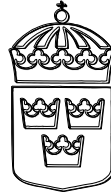


Committee Terms of Reference



Comprehensive review of
Boverket's Building Regulations etc.

ToR
2017:22

Decision at a government meeting on 23 February 2017

Summary

A committee of inquiry is to conduct a systematic and thorough review of Chapters 8 and 10 of the Planning and Building Act, Chapters 3–5 and 7 of the Planning and Building Ordinance, Boverket's Building Regulations, Boverket's Regulations on the application of the European construction standards and the standards they refer to in order to modernise the regulatory framework, thereby benefitting greater competition and increased construction. The Committee is also to investigate the appropriateness, efficiency and volume of the regulatory framework. When required, the Committee is free to propose amendments to this and adjacent regulatory frameworks that set requirements for the design and construction of buildings and civil engineering works.

The Committee is also to analyse the need for regulation to reduce climate and environmental impacts, including the spread of particularly dangerous substances during the construction process and in the choice of building materials.

In the part of its work that relates to provisions about building regulations the Committee is to continuously pass on its proposals to Boverket. [*the National Board of Housing, Building and Planning*].

Deliberations and proposals regarding standards are to be presented by 29 December 2017.

Deliberations and proposals regarding a reduced climate and environmental impact as a result of the construction process and choices of materials are to be presented by 30 November 2018.

A report on the remainder of the remit is to be presented by 13 December 2019.

Background

Housing construction in Sweden has been low for many years in relation to population growth. The Swedish population is increasing strongly and population growth is greatest in the metropolitan areas. Boverket's housing market survey for 2016 shows that 240 of Sweden's municipalities make the assessment that there is a housing deficit in their market. More than 80 per cent of Sweden's population live in these municipalities.

Since 2012 the number of housing starts has tripled nationally, and in the past year the number of housing starts through new construction has risen from about 46 500 in 2015 to 60 500 in 2016 according to Boverket's latest data. The forecasts for coming years are that housing construction will continue to rise. Central government has an important task in making sure that this positive development is maintained and that housing construction rises even more. When housing construction rises, regulatory frameworks must be adapted, as must processes affected.

The Planning and Building Act (2010:900), abbreviated as the PBA, entered into force on 2 May 2011, replacing the old Planning and Building Act (1987:10), abbreviated as the OPBA, and the Act on Technical Requirements for Construction Works, etc. (1994:847). Correspondingly, the present Planning and Building Ordinance (2011:338), abbreviated as the PBO, replaced an older ordinance with the same name.

The PBA and the PBO regulate requirements for construction works. Boverket may issue the regulations needed for the application of the provisions and the Board's regulations are called Boverket's Building Regulations, abbreviated as BBR. Most of the provisions are in BBR while the Act and the Ordinance are of a more general nature. BBR specifies functional requirements, i.e. that a particular function has to be achieved. This means that function can sometimes be achieved using different technical solutions.

In the bill that preceded the PBA the Government stated that one of its intentions with the new Act was to simplify the planning and building processes and sharpen building inspection. The new Act also involves linguistic modernisation and a requirement to take account of more aspects in drafting plans and in building, including environmental and climate aspects. Consideration of natural and cultural values and aesthetically appealing design in what is built were also highlighted as public interests.

Chapter 8 of the PBA contains the substantive provisions on requirements for construction works, construction products, plots and public spaces. This chapter includes requirements for

the design of construction works and their technical characteristics. Some of these requirements were also stated in the OPBA, while others have been added recently, sometimes as a result of EU directives.

Chapter 10 of the PBA contains provisions on the implementation of construction, demolition and site improvement measures. It is the developer who is responsible for meeting these requirements while the building committee chiefly acts as a supervisory authority. The PBA expanded the requirements for the formulation of an inspection plan. The quality assurance supervisor was replaced by an inspection supervisor, at the same time as this person's role was expanded and clarified. The building consultation was replaced with a technical consultation at the same time as the formal content of this consultation was specified. A requirement was also introduced that the building committee has to decide on a starting clearance before the building work can be started. The final certificate was replaced by a final clearance, which was made a pre-condition for putting construction works into use. At the same time, the building permit phase was coordinated more closely with the process of technical inspection.

