Planning and Implementation of Urban Regeneration

The Adequacy of the Statutory Toolbox Available to Practice

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SUMMARY

Worn down and more or less abandoned industrial and harbor areas became more and more visible in the Danish townscapes during the 1980s and 1990s. Some limited regeneration projects were carried through, but in general much public attention to these areas did not exist until the late 1990s where the regeneration challenge became an issue in the professional debate.
The urban, economic and spatial problematics rising from structural development trends of society were subject to a committee work from 1999 through 2001. The work resulted in a number of recommendations comprising i.a. suggestions concerning new statutory tools to handle the spatial transformation of urban regeneration areas.
The paper examines the subsequent development of Danish planning legislation with the purpose of determining whether the present 'statutory toolbox' can be considered sufficient compared to the problems and challenges emerging in practice. To evaluate the adequacy of the toolbox the paper draws on case studies on urban regeneration projects in three major Danish cities.
The conclusion is that the legislative developments during the last five years must be considered very relevant to problem solving in practice – but also that the statutory toolbox still appears incomplete, especially regarding some organizational and economic issues.

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1. INTRODUCTION

Worn down and more or less abandoned industrial and harbor areas became more and more visible in the Danish townscapes during the 1980s and 1990s. Some limited regeneration projects were carried through, but in general much public attention to these areas did not exist until the late 1990s where the regeneration challenge became an issue in the professional debate. Among other things, the absence of adequate tools to handle the transformation of the worn down areas became an issue. The tools provided by the legislation at the time were designed to handle urban growth and were capable of managing small scale alterations within the built environment, too. But they were obviously insufficient to handle the complexity of more or less abandoned industrial and harbor areas[1]. Moreover, the regeneration areas were putting new kinds of issues on the urban management agenda, e.g. extensive clearing needs (and costs), uncertainty regarding if and when the individual sites might be abandoned, etc.
The urban, economic and spatial problematics rising from structural development trends of society were subject to a committee work from 1999 through 2001. The work resulted in a number of recommendations comprising i.a. suggestions concerning new statutory tools to handle the spatial transformation of urban regeneration areas. In 2003, the recommendations of the committee were followed up through an amendment to the Planning Act. Subsequently, more amendments to the legislation have been passed, the latest in 2007[2].
The supplementation of the statutory toolbox has inevitably made it easier for the municipalities to solve some urban regeneration problems. The question is, however, if the toolbox contains the necessary and sufficient tools to meet the regeneration challenge in practice.

2. RECOMMENDATIONS OF THE 'URBAN POLICY COMMITTEE

In 1999 the Minister of Housing established the Urban Policy Committee. The mandate had a broad objective as it was to discover barriers to a favorable business development as specified by the government in the so-called Urban Policy Statement (Statement R13, 1998-1999).
In the report (Report no. 1397, January 2001)[3], several barriers are identified concerning revitalization, most of them posing economic and other kinds of uncertainties regarding the possibilities of future land use. The report analyzes the present possibilities and means to meet these challenges along with other tasks prompted by the urban policy. On this background, the committee submitted a number of suggestions. In the present context the following suggestions are considered of most relevance:

- provision of statutory authority to assign 'special urban regeneration zones' and to set up regeneration companies to operate in these zones. Furthermore, provision of one or more financial pools at the national level to cover economic losses for these companies if such losses occur in connection with the regeneration,

- provision of statutory authority to impose the costs connected with infrastructure investments on the investors, using uniform rules,
- preparation of guidance notes on the handling of noise problems (originating from traffic as well as companies),
- considerations on how to accept a minor, temporary non-conformity with the threshold limit values regarding noise in the regeneration zones until the regeneration is completed,
- extension of the possibility given in the Planning Act to establish provisions regarding the sequential order for the development of green fields into new urban areas. The committee suggests that this possibility is extended to cover transformation of land use in existing urban areas.

As it appears, some of the suggestions are directly related to spatial planning and environmental matters whereas others affect financial, fiscal and company law issues. In preparation for an assessment of the sufficiency of the statutory tools the changes in the legislation relevant to urban regeneration within these areas are analyzed in the following section.

3. PLANNING AND IMPLEMENTATION OF URBAN REGENERATION – LEGISLATION

Until mid 2007 the written Danish legislation only contained a few tools for carrying out urban redevelopment. However, besides the 'traditional' tools for planning and implementation Act no. 440 from 2003 provided some tools making it possible for municipalities to zone old industrial areas as so-called 'urban regeneration areas'.

3.1 Designation of Urban Regeneration Areas

The amendment to the Danish Planning Act in 2003 (Act no. 440/2003 (Byomdannelse/Urban Regeneration)) made it possible for municipalities to point out old industrial areas as urban regeneration areas for future redevelopment. The only precondition to point out an urban regeneration area in the municipal structure plan is that the industrial activity etc. that burdens the environment has ceased or is being phased out in a large majority of the area:

Danish Planning Act
***§11b**. A framework for the content of local plans for the specific parts of the municipality shall be established for: [...]*
5) urban regeneration areas, in which the use of buildings and undeveloped land used for business purposes, harbor purposes or similar activities is to be changed to residential purposes, public institutional purposes, urban centre purposes, recreational purposes or business purposes that are compatible with using the land for residential purposes; [...]

