Development of Dutch Building Control (1982-2003): Towards Certified Building Control

Johannes Jan VAN DER HEIJDEN, Henk VISSCHER and Frits MEIJER, The Netherlands

Key words: History, Public Policy Implementation, Legislation, Building Regulations, Building Control.

SUMMARY

Some deathly incidents in the beginning of the 21st century put building control high on the Dutch political and public agenda. Government, municipalities and private parties are working together on new more effective and efficient building regulation enforcement-strategies. One of these initiatives is the development of a system of voluntary process certification for checking building plans on compliance with the building decree (technical building regulations). Permit applications accompanied with a certificate of approval on plan-compliance with the building decree will not have to be tested by the local authorities (municipal building control departments) anymore in the future. In 2003-2005 the Ministry of Housing, Spatial Planning and the Environment (VROM) has set up trials in which building plans were controlled by private parties that were certified for this purpose. Evaluating these trials, some questions emerged. One being on the significance and possibility of developing and implementing a special certificate for controlling small or frequent building activities to the building decree, within the voluntary process certification system.

In this paper we present the outcomes of a research that addressed this question. The research also zooms in into the nature and volume of permit applications, the daily practice of Dutch building control and the permit fees collected. Prior to the research it was supposed that the efforts of the municipalities controlling small or frequent building activities could not be balanced with the income of these permit fees. We start this paper by taking a look upon the present state of Dutch building regulations and building control, with a special focus upon the period 1982-2003. In the second part of the paper we will present the mentioned research and discuss the present state of Dutch building regulations and control, both formal and daily practice. In the final part of this paper we draw conclusions upon possible alternative controlling processes for small or frequent building activities that might draw back administrative burden for both public and private parties and that might reach a higher level of compliance with building regulations

Development of Dutch Building Control (1982-2003): Towards Certified Building Control

Johannes Jan VAN DER HEIJDEN, Henk VISSCHER and Frits MEIJER, The Netherlands

1. INTROCUCTION

The role played by local authorities in defining (local) building regulations and monitoring compliance has a long history. As far back as the Middle Ages, local administrators were setting standards for existing and future buildings via so-called 'municipal by-laws'. It was not until 1902, when the Housing Act came into effect, that the Dutch government officially got to grips with public housing. However, public housing policy was legally the responsibility of the government, implementation of this policy was the responsibility of the municipalities. This responsibility of the municipalities consisted of setting up regulations related to buildings, supplying building permits and controlling compliance with building regulations.

During the twentieth century the building regulations were further developed and streamlined at national level. The Building Decree in 1992 introduced a general set of requirements for all buildings. Since the 1980s and 1990s the government's attitude to the building sector has been re-shaped by the concept of redefining regulations ('deregulation'), which was expected to increase freedom (of design) as well as create equal legal status and legal protection for citizens and ease the burden on industry and public administration. These goals were the mainspring behind legislative and regulatory amendments (for an overview of the development of Dutch building regulations between 1901 and 2003 see: Van der Heijden, et. al., 2006a, pp. 1541-1554).

Though the building regulations have continued to develop, the monitoring practices (building control) have more or less remained unchanged. Responsibility still lies with central government and the municipalities still decide on how to exercise control. As seen from a formal point of view Dutch building regulations show much features of a command-andcontrol strategy (Baldwin and Cave, 1999, chapter 4), which aims at compliance through means of deterrence (Reiss, 1984) and/or fear of sanctioning (Hawkins, 1984a). However, from a survey upon the daily practice of Dutch building control, which we present in section 3, it can be learned that the Dutch municipalities' enforcement-strategy, also shows features of the responsive regulation model as described by Ayres and Braithwaite (1992), which aims at compliance in the first place by persuasion through means of teaching, instruction, persuasion, negotiation and advising. For some time now the municipalities have been coming under fire because of the way in which they execute this task and government, municipalities and private parties are working together on new more (cost-)effective building regulation enforcement-strategies. One of these initiatives is the development of a system of voluntary process certification for checking building plans on the building decree (technical building regulations). In 2003-2005 the Ministry of Housing, Spatial Planning and the

Environment (VROM) has set up trials in which building plans were controlled by private parties that were accredited for this purpose. Evaluating these trials, some questions emerged. A special point of attention is the significance and possibility of developing and implementing a special certificate for controlling small or frequent building activities to the building decree, within the voluntary process certification system.