Standards have come to play an increasingly visible role in construction as the building regulations have been framed as functional requirements, i.e. requirements for functions without specifying how they are to be achieved. Functional requirements are supplemented in many cases by a reference to a standard for a specific solution. The reference is most often made in a general recommendation and is therefore not binding. But there is an advantage in following the general recommendation since it can then be assumed that the functional requirement in the regulation has been met. Everyone is free to choose another solution, but anyone who does so must be able to show that the functional requirement has been met.

Regulation (EU) No 305/2011 of the European Parliament and of the Council of 9 March 2011 laying down harmonised conditions for the marketing of construction products and repealing Council Directive 89/106/EEC entered into force in 2011. It regulates matters including how the characteristics of certain construction products are to be made known. This is done by drafting common European harmonised standards. In the case of products covered by a harmonised standard, testing and reporting the characteristics of the product according to the standard is mandatory before the product can be sold in the EU's internal market.

On 1 January 2011 Boverket's Regulations and general recommendations on design (BKR) ceased to apply as implementation regulations to the requirements of the Planning and Building Ordinance concerning the design of construction works. Instead Boverket's Regulations and general recommendations on the application of European construction standards (EKS) were introduced as implementation regulations. The EKS consists of references to relevant parts of the European construction standards (the Eurocodes) and national choices within them. Unlike most other standards in construction, the construction standards are binding. The

transition from BKR to the EKS meant that construction companies were forced to buy the relevant standards so as to be able to follow the regulations.

The central government budget for 2013 allocated SEK 10 million to a commission to Boverket to translate the Eurocodes and other central standards in the construction sector and make them freely available to Swedish companies. Since 2014 an appropriation of SEK 7 million has been provided each year for this purpose.

Under the PBO, Boverket has to follow up and analyse and to regularly compile the experience of the application of the PBA and regulations that have been issued in connection with the Act. As part of this task Boverket has submitted annual reports to the Government on the application of different parts of the PBA. However, no overall evaluation of the PBA has been carried out.

In the 2013/14 session of the Riksdag (the Swedish parliament) several private members' motions to the Riksdag put forward the view that the PBA had not fully lived up to the expectations of simpler planning and building legislation. According to these motions there is reason to further simplify the legislation. In response to the motions the Riksdag has announced to the Government that there is still a need for extensive reform and that the PBA needs to be modernised, simplified and clarified (Committee Report 2013/14:CU10, Parliamentary communications 2013/08:39, 14/08:187 and 2013/14:188).

On 21 June 2016 the Government presented a housing policy package of 22 steps for more housing. Several reforms proposed in the package need to be investigated before they can be implemented. For instance, a review was announced of Boverket's Building Regulations (point 6 of the package). That proposal is dealt with in these terms of reference. These terms of reference mainly cover a review of the building and construction regulations but also cover adjacent regulatory frameworks that set requirements for the design and construction of buildings and civil engineering works,

Need for an inquiry

The building regulations need to be reviewed

Against the background that planning and building legislation has undergone extensive change in recent years, the Government appoints a committee of inquiry to conduct a comprehensive review of the whole system of building regulations.

The building regulations are the way society sets the minimum acceptable level in building. The system of building regulations is of great importance for the effectiveness of planning and building legislation as a whole.

The building regulations and how they are framed is, for instance, crucial to being able to have a diversified supply of housing that can be demanded by several different target groups

and housing construction suited to different needs and preferences, as well as to ensuring that the workplaces built are healthy and safe for workers.

There is criticism of the present regulations to the effect that they are seen as too extensive and costly, but this criticism is usually expressed in general terms, and therefore provides limited guidance about how the regulatory framework could be changed.

Since no comprehensive and systematic review has been carried out in order to modernise and update the system of building regulations, there is reason to investigate whether the regulatory framework is well-adapted and appropriate and to investigate whether the building regulations represent an appropriate balance between public and private interests. There is also reason to investigate whether the way they are framed contributes to rising costs for building production.