***§11d**. An urban regeneration area, cf. §11b, subsection 1, no. 5, shall be delimited so that it solely includes an area in which the use of land for business purposes, harbor purposes or the like that burdens the environment has ceased or is being phased out in a large majority of the area.*

Within these urban regeneration areas a transition period of approximately eight years is allowed to solve noise problems, cf. section 15a, subsection 2.

Danish Planning Act
***§15 a**. [..]*
Subsection 2. Local plans that are produced for lots in an area that the municipal plan has designated as an urban regeneration area may [..] designate noise-burdened land for noise-sensitive uses if the municipal council can ensure that the noise burden will end during a time period that does not substantially exceed eight years after the local plan adopted in final form has been published.

The amendment from 2003 does only – at the most – add two new (implementation) tools to the tool box: A possibility of managing the sequential order in which the individual regeneration areas can be redeveloped and a transition period of eight years to reduce noisy activity. This transition period was introduced to allow binding local planning for houses, offices and other 'noise sensitive' land use next to industrial enterprises. In other word, since 2003 it has been possible to exempt from the standard threshold value limits within the first eight years, and thus easier to start redevelopment before all enterprises have closed down.[4]

3.2 The 'Traditional' Tools

For lack of anything better, municipalities and developers have used a range of 'traditional' implementation tools which can be – and are – used in practice to start up, regulate and implement urban redevelopment (Jørgensen et.al. 2006, Ministry of the Interior 1997 and 2002). These are mainly[5,6]:

- *Binding local planning* equipping the municipalities with a wide regulation power. Through binding local plans municipalities can provide a detailed regulation of the land use and building conditions on the individual plots. Moreover, through local planning the municipalities can secure private co-financing of some technical infrastructure – and to some extent even social infrastructure.
- *Compulsory purchase* authorizing acquisition of land for public or common purposes or when it is materially important in ensuring the implementation of urban development in compliance with the municipal plan or in realizing a local plan.
- *(Threat of) Rejection of Planning and Building Permission* giving municipalities the right to reject any building application – even those that are in accordance with the actual plans – if the rejection is motivated by matter-of-fact considerations/objective grounds. This also includes regrets of actual plans that lead to rejection of a building permission in order to change the actual planning.
- *The Municipal Authority (Kommunalfuldmagten)* giving local authorities authority to use their economic resources on building social and technical infrastructure to support housing, commercial and industrial undertakings etc. to be set up (Garde and Revsbech 2002, Heide-Jørgensen 1993, Harder 1973).
- *Easements and other Agreements in the Frame of Civil Law* making it possible for municipalities to secure 'municipal interests'. Easements can also be used to secure more intensive or other regulation than municipalities are entitled to according to the Planning Act.
- *Formation of so-called redevelopment companies* - registered as a limited company owned by municipalities jointly with private development companies. The municipalities' participation in such companies has to a very limited degree been regulated in two acts; Act no. 384 from 1992 and an amendment act, Act no. 548 from 2006.[7] In itself these acts have only added little news to the state of the law. At best they can be considered as interim acts allowing co-operation between public authorities and the private sector, despite they do not mention PPP explicitly[8]. Whatever a PPP is formed on legal basis on the acts or not, the PPP is in any circumstances fundamentally subordinate to the – very complex and user-unfriendly – unwritten legal doctrines of the 'municipal authority' developed though administrative practice and case law.

However, the need for new and efficient tools to smooth and catalyze the urban redevelopment process, and the need for clear boundaries for formation of public-private partnerships (PPP), led in June 2007 by Act no. 537 to the first set of implementation tools (in the proper sense of the word) meant for urban regeneration. Due to the adoption of these tools municipalities were for the first time given actual means to catalyze and smooth the urban redevelopment process; among others municipalities were authorized to form something like PPPs.

3.3 Implementation Tools to Catalyze and Smooth the Urban Redevelopment Process

During 2006/2007 the Danish parliament understood the municipalities' need for further tools to manage the urban regeneration. Based on recommendations in a report on the potential for active regulation in the Planning Act (Jørgensen et.al., 2006)[9] the parliament adopted an amendment of the Planning Act (Act no. 537/2007 (Bypolitik/Urban Policy)) containing a handful of new tools; four of these in preparation for smoothing and catalyzing urban redevelopment.
The amendment in 2007 – above all – contains legal bases to form voluntary public-private partnerships (PPPs) by means of 'development agreements' to legalize private co-financing of infrastructure. Furthermore, the amendment contains an extension of the 'local planning toolbox' to authorize i.a. planning regulation of water areas in harbors.