This paper deals with this point of attention and addresses the following questions: What is, within the scope of this possible enforcement strategy, a proper definition of frequent building activities? What is the daily practice of municipal building control, especially regarding frequent building activities? To what extent is it advisable to implement a certificate for controlling frequent building activities to the building decree? Which alternative processes seem to offer chances to secure compliance with technical building regulations in a (cost)effective manner, with regards to frequent building activities.

The paper is based both on a policy analysis – methodology used as described by Dunn (2003) – and a field survey on building control – methodology used as described by Fowler (2003) –. This paper is based upon research within the framework of a PhD-research project, which aims to provide suggestions of how to shift tasks and responsibilities in a way that optimally guarantees compliancy with building regulations, while minimising administrative burden.

In section 2 we chart the progress of the 1901 Housing Act until the present situation. We look briefly upon the period between 1901 and the early 1980s and go deeper into the development of Dutch building regulations in the period 1982 - 2003. Section 3 briefly presents the development of the mentioned system of system of voluntary process certification for checking building plans on the building decree. In section 4 we give an overview of a field study on building control executed in 2005-2006. In the final section we look upon formal and actual Dutch building control and the discussed expected future developments from a theoretical point of view. We end this paper by drawing some conclusions on possible future changes in Dutch building control with regards to frequent building activities.

2. PROGRESS OF THE HOUSING ACT

Van der Heijden, et. al., (2006b) make a division of the development of Dutch building regulations into three phases: first, a period of regulation, 1901-1940. The introduction of the Housing Act in 1901 is often regarded as the first step by the government towards official involvement in the building sector. The Housing Act of 1901 placed the responsibility for public housing policy squarely with the government and the responsibility for implementation in the hands of the local municipalities. This legislation immediately gave the municipalities the freedom to draw up their own building and housing regulations, and to introduce their own control and inspection measures. Accordingly, a situation evolved in which building regulations in one municipality could differ radically from building regulations. The municipalities increasingly responsible for drawing up specific building regulations. The municipalities enjoyed considerable autonomy in determining the content of these (local)

regulations. This subsequently created a situation in which there was very little standardisation or transparency.

The second phase 1940-1980 was characterised by attempts for standardisation. Delays occurred in projects that were specifically set up with the aim of easing the urgent housing shortage in the post-war years. The government decided to tackle the housing shortage by amending the building legislation in such a way that it would become more uniform and nationally applicable. Commercial and other parties in the building sector and ordinary citizens needed better legal protection. It was to this end that the Housing Act was drastically amended in 1961. The model building by-law, introduced in 1965, was primarily responsible for far-reaching standardisation of municipal building regulations. Nevertheless, the 1961 amendment still allowed the municipalities considerable freedom. The model building by-law gave them scope to grant exemption from regulations and to impose additional requirements. In the government's vision, equal legal status for companies and citizens was still insufficiently guaranteed.

The third phase, 1980-2003, was characterised by redefining regulations ('deregulation'). In 1982 certain goals were defined by the Government (Lubbers I Coalition Agreement) which would supposedly simplify and reduce regulations. The Coalition Agreement stated that superfluous rules and regulations should be scrapped – particularly with regard to the technical aspects of housing – and that the building regulations themselves had to become more uniform. The goals that were set in this Coalition Agreement laid the foundation for the MDW operation (market forces, deregulation and law), which involved the modernisation of legislation and regulations from 1994 till 2003. The aims of this operation were to lower the costs for businesses and members of the public, to create more scope for market forces, and to improve the quality of legislation.

In mid-1983 an action plan (Actieprogramma Deregulering) was submitted to the House of Representatives, which more or less marked the start of redefining the building regulations ('deregulation'). It was hoped that this redefining would ultimately increase freedom, improve legal security and stimulate equality of status for members of the public, and ease the burden on businesses and government (TK, 1983). The action plan also described how the government's proposals for improvement could be incorporated in a Building Decree (Overveld, 2003 p. 11). This Building Decree would set out all the technical requirements for existing and new constructions and thus lead to unity and transparency in building regulations (Visscher, 2000 p. 32).

The Building Decree of 1992 set out the minimum standards that a plan had to meet in order to get a building permit. It also set out minimum standards for existing buildings. These standards took the form – as far as possible – of performance requirements. And it contained functional descriptions, which indicated the purpose of the Decree, whereas the threshold value indicated the required performance level. Essentially, there was no difference between the level in the 1992 Building Decree and the level in the previously mentioned model building by-law. The introduction of the Building Decree in 1992 was accompanied by an amendment to the Housing Act. The main changes compared with the Housing Act of 1962 were as follows (Bercken, 1997 and Visscher, 2000):

- Building projects were split into three categories: a permit-free category, a reportobligatory category and a permit-obligation category;
- A deadline was set within which the Mayor and Aldermen had to reach a decision on a report or an application for a building permit (5 and 13 weeks respectively). If no decision was reached within this deadline, the permit would be nominally granted;
- A provision was incorporated which attached public law significance to private law certificates.

