Andris Steinerts
Head of Building regulation unit at the Building department

Implementation of Eurocode and market surveillance of construction products in Latvia

Consortium of European Building Control, Riga, May the 12th, 2008

Brīvibas iela 55, Riga, LV 1519
Phone: 67013035;
Fax: 67280882; 67013027
E-mail: andris.steinerts@em.gov.lv;
Internet home page: www.em.gov.lv
Construction sector in Latvia is regulated by the Construction law, issued by Saeima in August the 10\textsuperscript{th} 1995.

Circulation of construction products is regulated according to Article 25 of the Construction law, Law on Conformity Attestation, Regulation of the Cabinet of Ministers No.181 from April the 30\textsuperscript{th}, 2001 “Conformity attestation of construction products in regulated area” and Latvian Building code LBN 006-00 “Essential requirements to construction works” (approved by the Regulation of the Cabinet of Ministers No.142 from March 27\textsuperscript{th} 2001).
According to Article 4 of the Construction law the general supervision and co-ordination of construction in Latvia is competence of the Ministry of Economics. The Ministry shall develop a uniform State policy in construction and ensure implementation of this policy. In order to perform this task, the Ministry shall:

1) develop a construction development strategy and programme;
2) develop proposals for the improvement of the system of regulatory enactments regulating construction;
3) develop, compile and submit construction norms to the Cabinet for approval;
4) excluded;
5) within the scope of its competence, examine complaints regarding activities by State administrative and local government institutions and the officials of these institutions in the field of construction;
6) maintain the construction merchant register;
7) ensure State control in construction;
8) monitor and control compliance with the requirements for the accessibility of the environment in public buildings and structures; and
9) maintain the information base to ensure the supervision and control of construction.
Andris Steinerts - Implementation of Eurocode and market surveillance of construction products in Latvia
Consortium of European Building Control, Riga, May the 12th, 2008

There are acting three subordinated to the Ministry of Economics institutions in construction sector: State Construction Inspectorate (www.vbi.gov.lv), State Construction, Energy and Housing agency (www.bema.gov.lv) and Consumers Rights Protection centre (www.ptac.gov.lv)
There is three-stage supervision of construction process in Latvia:
- supervision provided by members of construction process;
- municipal Construction inspection;
- State Construction Inspectorate.
According to Article 27 of Construction law and Paragraph 158 of the General Construction provisions customer has a right to draw in construction supervisor representing customer’s interests at the construction site.

Performance of construction supervision is prescribed by Latvian Building code LBN 303-03 “Regulations for supervision of construction Regulations for supervision of construction” (approved by the Regulation No.75 of the Cabinet of Ministers from February the 10th, 2004)
According to Paragraph 159 of the General Construction provisions construction supervision ordered by customer is binding in case if:
- the construction is being performed with State or local government funding (as public procurement);
- the intended use, construction elements or methods for executing the construction work of the building or structure involve an increased risk in accordance with the opinion of an expert-examination;
- construction process is performed in plant and design-build form
According to Article 26 of Construction law and Paragraph 160 of the General Construction provisions customer has a right to invite designer of the construction work to perform an authorship supervision of construction process and to follow the course of the building design implementation.