Danish Planning Act

Part 5a – Development agreements on infrastructure
§21b*. At the request of a property owner, a municipal council may enter into a development agreement with the property owner for areas designated as urban zones in the municipal plan, cf. §11a, no. 1.*
Subsection 2. Development agreements may be entered into with the aim of:
1) achieving a higher quality or standard of the planned infrastructure in an area;
2) accelerating the local planning for an area designated for development through local planning by the framework provisions of the municipal plan, including urban regeneration, but for which local planning would contradict the provisions on the chronological order of development of the municipal plan; or
3) change or extend the development opportunities listed in the framework provisions of the municipal plan or the local plan for the relevant area on the condition that the property owner must only contribute to financing infrastructure that the municipality would not be required to establish.
Subsection 3. The development agreement may solely contain provisions stipulating that the property owner in full or in part shall construct or pay the expenses for the physical infrastructural installations that are to be established inside or outside the area to implement the planning provisions. The agreement may further stipulate that the property owner shall pay the expenses for preparing the municipal plan supplement and the local plan.
Subsection 4. Information that a draft of a development agreement exists shall be publicized simultaneously with the publication pursuant to §24 of the proposal for the municipal plan supplement and the local plan. §26, subsection 1, shall similarly apply to information on the draft of a development agreement.
Subsection 5. The municipal council's entering into a development agreement shall be adopted simultaneously with the adoption of the local plan in final form, and information on the adoption of the development agreement shall be publicized. Information on the development agreement shall be accessible to the public. §31, subsection 1 shall similarly apply to the development agreement.

The new PPP tool was meant to catalyze and smooth the urban redevelopment and regeneration process. Property owners may enter into voluntary development agreements with the municipality on contributing to the physical infrastructure, such as squares, streets and paths through planning for urban development or urban regeneration.
The fact that the development agreements are voluntary protects the land owners against "hidden" (i.e. unlawful) tax charging. In other words, municipalities are prohibited to charge landowners for infrastructure costs which are normally defrayed and budgeted by the local government. Only when the urban development results in extraordinary expenses, these expenses can be charged the landowners – i.e. when a higher quality or standard of the planned

infrastructure in an area is to be achieved (cf. § 21b, subsection 2 no. 1); or when accelerating the local planning (cf. § 21b, subsection 2 no. 2); or when the development opportunities are changed or extended (cf. § 21b, subsection 2 no. 3).
The same logic – land owners are protected against "hidden" tax charging – is behind the fact that only 'physical' infrastructure, such as squares, streets and paths can be dealt with in a development agreement. 'Social' infrastructure like schools, etc. cannot be included due to the tradition that such infrastructure is always defrayed and budgeted by the local government.
With these limitations, however, the new development agreements can actually only contribute a little to smooth and catalyze urban (re)development. Due to the landowner-protection-based restrictions it can hardly be considered a proactive tool for the municipalities.
Contrary to the 'development agreements' the extension of the 'local planning toolbox' seems somehow more efficient – in the sense of a proactive tool for the municipalities:

Danish Planning Act, paragraph 15, subsection 2 (as after June 2007 includes the new items 21-24)

A local plan may contain provisions on:
1)[..] transferring areas covered by the plan to an urban zone or a summer cottage area;
[..]
21) insulating new residential housing against noise in existing residential areas or areas for mixed urban uses, cf. §11b, subsection 1, no. 2;
22) requiring that new residential housing be constructed as low-energy housing, cf. §21a;
23) the use of waters in an urban regeneration area, cf. §11d, within or in connection with the outer jetties of a harbour; and
24) the design of installations on waters in an urban regeneration area, cf. §11d, within or in connection with the outer jetties of a harbour, including damming and filling, establishing fixed installations and placing fixed or anchored installations or objects and the placing of boats intended to be used for other purposes than pleasure sailing, dredging or excavating etc.

Firstly, due to the new extension of the 'local planning toolbox' – namely no. 21 – housing development and other noise-sensitive development can more easily take place in areas exposed to noise. That goes for the designated urban regeneration areas with the eight years postponement to observe the noise thresholds (cf. section 3.1). But it also goes for other land exposed to noise, cf. §15a, subsection 1:

§15a. A local plan may only designate land exposed to noise for noise-sensitive use if the plan can ensure that the future use will be without noise nuisance through noise-abatement measures, cf. §15, subsection 2, no. 12, 18 and 21.
Subsection 2. Local plans that are produced for lots in an area that the municipal plan has designated as an urban regeneration area may, regardless of subsection 1, designate noise-burdened land for noise-sensitive uses if the municipal council can ensure that the noise burden will end during a time period that does not substantially exceed eight years after the local plan adopted in final form has been published.

Thus, paragraph 15, subsection 2 no. 21 provides the necessary noise abatement measure for the local planning authorities to start redevelopment in all noise-exposed urban areas – and even in a way that reduces potential neighbor conflicts and compensation claims between the new residents and noisy businesses.
Secondly, paragraph 15, subsection 2 no. 23 and no. 24 provides the local planning authorities' legal basis for planning regulation of water areas in harbors. Generally, municipalities do not have sovereignty in water areas as they belong to the Danish central government. Damming and filling, establishing fixed installations etc. on waters normally have to be negotiated and approved by The Danish Coastal Authority, but since June 2007 the local planning authorities have been able to act as the sovereignty de facto is theirs – as long as they keep within or in connection with the outer jetties of a harbor.

Also this extension of the municipalities' powers to include waters in a harbor smoothes the urban redevelopment process.