The digitalisation of society as a whole as well as processes for planning, project planning, production management and monitoring in construction generate an expectation that it will be possible to process regulations and general recommendations, which consist of measurement values and calculation models, digitally.

Society today is adapted and built up according to a particular climate. But the changes to be expected in the climate will change these parameters. This will have impacts in many different areas of society, and not least for buildings. Climate change means adjustments in terms of temperatures, relative humidity and precipitation, for instance. Buildings will be affected by this, for example through the impact on the lifetime of materials and the risk for greater dampness and mould damage. New dimensioning regulations may need to be drafted to cope with more extreme weather, high snow loads for instance. The building regulations therefore need to be adapted to the new situation resulting from climate change.

Agenda 2030 is the action plan that the countries of the world have agreed on in order to solve the global challenge involved in establishing economically, socially and environmentally sustainable development. The built environment affects all aspects of sustainable development and a review of the rules that steer the development of buildings must be guided by this Agenda and its objectives.

There are general recommendations to Boverket's Building Regulations, which supplement the functional requirements prescribed and specify how someone suitably can or should act in order to meet the regulations. However the crucial point is that the developer is able to show that the functional requirements have been met, not that the general recommendations have been followed. In certain cases there are difficulties in showing that the functional requirements have been met without following the general recommendations. For that reason the general recommendations have assumed an important and, in practice, normative role in deciding what is built and how it is built. This means that scope for innovation and development that functional requirements are expected to provide is restricted. In this context it is important to investigate

what the application of the regulatory framework with the general recommendations looks like in the municipalities.

On 8 September 2016 the Government commissioned Boverket to present proposals that would lead to more uniformity in the inspection of characteristics of prefabricated housing. Boverket is to report on the commission by 30 June 2017. Boverket's commission includes considering statutory amendments, which will then affect a subset of what is built in Sweden. It is assumed that the present regulatory framework will continue to apply to other construction. In these areas there is reason to evaluate the changes made when partly new regulations for the inspection of the implementation of construction, demolition and site improvement measures were introduced into Chapter 10 of the PBA in 2011.

In 2012 Boverket was commissioned by the Government to propose statutory amendments in order to stimulate the construction of housing for students and young persons and to propose the amendments to acts, ordinances, regulations and guidance that are needed in order to stimulate and facilitate the emergence and construction of such housing. This commission resulted in far-reaching amendments to design requirements that made it possible to reduce the residential floor space in these two categories of housing without compromising accessibility and usability for persons with limited mobility or orientation capacity. In addition to housing for students and young people there are other temporary forms of housing that could be reviewed in a similar way.

The role of standards in the regulatory framework for building needs to be reviewed

Boverket's Building Regulations have mainly been framed as functional requirements for many years. Participants in the construction sector are expected to develop specific solutions that meet the functional requirements set in the regulatory framework. When a standard is developed, a specific technical solution produced by one participant can be more widely used. In this way, other companies can avoid the development effort that would otherwise be required. By reducing the information and adjustment costs of construction companies in this way the development and use of industry-wide standards contributes to more efficient construction.

Standards are private law documents that other participants must buy in order to be able to use them. This system makes it possible for the participant or participants who have had development costs to receive compensation for the standard, which is necessary if standards are to be produced.

At the same time, the cost of buying standards can be relatively high for individual companies that need to have access to them. For small businesses the cost can be a particular burden. To the extent that the costs of standards are so high that they create barriers to entry or prevent small businesses from growing, the system of standards can also restrain competition in the construction market and therefore lead to higher building costs.

Since well-functioning standardisation is important for industrial growth and development, central government provides both direct grants to the standardisation bodies and also other forms of support, for example through the participation of government agency experts in various sectors.

There is a need to investigate whether the functional requirements in the regulatory framework for building in combination with standards and the structure of the construction industry create barriers to the establishment of new businesses and to growth in the construction industry. In this context, however, the advantages and disadvantages of alternatives to standardisation must be considered. Similarly these alternatives need to be examined in relation to EU law.

