument is a logical result of the policy processes in the policy network;
- The chosen instrument, the covenant, was widely supported by the most important parties for the realisation of the policy: private parties. The private parties in the policy network indicated they did not want strict governmental rules (Remoy et. al., 2015, 4);
- Measured in terms of its own goals, the covenant was effective.

It is very difficult to make statements about the effectiveness of the used covenant as compared to possible alternative instruments (or mix of instruments) which could have been used to combat the vacancy of offices. Nevertheless, the additional use of other policy instruments in Rotterdam, like the land use plan and the transformation team – mostly tailored at individual office conversion cases instead of the city-wide covenant and policy network – reveals that a mix of policy instruments at different decision-making levels might be conditional for effective office conversions.

4.5 Conclusions

This chapter has elaborated on the use of planning policy instruments for resilient urban redevelopment by examining the ability of public and private stakeholders to respond to changes in real estate market demand by adopting existing offices to new usage. From the literature review it became clear that in order for Rotterdam stakeholders to handle resilience issues in their particular context, they needed to use policy instruments in a co-operate manner by multi-level governance efforts. Moreover, it indicated that (public) planners, in their efforts to redevelop urban areas in a resilient manner, should be able to understand markets and deploy planning instruments in such a manner that private actors can make decisions in favour of office conversions. Office conversions as such contribute to increasing the societal and economic resilience of the city, by giving space for new target groups and ensuring the economic viability. In addition, the literature review illustrated that it makes sense to consider a wide range of policy instruments to achieve effective office conversion practices, and that it is likely that in particular context a certain mix of instruments would be necessary.

The Rotterdam case study on office conversions illustrates that such conceptual elaborations and assumptions can be empirically justified. What becomes clear is that making urban areas more resilient in terms of providing affordable housing for students and new city centre apartments for communities in Rotterdam, through the conversion of obsolescent offices into new use requires an effective mix of hard and soft planning policy instruments. These instruments need to be aligned with market needs at both city and local development level, and combines policy formation with policy implementation measures. Generally, this implicates that cities and its stakeholders have to search for their own specific mix of planning policy instruments to cope with their resilience challenges. Therefore what had worked in Rotterdam may need tweaking to work effectively elsewhere. Additionally, future research in the field might focus on the relationship between public planning policies and private market decisions, as this chapter proves that meeting various built environment resilience challenges necessitates collective efforts which can partly be achieved by deploying planning policy instruments in an effective manner.

4.6 References

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