4. PLANNING AND IMPLEMENTATION OF URBAN REGENERATION – PRACTICE

After the Urban Policy Committee submitted its report, a number of amendments to the legislation has been made, cf. the previous section. The question is, however, to what extent the overall statutory toolbox is adequate compared to the challenges in practice. To elucidate this question three cases are presented below.

4.1 The Inner Harbor in Odense

The Inner Harbor is located in the heart of Odense City at the end of a canal running from the city to the sea. Due to general development trends regarding transportation and the construction of a new harbor closer to the sea almost all harbor activities connected to the old harbor had stopped in the 1990s and the 3.8 square kilometer large area had developed into an area holding large and minor industries; most of them with no contemporary connection to the water. Because of the central location in the town the entire harbor area held a considerable and attractive development potential from a municipal as well as a private point of view. Almost all the land was owned by the Harbor Company implying that the companies in the area were renters with lease contracts expiring 2006 through 2027. In 2003 the municipality bought much of the land from the Harbor Company.
During the last half of the 1990s the municipality worked out a long term strategy plan for the future development of the harbor (Odense kommune, 2004). The overall objective of the strategy was to develop the harbor area into "a new and attractive town district focused on a maritime urban environment". The strategy plan works with a step by step redevelopment of the harbor starting with a redevelopment of the inner harbor which was located closest to the city and already almost released. Coincident with the adoption of the strategy plan several developer companies stated interests in building offices in the inner harbor area, but at the same time they called for assurance that the entire area would be developed into an attractive area.

4.1.1 Problems and challenges

From a municipal point of view, the fundamental challenge was to get the development into new land uses started given that the inner harbor and adjacent areas still held running enterprises, cf. figure 1. The problem constituted a dilemma between on the one hand prevention of environmental conflicts (especially noise) between the running enterprises outside and inside the inner harbor area and the new land uses, and on the other hand avoidance of delaying the redevelopment until 2020 where the municipality could be sure the areas were totally abandoned due to the expiration of the lease contracts.

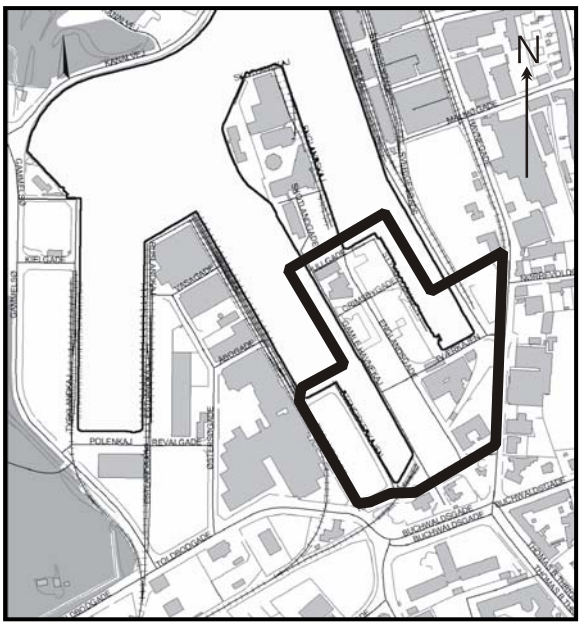

Figure 1: The Inner Harbor in Odense
(Scale 1:10.000)
The map shows the area covered by the first binding local plan (Binding Local Plan no. 1-586, 2002)
Most of the area is abandoned except the central part where a vigorous engineering workshop. The area is surrounded by going enterprises west, north, east and south.

Regarding the inner harbor area the transition problem can be divided into two sub-problems:

- *The future land use*. Surrounded by running enterprises with considerable noise emissions it was impossible to locate housing in the area. These enterprises had an environmental approval with a permit limit regarding noise emission exceeding the acceptable limit in housing areas. So, despite the municipality wanted to locate housing in the area it was obliged to plan the future land use to be offices, retail and private service only if it wanted to initiate the regeneration before the enterprises had left the surrounding areas.
- *Total clearance of the inner harbor area*. Centrally in the area a running enterprise – an engineering workshop – with a lease contract expiring in 2021 was located. This company was not interested moving out of the area despite it from the beginning was clear that it stood in the way of the municipal plans. Furthermore, this company had en environmental approval implying i.a. a permit limit regarding noise considerably exceeding the limit values in housing areas and exceeding the limit values in commercial areas as well.

Taking these problems into account the local plan (no. 1-586) adopted in 2002 (Odense kommune, 2002) zones the future land use for light industry, offices and public and private service. Despite the municipality found it desirable to mix the land use and zone parts of the area for housing the gradual transition of the harbor area made it necessary to omit such a land use from the plan.