European and international standards are the key to markets outside Sweden. If Swedish companies are to be able to drive innovation and development, they must also have opportunities to be able to influence the formulation of standards at European and international level. There is a need to investigate special action to promote the participation of the construction industry in the development of European and international standards.

Sustainable construction processes and choices of materials

The built environment accounts for a large part of the environmental impact and energy use in society. To facilitate the transition to an energy system based on renewable raw materials in which Sweden's national environmental quality objectives are achieved, energy use in the built environment needs to decrease. New-built housing today is often of high quality in terms of energy efficiency. Since new-built housing is becoming more and more energy-efficient, the construction process's relative share of a building's aggregate environmental impact seen over the whole lifetime of the building is getting larger and larger. This is why the Committee on Environmental Objectives states in its interim report A climate and air pollution control strategy for Sweden [*En klimat- och luftvårdsstrategi för Sverige*] (SOU 2016:47) that more focus needs to be placed on minimising the climate and environmental impact of building materials during the construction process.

Two studies initiated by the Swedish Construction Federation show that up to 50 per cent of the total climate impact of a new-built multi-dwelling building during its lifecycle occurs during the construction process. These studies show that choices of materials have a substantial climate impact during the construction process. Boverket's report from 2015 mapping the state of knowledge and research regarding the climate impact of buildings points to the need for central government leadership to increase the drivers in climate work in the construction sector. Boverket's preliminary study of environment and climate-adapted building regulations identifies, for example, an imbalance in information about the environmental impact of building products between material producers and developers, which may be a reason for regulating

what information on the environmental impact of building products has to be available during the construction process.

Current building regulations contain requirements about health, hygiene and environment (Chapter 8, Section 4, first paragraph, point 3 of the PBA), but these requirements are limited to the environment of the users of the building. The energy management requirement in the building regulations (Chapter 8, Section 4, first paragraph, point 6 of the PBA) is intended to reduce the building's energy use and climate and environmental impact during its operating phase. As the production phase accounts for an ever increasing share of the negative climate and environmental effects of the construction and housing sector, it will be ever more important to take account of the climate impact during the construction process. In the light of this development there is reason to review the need for policy tools to limit the environmental and climate impact during the construction process.

Remit

A committee of inquiry is to conduct a systematic and thorough review of Chapters 8 and 10 of the Planning and Building Act, Chapters 3–5 and 7 of the Planning and Building Ordinance, Boverket's Building Regulations, Boverket's Regulations on the application of the European construction standards and the standards they refer to on the basis of what has been set out under the heading Need for an inquiry. The Committee is also to investigate the appropriateness, efficiency and volume of the regulatory framework. When required, the Committee is free to propose amendments to this and adjacent regulatory frameworks that set requirements for the design and construction of buildings and civil engineering works.

The Committee is also to analyse how the regulatory framework can be designed so as to reduce climate and environmental impacts, including reducing the spread of particularly dangerous substances during the construction process and in the choice of building materials.

The remit does not cover tax questions.

The purpose of the review is to modernise and simplify the regulatory framework and promote competition at the same time, without endangering health, safety, design quality, a good living environment and long-term sustainable construction.

Five parts of the remit are set out below. The first part of the remit, under the heading Modern and simplified regulations, is to be reported continuously during the period of the inquiry while the other parts are to be presented in interim reports or in the final report as stated under the heading Conduct of the work and reporting of the remit.

Modern and simplified regulations

A review is to be carried out of the regulations in BBR and the EKS on the basis of the system of building regulations within the limits set by acts of law and government ordinances. This system consists of a substantial volume of regulations that have

many users, in the first place municipalities and developers in different situations, ranging from individual builders to large commercial construction companies, who have to be able to find, read and apply individual regulations and the regulatory framework as a whole. The regulations cover all types of construction works to a varying degree.