The Building Decree of 1992 only partially reflected the policy goals in the plan to deregulate the building sector. It failed to address the goal that the Building Decree be brought into line with other building regulations which were not within the remit of the officials at the Department of Housing. The intention was to create clarity and uniformity in the building regulations. An evaluation of the Building Decree (VROM, 1996) revealed that the building sector favoured the systematic approach and endorsed the principle of performance levels. However, it also emerged that the envisaged simplicity was being obstructed by a complex reference structure pertaining to norms and ministerial arrangements, and by the legalese in which the regulations were couched.

A need for further deregulation coupled with reports about the incomprehensibility of the building regulations and incompatibility with other legislation prompted a revision of the Housing Act. The new version came into effect along with the (converted) Building Decree 2003 on 1 January 2003 (Overveld, 2003). It was hoped that the Housing Act and the underlying Order in Council would trigger the development of more customer-friendly and comprehensible building regulations (Damen, 2003).

The Building Decree 2003 differed mainly in form and partly in content from the Building Decree 1992. One significant innovation was the introduction of 'table legislation', i.e. sets of tables that determine the sub-sections which apply to parts of a building with one and the same intended use (Overveld, 2003, p. 17 et seq.). The concept of 'use function' does not appear in the Building Decree 1992. 'Use function' is understood as: the parts of one or more buildings on a piece of land which are used for the same purpose and together form a use unit. There was no question of actual deregulation via the amendments: the Building Decree 2003 comprises more sections (regulations) than the Building Decree 1992.

An important change in the 2003 amendment of the Housing Act was the abrogation of the category report-obligatory building works and the introduction of a light-permit-procedure category and a normal-permit-procedure category. The light-permit-procedure category consists of small building projects, small adjustments to existing buildings and small changes to existing buildings like adding a greenhouse to an existing house, or raising a small garage. The light-permit-procedure category overlaps partly with the permit free category. The difference in categories can be found in the location of the small building projects: if these are being raised at the front site of the existing building, a light-permit is obliged, if these are being raised at other sides of the building it permit free, which has to do with compliance to zoning and aesthetic by-laws. For example: for raising a shed dormer at the front-side of an

existing house a light-permit is compulsory, but raising exactly the same shed dormer at the back side of that same house can be done permit free.

2.1 Problems in Monitoring Compliance with Building Regulations

Despite the changes to the building regulations and their objectives, the municipalities were still responsible for monitoring compliance. Various incidents at the turn of the century (a pub fire in Volendam, an explosion of a fireworks factory in Enschede, the collapse of a carpark deck in Tiel and the collapse of a balcony in Maastricht) sent building control straight to the top of the political and public agenda (with articles in i.a. Cobouw, 2000 and Cobouw, 2003). Investigations into these incidents revealed that various municipalities were consistently neglecting to conduct adequate checks, that there were shortcomings in the issue of building permits, and that the responsibilities within the municipalities were not clearly enough defined. The reports concluded that the government ought to play a stronger role in policing the regulations and that clearer distinction was needed in the allocation of responsibility. It should be noted that these defects were ascertained mainly in the municipalities (for an overview of these reports we refer to: Van der Heijden, et. al., 2006b, p. 1547).

A report on the national ministerial inspections at municipalities (VROM, 2005) provides an overview of a (government) inquiry into the quality of municipal building control. The report uncovered that information which is needed for checking various aspects of the Building Decree was missing from 45% of new-building files for 2003 and 27% for 2004. In addition, the Building Decree was (partially) breached by approximately 8% of the files for 2003 and 17% of the files for 2004. Finally, the report stated that in 2003 and 2004 no (visible) checks were performed for the various regulations and requirements in the Building Decree in 69% and 47% respectively of permit applications. Large discrepancies were also found in the calibre of the checks performed by the different municipalities. In 2003, the municipalities had already made known that they were unable to fully monitor compliance with the building regulations: "100% supervision is beyond our capability" (VBWTN, 2003).

2.2 Conclusion

Though Dutch building regulations have continued to develop, the monitoring practices have more or less remained unchanged. Responsibility still lies with central government and the municipalities still decide on how to exercise control. Exercising this responsibility the municipalities show only a limited degree of uniformity and standardisation. Serious problems also exist in supervising adherence to regulations. The municipalities lack the capacity to perform inspections that meet the legal criteria. In addition, they are scarcely responsible (if at all) for testing the content of building plans against the Building Decree. Tentative developments which were started up during the deregulation period may eventually lead to the (partial) transfer of municipal control tasks to the private sector.