4.1.2 The case and the subsequent development of the statutory toolbox

The core of the problem in the case is how to handle noise problems in the transition period. Pursuant to Danish legislation it is not possible to zone noise exposed areas for noise sensitive land uses. As a rule, it is therefore impossible to plan for e.g. housing purposes close to noisy enterprises. However, by virtue of the amendment to the Planning Act in 2003 this main rule is softened in urban regeneration areas, implying the possibility of working with a minor exceeding of the threshold value limits in an eight year transition period. This period of time is

equivalent to the (minimum) duration of an environmental approval according to the Environmental Protection Act.
In the case of Odense this eight year transition period would have reduced the problems substantially. Given that all the enterprises were located on leased plots implying that they had to wind down within a limited period of years such a transition period could have brought the time of closing-down and the time where the general value limits should be in force closer to each other. Furthermore, it would have been possible to tighten up the requirements regarding noise emission in the companies' environmental approval after the expiration of the present approval because of the new neighbors.
As mentioned, the binding local plan was approved in 2002. As a consequence of the amendment to the Planning Act in 2003 the municipality provided a new binding local plan (no. 1-606) in 2003 (Odense kommune, 2003) where housing purposes were incorporated. Due to the statutory requirements the plan contains a detailed mapping out of the noise conditions in the area documenting that the exceeding of the noise threshold value limits can be stopped within eight years.
Regarding the engineering workshop located centrally in the redevelopment area the sequence of events gave rise to a hostile relation between the company owner and the municipality. Apparently, the municipality did not wish to help the company to move out and in this way provide an assurance of continued working. To do so, the municipalities have two tools at their disposal. They can push through a compulsory purchase to implement the binding local plan or they can set up a redevelopment company to deal with the transfer of land, site preparation etc. In case of compulsory purchase the municipality has to fund the compensation and this compensation has to be meted out in accordance with current law. In case of redevelopment companies a more informal situation exists, e.g. regarding procedures and compensation as the relation between the parties as the point of departure is a matter of private law. However, cf. section 3.2 the legal basis of the municipalities' involvement in redevelopment companies is not very clear and despite the recommendations of the Urban Policy Committee a relevant statutory basis has not been provided. In addition, neither the committee's suggestions concerning formation of a financial pool at the national level to cover potential losses for such companies have been realized. In other words, the subsequent development of the legislation has not provided tools to handle problems as those arising from the engineering workshop.

4.2 The East Harbor in Aalborg

The city of Aalborg was founded in the Middle Ages by a 'natural harbor' at a narrowing of the Limfjorden strait, and this location has been of decisive importance to the development of the town until late in the 20th century. Consequently, the entire waterfront was dominated by industry and harbor enterprises in the late 1990s, i.a. shipbuilding, trade, heavy industry and a power plant, but due to general development trends the waterfront has been under transition for the last decade or two. The spatial planning for the transition was commenced in the middle of the 1990s and since then several planning documents have been prepared to clarify the overall objectives and manage the transformation process.
In 2001 a private developer company was set up with the object of initiating a redevelopment of an area which formed a part of a former shipbuilding yard. The company owned the area

and wanted to use it for offices and residential buildings. The area made up only a minor part of the total waterfront area and the municipality did not plan an imminent regeneration. Among other things running enterprises were located on adjacent areas.
The case area (approx. 125,000 sqm.) was abandoned and was the part of the former shipbuilding site located closest to the city center. The remainder part of the shipbuilding area was located east of the case area and utilized for industrial productions, primary in the former shipyard buildings. On the north side the Limfjorden strait is situated. West of the area a number of enterprises (i.a. feeding stuff companies) separated the area from the city center further west (approx. 1200 meters). To the south a major road connecting the city center to a freeway runs by the area and to the south-east a number of major industries were located. The areas opposite the road contain an older neighborhood dominated by housing blocks. That is, the area was cramped between running industries in the east-west direction and was considerably affected by traffic noise from the south, cf. figure 2.

4.2.1 Problems and challenges

From a municipal point of view, the developer company's initiative gave rise to several problems and dilemmas. On the one hand, the area was a part of the waterfront area and thus included in the overall transformation strategy. On the other hand, despite the area was 'mature' for redevelopment as all the previous land use had stopped, it was not 'mature' for redevelopment in a broader sense because of the land use of the surrounding areas. In this situation, the municipality could have chosen to maintain the existing planning regulations zoning the area for industrial use, but in the light of the overall development trends and the strategy for the waterfront this would not have been appropriate.

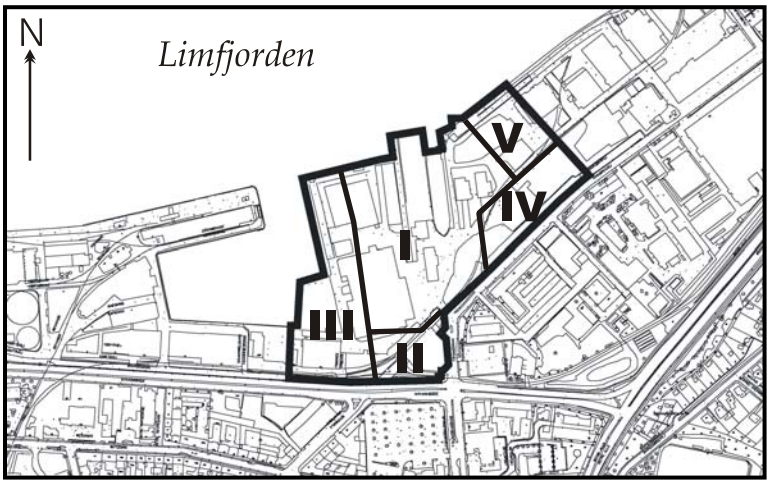

Figure 2: The East Harbor in Aalborg.
(Scale 1:10.000)
The map shows the area covered by the binding local plan and the sub-areas zoned for different purposes.
Sub-area III is a buffer zone with no building possibilities.
Sub-areas I, II and IV are zoned for mixed urban uses, housing not included.
Sub-area V is the area 'leftover' for housing.