Certain aspects of the design of buildings are governed by regulations issued by agencies other than Boverket, including the Swedish Civil Contingencies Agency and the Swedish Work Environment Authority. Out of consideration for the users of the regulations it is appropriate for regulations that refer to the same characteristic of a building to be adopted and supplied in a single context. So there is reason to consider whether all parts of the present distribution of authorisations between agencies are appropriate.

How the regulations are structured and how they are presented to different types of users may be of quite some importance for whether they are seen as complicated or leading to higher costs. In connection with its systematic review of the substantive content of the regulations the Committee is therefore also to investigate the possibilities of making the regulations more user-friendly by, for example, technical applications that make it possible to overview what parts of the regulatory framework are relevant in a particular decision-making situation. This part of the inquiry remit also includes the use of general recommendations and references to standards.

The committee is therefore to:

- review all the building regulations in BBR and the EKS and propose the amendments to the regulations deemed appropriate;
- consider whether the delimitation of authorisations between the agencies that issue regulation in the area of construction is appropriate; and
- investigate the forms in which the building regulations and general recommendations should be available to different users and how references are made to standards.

At which regulatory level should the building regulations be adopted?

Public regulations for the design of buildings are aimed at areas including safety, health and resource efficiency. Even if every regulation viewed on its own is justified, there are reasons to conduct a review of the whole system. The committee is to draw on research and international comparisons to shed light on whether the volume of the Swedish building regulations is appropriate.

Even if the volume of the regulatory framework in the area of construction is appropriate, there is reason to consider whether all parts of the present system with the sub-delegation of regulatory power from the Riksdag and the Government down to Boverket are appropriate. The Committee is therefore to consider whether this systematic structure should be altered in some respect so that regulation reflects more clearly the

extent to which a particular rule is an expression of a political decision, about which it is more appropriate for the Riksdag or the Government to issue regulations, or consists instead of detailed provisions, where there is an advantage when they are issued by an administrative authority.

The committee is therefore to:

- shed light on the volume of the Swedish regulatory framework compared with the volume of the regulatory framework in other comparable countries;
- when required propose changes to the scope of the public commitment;
- consider whether all parts of the present system of sub-delegation of regulatory power regarding regulations in the area of building are appropriate and propose statutory amendments when required.

Standards and competitiveness

Against the background of the changes that the regulation of planning and building has undergone since the PBA was introduced and Boverket's Design Regulations made way for EKS 2011, a review of the present model of standardisation in the construction area is justified. In particular, the Committee is to analyse how the present system of standards and its application in practice affect the efficiency of construction as well as the economic consequences of the system and how it affects competition in the construction industry and in the construction market. The purpose is to increase the understanding and usability of the system of standards.

This remit also includes reviewing how the functional requirements in the regulatory framework for building and standards interact in order to map circumstances that restrain the establishment and growth of companies in the construction industry.

The committee is therefore to:

- map how comparable EU Member States handle standardisation in the construction area;
- map ongoing revision and development work for standards in the EU in the construction area;
- map and analyse what barriers to establishment and growth in the construction industry can be attributed to the combination of functional requirements in the regulatory framework for construction and standards;
- where required propose measures to remove such barriers; and
- examine whether special measures are justified to facilitate the participation of the construction sector in European and international standardisation, taking account of the general measures taken, for example, as part of support for the Swedish export industry.

The inspection system

The PBA led to several significant changes in public inspection of the implementation of construction, demolition and site

improvement measures. Against the background that the Act has been in force for some years there is reason to analyse whether the framing of the provisions of Chapter 10 of the PBA is appropriate, since, for example, Boverket has noted that there are deficiencies in many inspection plans. The announcement by the Riksdag that a review of the PBA is needed is a further argument for a specific review of these provisions.

In the first place the review of Chapter 10 of the PBA should cover the amendments that involved significant new content in relation to the provisions of the OPBA, but the review should also ensure that the inspection process as a whole is functioning in an appropriate way. This review should also include the reform that certain design requirements that were previously only covered by the developer's self-inspection are now already examined in the building permit.

The review is intended to ensure that the design of the system is appropriate and is to be conducted on the basis of the reasons that formed the basis for the changes (Govt Bill 2009/10:170).