3. CERTIFIED BUILDING DECREE TEST

In the last 15 years the Dutch government and the municipalities have launched a number of initiatives which are designed to improve the effectiveness and efficiency of building control. The amendment to the Housing Act in 1991 had already scrapped the obligation to establish a local authority building control, stating instead that 'measures should be taken' to that end. This gave municipal councils an opportunity to opt for a privatised form of supervision or to transfer the task (e.g. in a regional context). Private organisations could also be involved in the monitoring process (Visscher, 2000, p. 113).

The MDW Work Group also saw the recruitment of private organisations as a means of increasing the effectiveness and efficiency of the permit process. It discerned concrete opportunities for legalising voluntary process certification. This would considerably speed up the procedure and, at the same time, ease the burden on the municipality and the applicant: "the deployment of a certified organisation for the design would dispense with the need for preventive technical screening" (TK, 1997). Implementation of a system of certified design organisations was a formal policy (end)goal. At the moment the idea of process certification within building control aims at certified private organisations that can perform building decree tests.

In 2000 the government presented a policy agenda for standardisation, certification and accreditation, which stated that, in self-regulation, the focus would be on evaluation and the possible extension of standardisation and certification as an alternative or supplement to regulation. It was announced in the policy document, Building Regulations Agenda, 2002-2006 (TK, 2002), that the prospects of clarifying public and private responsibility in the building sector on a certification basis would be explored. In 2003-2005 the Ministry of Housing, Spatial Planning and the Environment (VROM) set up trials in which building plans were controlled by private parties that were certified for this purpose. It was concluded that a uniform testing method would be needed in order to realise a certified Building Decree test, which was an equivalent alternative to the municipal Building Decree test. As there is no information about the quality of the municipal test or the amount of time involved, it is impossible to draw conclusions on whether certified organisations could do the job more quickly and effectively than the municipalities. A special point of attention that came out of the tests, is the question upon the significance and possibility of developing and implementing a special certificate for controlling small or frequent building activities to the building decree, within the voluntary process certification system.

4. DAILY PRACTICE OF DUTCH BUILDING CONTROL

During the period October 2005-March 2006 OTB Research Institute for Housing, Urban and Mobility Studies performed a field research on building control by municipal departments during 2001-2004 (Van der Heijden, et. al., 2006b). The goal of this research was to get insight in the significance and possibility of developing and implementing a special certificate for controlling small or frequent building activities to the building decree. In advance frequent building activities were defined as building activities with a maximum building costs of \in 75,000. This sum is based upon building activities that are described as maximum possibility to fit in the light-permit procedure; *i.e.* in advance it was expected that most frequent building activities consisted of activities that fit the description in the light permit procedure.

From a random sample survey 64 municipalities were selected to fill five survey-groups defined by the number of residents; the municipality of Amsterdam was not included within the sample. Out of this 64 municipalities 27 municipalities were willing to participate in the research, filling up the survey-groups as shown in table 1. The research consisted out of a questionnaire to be filled in by the municipal building control department and an semi-open-interview with one or more members of this department, preferably staff-members. Performing this survey research methodology has been used as described by Fowler (2003). The period 2001-2004 has been chosen to compare the period before the 2003 amendment with the period after it.

Survey-group	Total mun. in NL	Selected municipalities	Participating mun.
0 - 30,000 res.	321	15	2
30,001 – 50,000 res.	82	15	7
50,001 – 100,000 res.	39	15	6
100,001 – 200,000 res.	20	15	9
Over 200,000 res.*	5	4*	3

Table 1 - selected and participating municipalities per survey-group

* Note: the city of Amsterdam has not been included in the sample; this due to the cities' organisation of more or less autonomous boroughs.

4.1 Quantitative data

The questionnaire zoomed in into the quantitative aspects of building control (e.g. How many building permits have been applied and supplied in the year 2001?) and put for nine cases, based upon which was asked how much time was spent on different fields of building control (e.g. How much time does it take to check the constructive aspects of a building plan?; How much field-control is being performed during execution of building activities?). The cases all had the same set-up; e.g. a case could be (case 4): "A planned extension at the front site of an existing house. The building costs for this extension are $\in 25.000$. The plan fits within the zoning by-law; all asked for information has been supplied by the applicant."