The problems connected to the situation can be summarized as follows:

- *The sequential order of the overall transformation of the harbor areas.* At the time the development proposal was put forward to the Municipality of Aalborg (in 2001) the municipalities only had the option to zone areas for the ' final' land use; that is industry, housing, service etc., and according to general regulations in the Planning Act they were obliged to provide binding local plans according to this zoning on request from the land

owners. That is, given that the case area was abandoned and the land owner wanted to use the area, the Municipality of Aalborg had to decide whether the future land use should still be industry or it should be altered into new uses here and now.
- *Noise from enterprises on adjacent areas.* Similar to the Odense case adaptation of the land use to the de facto noise emissions from neighboring enterprises posed a severe challenge to the detailed planning.
- *Noise from the traffic on the road running south of the area.* Unlike the noise emission from enterprises – which is dependent on the specific activities on the site and the company's environmental approval – traffic noise has a more permanent and non-controllable character. And because of the road's importance in the town's traffic system the noise made up an almost unchangeable condition to the planning of the land use.
- *Dust and smell from the feeding stuff companies west of the area.* The limit values regarding noise depends on the land use but the values regarding dust and smell are independent of this implying that no buildings could be allowed in the western part of the area.

The adaptation to the adjacent land uses influenced the local plan (no. 10-066) adopted March 2003 (Aalborg kommune, 2003) in a very decisive way. Because of the dust and smell emissions from the feeding stuff companies the plan designates a 100 meter wide buffer zone covering the western part of the area where building was prohibited. Next, the noise emissions from the road and adjacent enterprises implied that only a small part of the area located in the north-eastern corner was zoned for housing. The remaining area was zoned for 'mixed urban uses' (offices, public and private service, shops etc., housing *not* included). As a result, the housing area became an 'island' most remote with respect to the city center and existing urban areas.

4.2.2 The case and the subsequent development of the statutory toolbox

The binding local plan was adopted by the municipal council in March 2003, only a few months before the 2003-amendment to the Planning Act. This amendment provides some tools which could have solved some of the problems observed in the Aalborg case and furthermore, the 2007-amendment provides additional tools which are relevant to this case.
The 2003-amendment provides a statutory basis for pointing out urban regeneration areas and to specify the sequential order of the transformation in the municipal structure plan. Especially regarding a so extensive transformation task as is the case regarding the waterfront in Aalborg this opportunity makes it possible to avoid that the transformation takes place in a sporadic way based on the individual land owners' requests. Still, it is a local political question if the municipal council wants to use this opportunity.
Like in the Odense case designation as an urban regeneration would also have given the municipality a time margin solving the noise problems originating from adjacent industries. Depending on the specific circumstances an eight year transition period might have made it possible to zone a larger part of the area for housing or to locate this land use differently than the case is in the adopted plan. The new regulations concerning insulating new residential housing against noise provided by the 2007-amendment could have eased the handling of the noise impact even more, but – maybe more important – they could also have made it possible to handle the noise impacts from the road running by the area and thus made it possible to locate housing closer to this road.

As it appears it is highly probable that the new statutory tools provided by the amendments to the Planning Act would have been helpful if they had been available at the time when the Aalborg case took place. However, the case would not be easy and tools to handle other environmental conflicts than noise problems would still be missing. In this case the municipality was forced to designate a 100 meter wide buffer zone with no building possibilities in the western part of the area because of dust and smell emissions from the feeding stuff companies. The subsequent legislation does not comprise any tools to handle this kind of problems.

4.3 The Sluseholmen Project in Copenhagen

Sluseholmen ('The Canal Lock Islet') makes up a part of Sydhavnen ('The South Harbor') in the city of Copenhagen. Similar to other harbor areas the harbor activities had stopped late in the 20th century and like other areas at the harbor of Copenhagen there was a general call for redevelopment. The Sluseholmen area was solitarily situated, implying that problems originating from impacts (e.g. noise) from surrounding industries did not exist. In accordance with the strategic planning for the transition of the entire harbor the municipality wanted the area to be transformed into a housing area comprising 5000 housing units.
With a general need of (new) housing in the central part of the metropolitan area and in the light of the central location of the waterfronts it offhand seemed obvious to plan for new housing areas. Furthermore, the Sluseholmen area is located only about 2.5 kilometers from the city center, cf. figure 3. However, at the beginning of the 2000s investors and developers were not (yet) queuing up to redevelop the waterfronts of Copenhagen.