The committee is therefore to:

- evaluate how the provisions of Chapter 10 of the PBA and related regulations are applied;
- analyse whether the framing of the provisions of Chapter 10 of the PBA and related regulations is appropriate from both the public and the private perspective, especially in relation to the interest of minimising the number of construction faults;
- give a general description of the importance of the changes for the quality of what is built;
- evaluate the reform that certain design requirements that were previously covered by the developer's self-inspection are now already examined by the building committee in the building permit;
- investigate how the changes in the PBA have affected processing times in the municipalities;
- examine whether the changes have resulted in greater administrative costs for developers; and
- when required propose changes to the regulatory framework that are needed to achieve a more appropriate construction and inspection process.

Reduced climate and environmental impact as a result of the construction process and choices of materials

Against the background that a substantial share of the climate impact of newly produced buildings arises during the construction process and in choices of materials, there are reasons to review the need to also target policy tools at the construction process.

The committee is therefore to:

- assess the socioeconomic effects of reducing the climate and environmental impacts of buildings including reducing the spread of particularly dangerous substances from a lifecycle perspective; and

- investigate the need for changes in regulatory frameworks and other policy tools so as to reduce the climate and environmental impact, including reducing the spread of particularly dangerous substances, during the construction process, and present cost-effective proposals when required.

Impact assessments

The Committee is to present cost estimates and the effects of its proposals on the environment, equality between girls, boys, women and men, accessibility for persons with disabilities and on other matters in accordance with the Committees Ordinance (1998:1474) to the extent that is relevant for its various proposals. In the case of proposals for regulations that are to be passed on to Boverket, the associated impact assessments are also to be passed on to the Board.

The impact analysis is to be started in the initial phase of the inquiry and run in parallel with the remainder of its investigative work. The committee is also to report which proposals have been considered but dismissed and give reasons for its decision. The committee is also to assess and report what effects its proposals may have on to the environment. If the committee judges that its proposals may have fiscal impacts the committee is to propose funding.

Conduct of the work and reporting of the remit

As part of its remit the committee is to study and analyse the systems of building regulations in the other Nordic countries and in other countries considered relevant by the committee on the basis on the purpose of its terms of reference. The committee is to study relevant research about how building regulations affect the design of the built environment and their impact on the costs of new construction and of alterations. The committee is free to initiate research studies in these areas.

It is important that municipalities and developers, whether small, medium-sized or large, and organisations with user perspectives are given an opportunity to participate in the formulation of the proposals for change. The review is to be conducted with different reference groups linked to the various parts of the remit in order to achieve a common view and greater understanding and to deliver an appropriate system of regulations that ensures good usability and applicability, well designed living environments and efficient construction.

The committee is to await the report on Boverket's commission to present proposals that contribute to uniformity in the inspection of prefabricated houses before starting its evaluation of the inspection system. In the part of its remit that relates to reduced climate and environmental impact as a result of the construction process and choices of materials the committee is to consult with Boverket on how its investigative work can supplement commission 8 in Boverket's appropriation directions for 2017. The committee is also to keep itself

informed about other inquiries and commissions that may be of relevance for this inquiry. Boverket is to function as expert support and assist the inquiry throughout the period of the inquiry.

The committee is to consult with the county administrative boards. When required the county administrative boards are also to assist the committee, for example by providing compilations and evaluations of the application by the municipalities of the regulatory framework.

In the part of its work that relates to provisions about building regulations the Committee is to continuously pass on its proposals along with impact assessments to Boverket.

The part of the remit that relates to standards is to be presented by 29 December 2017.

The part of the remit that relates to reduced climate and environmental impacts as a result of the construction process and choices of materials is to be presented by 30 November 2018. This part of the remit is to be presented separately from the other parts.

A report on the remainder of the remit is to be presented by 13 December 2019. This report shall also contain a brief account of how the part of the remit that relates to regulations, where its proposals have been passed on to Boverket continuously, has been carried out.

(Ministry of Enterprise and Innovation)