From the data of the filled in questionnaires insight was gained in the building costs of planned buildings in relation to the amount of building permits that were being supplied; the amount of supplied building permits in relation to the categories light- and normal permit-obligatory works; the influence of the 2003 amendment on supplied building permits in relation to building costs of planned buildings; the amount of time spent on building control in relation to building costs of planned buildings; and the cost-effectiveness (defined as legal dues/spent time on building control) in relation building costs of planned buildings.

The majority of building-permits is being supplied for planned building activities with building costs of maximum \in 50,000, which has been defined as the category of frequent building activities. Within the different survey-groups 70% to 87% of all granted building permits were granted to this category. Within this category most building-permits were being granted to building activities with building costs between \in 10,000 and \in 25,000 (about 23% of all granted building permits, which appeared to be quite a constant factor throughout the survey period).

In the years 2003 and 2004 about 40% of all granted building permits concerned lightbuilding-permits, which left 60% of all granted building permits as regular-building-permits. In comparison with the pre-2003 amendment period a decline of 22% in 2003 and 13% in 2004 was noticed for applied and granted building permits for building activities with building costs of maximum \notin 25,000. In comparison with the pre-2003 amendment period a decline of over 40% in applied and granted building permits for normal permit-obligatory works was noticed. Table 2 shows per case the minimum, maximum and average amount of time (based upon the answers of the municipalities participating in the interview) spent on different fields of building control, the average legal dues and the cost-effectiveness (defined as legal dues/spent time on building control).

Case Amount of time s				ent (hours)						Legal dues and cost-effectiveness					
B	uilding costs	Total time spent			Average time spent per field of control						Legal dues*			cost-eff.	
		min.	av.	max.	p.c.	c.c.	z.c.	e.c.	s.c.	e.a.	0.	min.	av.	max.	(€/h)
1	€ 1,000	0.8	4.9	15.0	1.3	0.1	0.1	0.4	1.2	0.0	0.8	€ 38	€ 76	€ 161	€ 36
2	€ 2,500	0.8	5.5	15.0	1.5	0.2	0.3	0.4	1.4	0.1	0.8	€ 42	€ 85	€ 161	€ 35
3	€ 5,000	1.0	6.1	15.0	1.5	0.3	0.4	0.4	1.6	0.0	0.9	€ 51	€ 109	€ 170	€ 37
4	€ 10,000	1.2	7.3	16.8	1.8	0.6	0.4	0.4	2.1	0.2	1.0	€ 95	€ 175	€ 272	€ 44
5	€ 25,000	1.3	8.4	20.8	2.1	0.9	0.4	0.5	2.3	0.2	1.0	€ 151	€ 408	€ 640	€ 89
6	€ 25,000	0.6	11.5	32.0	2.8	0.7	2.3	0.5	2.5	0.1	1.5	€ 190	€ 610	€ 829	€ 156
7	€ 50,000	1.6	10.7	29.0	2.7	1.1	0.8	0.6	2.7	0.2	1.3	€ 270	€ 808	€ 1,279	€ 143
8	€ 50,000	1.9	18.2	55.0	5.4	2.0	2.6	0.8	3.8	0.7	1.6	€ 190	€ 1,095	€ 1,793	€ 124
9	€ 75,000**	2.0	17.1	60.5	5.0	2.0	0.7	0.7	4.7	0.3	1.3	€ 345	€ 1,344	€ 2,048	€ 173

Table 2 – Time spent on building control, legal dues and cost-effectiveness per case

* Note: Dutch municipal building control departments are within a certain range allowed to fix legal dues for building control.

^{**} Note: €

p.c.:	Over-all checking of building plans to the Building Decree, with exemption to construction-
safety aspects,	and control of completeness of supplied information.

c.c.: Checking supplied information to construction-safety aspects.

z.c.: Checking supplied information to zoning by-law.

- e.c.: Checking supplied information to aesthetics by law.
- s.c.: Checking work under construction to building permit (site control).

e.a.: External advise (e.g. advise from fire-prevention department).

o.: Other activities (mostly administration).

From the data of the cases insight was gained in the time spent on the actual building control process. About 40% of the time spent concerns checking of building plans to the Building Decree (checking construction-safety aspects included); about 30% of the time spent concerns site control; about 15% of the time spent concerns checking the applications to zoning and aesthetics by-laws; and about 15% percent of the time spent concerns other activities (2% external advise included). Three municipalities, out of the twenty-seven participating, showed almost no checking applications upon the Building Decree; six municipalities showed none or almost no site controls. No clear differences were to be made between the different survey-groups, but also no clear 'national' way of dealing with applications can be described: both time spent on building control as legal dues vary in a wide range. The interviews zoomed deeper into the actual tasks performed within the time spent.