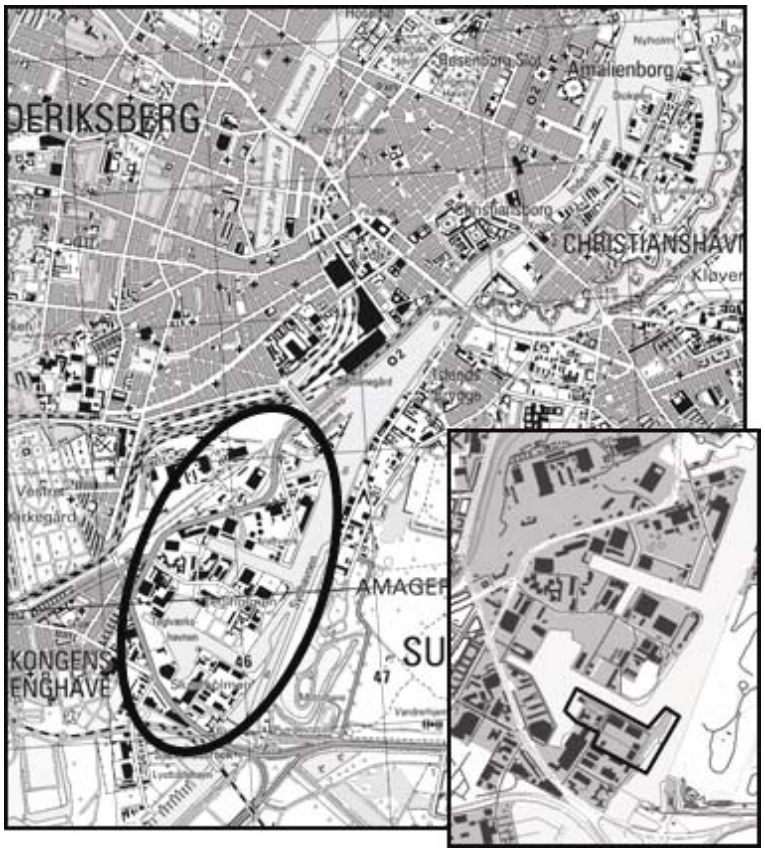

Figure 3: The Sluseholmen Project Area in Copenhagen.
The map shows the location of Sydhavnen in the city of Copenhagen (large map) and the location of the Sluseholmen project area in Sydhavnen (the "rectangle" on the small map).

4.3.1 Problems and challenges

From a municipal point of view, the fundamental problem was to put the redevelopment to work. Because of the general inertia in the trade the apparently favorable circumstances as regards location were not sufficient to surmount the uncertainty regarding the area's future, the site preparation costs etc. In short, land owners and developers deemed the project too ambitious and unrealistic at the time. In this situation the municipality could have chosen to implement the plan itself; that is, provide a binding local plan, carry out land acquisition via agreements or/and compulsory purchase, run the site preparation and provision of infrastructure etc. However, this might have been a high-risk decision which would have burdened the municipal budgets considerably, too.
Instead, the Municipality of Copenhagen entered into a public-private partnership together with the Port of Copenhagen Ltd. in 2003. As far as known, the PPP was the first formal PPP in Denmark and it was formed as a limited partnership company. The main purpose for the municipality was (hopefully) to kick-start the redevelopment process by site preparation and erection of the first 1000 dwellings (135,000 sqm. floor space).
In all, the Municipality of Copenhagen and the Port of Copenhagen Ltd. put in 100 million DKK partly as subordinated loan capital. The capital was used to buy land at Sluseholmen. After the land acquisition the different plots were re-sold to investors and developers. In the sale agreements regulations about burden sharing etc. regarding the site preparation were integrated. Moreover, regulations ensuring compliance with a special urban design concept were incorporated in the agreements.
The action implied a considerable risk for the PPP but turned out to be profitable to the two parties involved. As the state of the market changed around 2004 it happened to be so that not only could the profit from selling the plots cover the costs but the PPP ended up earning money, too. Hence, the PPP succeeded in kick-starting and catalyzing the redevelopment process by taking the lead and by laying in services in the area, developing an overall architectural identity making the area attractive for dwelling buyers and with them developers and investors. Furthermore, the Sluseholmen project 'uncorked' the development of the entire area as it has since been no problem to attract developers and investors to implement the other 4,000 housing units in Sydhavnen.

4.3.2 The case and the subsequent development of the statutory toolbox

The core of the problem in the case is how to initiate a transformation process in a situation where the private sector actors are uncertain or doubtful on the profitability of the redevelopment. In such situations it might be appropriate for the municipality to play an active role in the preliminary phases and to undertake the initial investments.
To do so, no special statutory tools are available to the municipalities. The PPP in the Sluseholmen project was formed with legal basis in the 'municipal authority' – and not Act no. 384/1992 despite it was possible. This only stresses the conclusion in section 3.2 that this Act really does not add any news to the state of law. And even though Act 384 was adjusted in virtue of Act 548 in 2006 these amendments only have minor importance to urban regeneration. That is, the recommendation of the Urban Policy Committee to provide statutory author-

ity to set up regeneration companies to operate in the urban regeneration zones has only been met to a very restricted extent.
Moreover, the Urban Policy Committee recommended providing one or more financial pools at the national level to cover economic losses for such regeneration companies if such losses occur in connection with the regeneration. In the Sluseholmen case the expediency of such pools is manifest as they could have stretched an economic safety net under the site preparation etc. in the area. Fortunately, the state of the market turned out in a favorable direction relatively early in the process. However, it might in any case to some degree be considered a societal interest 'above' the municipal level to ensure that a transformation takes place – even though the clearing of the areas may be expensive and the site preparation costs exceed the market value of the prepared sites. In present legislation it is not a question *if* it is a societal interest as the municipalities can attend to such tasks within the frames of the 'municipal authority'. But due to the absence of funding possibilities at the national level they have to fund the activities themselves.