Case	Building costs	Legal dues and legal dues as percentage of building costs								
		min.	%	av.	%	Max.	%			
1	€ 1,000	€ 38	3.8%	€ 76	7.6%	€ 161	16.1%			
2	€ 2,500	€ 42	1.7%	€ 85	3.4%	€ 161	6.4%			
3	€ 5,000	€ 51	1.0%	€ 109	2.2%	€ 170	3.4%			
4	€ 10,000	€ 95	1.3%	€ 175	2.3%	€ 272	3.6%			
5	€ 25,000	€ 151	0.6%	€ 408	1.6%	€ 640	2.6%			
6	€ 25,000	€ 190	0.8%	€ 610	2.4%	€ 829	3.3%			
7	€ 50,000	€ 270	0.5%	€ 808	1.6%	€ 1,279	2.6%			
8	€ 50,000	€ 190	0.4%	€ 1,095	2.2%	€ 1,793	3.6%			
9	€ 75,000	€ 345	0.5%	€ 1,344	1.8%	€ 2,048	2.7%			

Table 3 – Legal dues for building control in relation to building costs

From the cost-effectiveness of the different cases is was learned, that applications for building activities with low building costs (up to $\in 25.000$) are more expensive to deal with for the building control departments, than applications for building activities with high building costs ($\notin 25.000$ and more). From the point of view of the requester building activities with low building costs are relatively also more expensive in the building control process than building activities with high building costs. The legal dues for building control seem to be inverse proportionate with the building costs of planned building activities, as table 3 shows.

4.2 Qualitative Data

The interviews zoomed in into the qualitative aspects of building control (e.g. What is being controlled?; Into what extend are standard procedures being used? Into what extent are requesters being treated likewise?). The interviews had a more or less open structure, though they were build around eighteen core-questions, which fitted in five theme's: (1) the data from the questionnaire; (2) organisation of the municipal building control department; (3) control procedures; (4) dealing with requesters; (5) experiences with and expectations to past and future amendments in Building Regulations.

TS 28 - Construction Economics

Johannes Jan van der Heijden, Henk Visscher, Frits Meijer Development of Dutch Building Control (1982-2003): Towards Certified Building Control From the data of these interviews insight was gained in the way municipal building control departments perform their building control tasks; how their processes are set up; for what type of building activities most building permit requests are being made; into what extent requesters and building plans are being treated likewise; and into what extent the municipal building control department value to provide preliminary consultation to (possible) requesters.

The building control departments of the different municipalities are dealing with building control in different ways, no 'national' standard can be described, however some assumptions on Dutch building control can be made. First of all, almost all departments say the (construction) safety and public health form the main focus in building control. From the interviews and the cases it was learned, that applications for frequent-building activities (with building costs of maximum € 50.000, see above) are being checked upon in basic terms. Second, the departments seem to work with a (informal) prioritisation in relation to the expected risks of a building plan, more or less based upon it's building costs. Third, throughout the range of interviews it got clear, that building control employees seem to treat different questioners in a different manner: a clear distinction exists in the way civilians and professionals in the building sector are being treated. Civilians seem to get more help, more instruction and more advise prior to and during the building control process than the professionals. Professionals are expected to know their way around and manage their own difficulties. "That's what they [the professionals] get paid for" seems to be the general justification of this difference in attitude towards the different requesters. Also difference in treatment seems to be made between professionals (architects, advisors and building contractors) known to the employees of building control departments. Work (both designs and building constructions) of professionals with a good reputation at the department seems to be checked upon far less deeply, than work of professionals with a bad reputation at the department. Again a estimation of risks seem to be made, in order to define the level of enforcement an application or a building under construction needs to get the compliance as wanted. This risk-estimation is being based upon the reputation of a professional, which is build up during a period this professional interacts with the building control department. Likewise the risk-estimation based upon building costs, this risk-estimation based upon reputation is no formal policy within the building control departments. And a fourth and final assumption that can be made, based upon the interviews, is the value municipal building control departments give to the possibility for a (possible) requester to consult the department on his planned building activity, prior to the official building-permit application. One the one hand this consultation gives the departments the possibility to steer the conceptual plans, on the other it saves the requester problems with non-compliance (the requester is made clear into what extent the plan will, or will not comply with regulations and, if necessary, where it should be altered to make it comply), which gives the requester certainty. An other argument that was given to the positive aspect of prior-consultancy, was its shortening effect on the processing-time, though no department interviewed records the processing-time of this priorconsultancy.

11/15

4.3 Conclusion

From the field research the question if a special form of controlling small building activities within the framework of voluntary process certification is necessary, could be partly answered. Because in many small building activities non-professional parties are involved, it seems doubtful that applicants would use a certified (private) controller for these kinds of activities. Though an improvement of quality could be raised, because municipalities seem to control small building activities on a low level. Reduction on permit fees when a certificated controller is being used might be an incentive to stimulate the use of this type of building control. In future research architects and engineers will be involved in a study that explores the way these professionals look upon the changes of this special form of controlling small building activities within the framework of voluntary process certification.

5. DISCUSSION AND CONCLUSIONS

Taking a look upon formal Dutch building regulations and building control we detect many characters of a command and control system: building regulations are compulsory imposed by the Dutch state government, all subjects should be treated likewise, enforcement of building regulations is largely being executed by governmental agencies and non-obedience will be sanctioned, a strategy sometimes described as an *instrumental style* (Wiering, 1999; Van Stokkom, 2004). The references to Dutch-norms (NEN-norm) within the Building Decree seem to be an exception, because these norms are being laid down by a private organization. This can be seen as a form of (enforced) self-regulation within formal Dutch building control.

When we take a look upon the actual execution of building control by Dutch municipal building control departments we detect a less instrumental style, but see a style that aims at compliance with a focus on persuasion through means of teaching, instruction, persuasion, negotiation and advising, sometimes described as a *normative style* (Wiering, 1999; Van Stokkom, 2004). In the way these employees execute their tasks, they choose a persuasive and instructive attitude (shown, for example, by the way they execute and value the possibility of consultancy prior to the official building-permit application). Prioritisation in building activities, applicants and professionals is made: building activities with large building costs are prioritised higher, than building plans with small building costs; civilians (laymen) do get more help, more advise and more instruction prior to and during the building control process than professionals; and within this group of professionals distinction is being made based upon reputation of the professional that designs or executes the building plan, that is under control.

Also in future developments in Dutch building regulations and Dutch building control a move from the traditional command and control system can be seen: the introduction of certified private building control. By introducing private parties in the 'public monopoly' of building control, the way is opened to an enforcement system that shows characteristics of (enforced) self-regulation (for an overview on theoretical backgrounds of (enforced) self-regulation we refer to Baldwin and Cave, 1999, pp. 124-133 and Ayres and Braithwaite, 1992, chapter 4).

From the field-research the main-question of this paper – what is the significance and possibility of developing and implementing a special certificate for controlling small or frequent building activities to the building decree within the voluntary process certification system? – can only be partly answered. This because in many frequent (small) building activities non-professional parties are involved, it seems doubtful that applicants would use a certificated (private) controller for these kinds of activities. Though the quality of checking plans to the building decree could be raised as municipalities seem to control small building activities on a low level, whereas it is expected that this will be done more thoroughly by certified (private) controllers. Reduction on permit fees when a certificated controller is being used might be an incentive to stimulate the use of this type of building control.

Other possible alternative controlling processes for small or frequent building activities that might draw back administrative burden for both public and private parties and that might reach a higher level of compliance with building regulations might be the introduction of a form of 'type-approval'. This type-approval could be implemented as a certificate of control for location-independent aspects of a design. For the realisation of the same design on a different location, the certificate could serve as proof of compliance with the building decree. Also a certification of complete building parts, like shed dormers, might be a form of certification that could be further analysed.

Next to different forms of certification, other policies might help in improving the (cost)effectiveness of building control. Especially ICT applications – digital applying and controlling systems, supplying information, monitoring the controlling process, etc – show chances for this improvement. Also a stretching up of the category permit-free building activities or permitting building permits at the counter, as we see in some Dutch municipalities and other countries already, are remarkable concepts that have to be further analysed.

REFERENCES

- Ayres, I. en J. Braithwaite, 1992, *Responsive Regulation: Transcending the Deregulation Debate*, New York (Oxford University Press)
- Baldwin, R en M. Cave, 1999, Understanding Regulation. Theory, Strategy and Practice, New York (Oxford University Press)
- Bercken, F.H. van den, 1997, *Reeks Bundels Bouwvoorschriften, I. Woningwet en Bouwbesluit*, Den Haag (Sdu Uitgevers)
- Cobouw, 25 februari 2000

Cobouw, 2 juni 2003

- Damen, 2003, Monitoring ervaringen bouwregelgeving. Een onderzoek naar de eerste ervaringen in de praktijk met de per 1-1-2003 gewijzigde bouwregelgeving, Delft (Damen Bouwcentrum)
- Dunn, W.N., 2003, *Public policy analysis: an introduction*, New Jersey (Prentice Hall) 3rd edition