5. CONCLUSION

In Denmark, the statutory toolbox to handle urban regeneration areas has been extended in several stages in recent years. In 2003 the possibility of zoning special urban regeneration areas as 'special planning zones' in the municipal structure plans was provided and it was made possible for the municipalities to manage the sequential order in which these areas are redeveloped. The precondition to do so is that the industrial activity etc. that burdens the environment "has ceased or is being phased out in a large majority of the area". Moreover, the municipalities were given the possibility of adjusting the general threshold limit values regarding noise within these areas for a transition period "not significantly exceeding eight years". In 2006 the legal basis for the municipalities' participation in redevelopment companies with private parties was adjusted, but the amendment act only added a little news to the state of law. In 2007 a further amendment was made to the Planning Act, providing some further tools to handle noise problems, to regulate water areas in harbors and to enter into development agreements on infrastructure at the request of a property owner.
Despite these extensions the statutory toolbox must to some extent still be considered inadequate. Compared to the Urban Policy Committee's recommendations – based on mapping out of the challenges connected with redevelopment of former harbor and industry areas – only some of the recommendations have been followed up, whereas some challenges – especially regarding funding and partnerships – remain untouched. Compared to the specific challenges discovered by studies of redevelopment projects in three major Danish cities in the years just before the first amendment the toolbox must be considered insufficient, too. Although a substantial part of the planning and implementation challenges found in the cases could have been solved much more easily be means of the present legislation, the cases also demonstrate a number of unresolved problems.
From the legal analyses as well as the case studies several legislative 'insufficiencies' have emerged. First and foremost the legal basis for the municipalities' participation in different types of PPP and other (economically) binding cooperation with private parties remain unclear or, at least, complex and user-unfriendly. Secondly, a sort of financial pools at the national level to cover potential losses appears to be essential to facilitate well-founded (regard-

ing planning considerations) but economically uncertain redevelopment projects; not least in the light of the obscure legislation regarding formation of redevelopment companies. Thirdly, the only environmental problem dealt with in the legislation is noise, but especially in harbor areas smell and dust emissions might pose problems, too. Finally, some of the new regulations have an 'elastic' formulation which may lead to confusion. What exactly means "a *large majority* of the area" or "not *significantly exceeding* eight years"? Even though the resulting margin can be said to be an advantage in some respects it also bring about an uncertainty regarding the law.
All things considered, the development of the statutory toolbox during the last five years must be considered very relevant to the problem solving in practice – but still the toolbox could be more complete.

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NOTES

[1] Restoration of older residential areas, housing improvement and provision of open spaces has traditionally been handled through separate legislation (The Urban Renewal Act, etc.)

[2] The Planning Act is translated into english, see: Ministry of the Environment, 2007a. The Danish planning system is outlined in Ministry of the Environment, 2007b and European Commission, 1999.

[3] For further details about the work and recommendations of the Urban Policy Committee, see: Aunsborg and Sørensen 2006, section 4.1.

[4] For further description of environmental problems in urban areas, see: Aunsborg and Sørensen 2006.

[5] For further details about the 'traditional' implementation tools, see: Sørensen and Aunsborg 2006.

[6] Urban regeneration areas often include contaminated land. In Danish legislation (cf. The Contaminated Land Act, Consolidated Act no. 282/2007) no distinction is made between contaminated land in urban regeneration areas and other areas. The legislation is fairly complicated, but since the current land use in regeneration areas usually is a "non-sensitive" one (no dwelling, kindergartens etc. and neither drinking water resources) the main rule is, that in case of land contamination a condition to clean-up the area is incorporated in a (mandatory, cf. Act. no. 282/2007 section 8) permission to change the land use. In brief this means that costs originating from cleaning up contaminated land normally make up a part of the site preparation costs. (Basse and Trenskow, 2003)

[7] Cf. Act no. 384/1992 (Lov om kommuners og amtskommuners samarbejde med aktieselskaber mv. – *Municipalities' and Counties' cooperation with joint-stock companies etc*.) and Act no. 548/2006 (Kommuners udførelse af opgaver for andre offentlige myndigheder og kommuners og regioners deltagelse i selskaber – *Municipalities as Contractors for other Public Authorities and Municipal Participation in Private Companies).*

[8] Not until Act no. 537/2007 (cf. section 3.3) - which authorises voluntary public-private partnerships (PPP) by means of 'development agreements' – Denmark had no real PPP-legislation regarding urban (re)development.

[9] Made by researchers, consultants and civil servants; and financed by the Ministry of the Environment jointly with The Foundation Realdania.