Fowler, F.J., 2003, Survey Research Methods, London (Sage Publications) 3rd edition

Johannes Jan van der Heijden, Henk Visscher, Frits Meijer Development of Dutch Building Control (1982-2003): Towards Certified Building Control

Hawkins, K., 1984a, *Environment and Enforcement: Regulation and Social Definition of Pollution*, Oxford (Clarendon Press)

- Heijden, J.J., H.J. Visscher en F.M. Meijer, 2006a, *Bouwtoezicht bij veelvoorkomende* bouwactiviteiten, non-published report
- Heijden, J.J., H.J. Visscher en F.M. Meijer, 2006b, *Shifting responsibilities in Building Control in the Netherlands: a historical perspective*, Second International Congress on Construction History Proceedings, Cambridge (Construction History Society)

Ministerie van Volkshuisvesting, Ruimtelijke Ordening en Milieubeheer, 1996, *Evaluatie herziene Woningwet en Bouwbesluit*, Den Haag: Sdu Uitgevers BV

Ministerie van Volkshuisvesting, Ruimtelijke Ordening en Milieubeheer, 2005, *Dossier Bouwregelgeving*, http://www.vrom.nl/pagina.html?id=18350, last checked on May 3th 2005

Overveld, M. van, 2003, *Bouwbesluit 2003: theorie en praktijk. Beoordelen en verder* ontwikkelen van bouwvoorschriften, Den Haag (Sdu Uitgevers BV)

Reiss, A., 1984, Selecting Strategies of Social Control Over Organizational Life, in: Hawkins, K. en J.M. Thomas (red.), 1984, *Enforcing Regulation*, Boston/Den Haag (Kluwer-Nijhoff), pp. 23-35

Stokkom, B. van, 2004, *Handhaven: eerst kiezen, dan doen. Sociaal wetenschappelijke mogelijkheden en beperkingen*, Den Haag (Expertisecentrum Rechtshandhaving

- TK, Tweede Kamer der Staten Generaal, 1983, *Actieprogramma deregulering* (woning)bouwregelgeving, vergaderjaar 1983-1984, 17913, nr. 7, Den Haag (Sdu Uitgevers)
- TK, Tweede Kamer der Staten Generaal, 1997, *Marktwerking, deregulering en wetgevingskwaliteit, brief van de staatssecretaris van Volkshuisvesting, Ruimtelijke Ordening en Milieubeheer*, vergaderjaar 1996-1997, 24036, nr. 59, Den Haag
- TK, Tweede Kamer der Staten Generaal, 2002, *Bouwregelgeving 2002-2006, brief van de staatssecretaris van Volkshuisvesting, Ruimtelijke Ordening en Milieubeheer,* vergaderjaar 2002-2003, 28358, nr 1, Den Haag (Sdu Uitgevers)
- VBWTN, Vereniging Bouw en Woningtoezicht Nederland, 2004, *Ontwikkeling Toezichtsprotocol*, Projectvoorstel, Den Haag
- Visscher, H.J., 2000, *Bouwtoezicht en kwaliteitszorg, een verkenning van alternatieven voor de technische controles door het gemeentelijk bouwtoezicht*, Bouwmanagement en technisch beheer 20, Delft (Delft University Press)
- Wiering, M., 1999, *Controleurs in context. Handhaving van mestwetgeving in Nederland en Vlaanderen*, Lelystad (Vermande)

BIOGRAPHICAL NOTES

The authors of this paper all work at Delft University of Technology, OTB Research Institute for Housing Urban and Mobility Studies on the department of Sustainable Housing Management and Quality Assurance. The housing sector plays a central role in the programme of this department. The researchers study new and existing housing stock with the emphasis on policy, processes, instruments and players in the housing market. The main themes of interest are quality, the development of processes and models, management and testing. This paper is part of a PhD-research project on which **Jeroen van der Heijden** is currently working. The project aims to provide suggestions of how to shift tasks and responsibilities in a way that optimally guarantees compliancy with building regulations, while minimising administrative burden.

CONTACTS

ir. J.J. van der Heijden Delft University of Technology OTB Research Institute for Housing, Urban and Mobility Studies Jaffalaan 9 2628 BX Delft THE NETHERLANDS Tel. + 31 152781658 Fax:+ 31 152783540 Email: j.vd.heijden@otb.tudelft.nl Web site: www.otb.tudelft.nl