Performance of construction supervision is prescribed by Latvian Building code LBN 304-03 “Regulations for supervision of construction Regulations for the authorship supervision” (approved by the Regulation No.342 of the Cabinet of Ministers from June the 26th, 2003)
According to Paragraph 161 of the General Construction provisions authorship supervision ordered by customer is binding for:
- all structures in the central part and historical parts specified in the general plan of a city (town);
- public buildings and structures;
- construction works to be restored or reconstructed;
- construction works for which the Cabinet of Ministers has specified special construction process procedures in accordance with Article 6 of the Construction Law – if the relevant ministry requests such;
- for residential buildings except for single-family houses;
- for industrial structures for which an author’s supervision has been requested by the Regional Environmental board of the State Environment Service or if the building authority deems it necessary
- construction process is performed in plant and design-build form
State Construction Inspectorate carries out the functions, defined by the Article 29 the Construction law. To provide the performance of these functions, The SCI exercises such tasks:
- controls the officials and the state and local authority institutions - participants of construction - to observe the law and other requirements of legislation in the area of construction.
- carries out the control over building design acceptance, delivery of building permit, inspection of construction work, building conveyance into exploitation and the state control over the procedure of the letter.
- controls building materials and products to meet conformity assessment in the regulated area
- controls Hydropower Plant Dams to be meet the legal requirements
State Construction Inspectorate carries out the following functions, (prolongation):
- organizes building design, construction work and building expertise in order to evaluate the adequacy to legal requirements and technical regulation
- takes part in work of commission of construction acceptance of construction work fully or partly is financed from the state or local auditory funds or into exploitation is conveyed a socially significant building
- considers applications and complaints and responds to them according to its competence
- takes part in work of special commission in order to ascertain the cause of accidents taken part in buildings etc.
According to Article 7 of the Construction law, management of construction activities is competence of municipalities.

To manage the construction process the larger municipalities have Building authorities. Smaller municipalities had have cooperated and organized joint Building authorities.

In each Building authority there is position of construction inspector, in larger municipalities there are construction inspectorates.

It is duty of municipal construction inspectorates to monitor construction process performed in municipal area and to prevent violation of Building regulations.
(1) Municipalities are responsible for:
- development and approval the spatial plan, detailed plans of the administrative territory thereof and building regulations contained therein that are mandatory for all persons participating in construction and refer to all types of structures within the administrative territory of the territorial local government, as well as control and ensure performance thereof;
- examination of building designs and taking decisions regarding them;
- issuing and registering construction permits (including construction permits issued by other institutions); and
- control how persons participating in construction comply with the requirements of this Law and other regulatory enactments regulating construction;
- to publish at least once per month publicly available information (on web) regarding on all activities related to construction.
(2) To oversee and control construction municipalities shall set up building authorities within the administrative territory thereof.

(3) Construction within the administrative territory of the territorial local government shall be overseen by the officials of the building authority, who shall have a higher education in construction.

(4) Construction within the administrative territory of the territorial local government shall be controlled by officials on whom construction control rights have been conferred in accordance with the procedures specified in Section 29, Paragraph three of this Law.

(5) Territorial local governments may, in accordance with the procedures specified in Chapter V of the State Administration Structure Law, delegate to other local governments with the functions associated with the supervision of construction in the relevant administrative territory, separate tasks or establish joint control services for the implementation of such tasks, preserving liability for the implementation of the functions as a whole.
Municipal construction inspectors are responsible for compliance of construction process to Construction law in area of charge.

According to Article 30 of Construction law:

(1) Construction inspector has the right to inspect and examine construction works, to enter them, survey them, request explanations and documents provided for by the General Construction Regulations, as well as request the vacation of premises at the expense of the building contractor or builder, making them accessible and to uncover parts of structures to be able to examine the built construction if signs of unsafety have been determined.

(2) In respect of each examination the building inspector shall provide an adjudgment and, if necessary, also instructions regarding how the violations shall be eliminated.

(3) The building inspector has the right to suspend construction process until the instructions given in the adjudgment are fulfilled.
(4) If construction takes place without a construction permit or does not comply with the accepted building design, the building inspector shall order immediate suspension of the construction work until the relevant local government takes a decision.

(5) If it is possible according to assessment to dispose the violence discovered by construction inspector, municipality has a right to give with preconditions to leave the construction process.

(6) If the construction has proceeded without accepted building design, local government has taken a decision regarding the demolition of an unlawfully constructed structure or part thereof and recovering of previous situation.
Andris Steinerts - Implementation of Eurocode and market surveillance of construction products in Latvia
Consortium of European Building Control, Riga, May the 12th, 2008

Consumers Rights Protection centre is performing:
- market surveillance and control of non-food products, except household chemicals, pharmaceutical products and cosmetic products;
- examination of consumers’ complaints;
- assistance in cases of consumers legislation;
- surveillance of contracts among consumers and producers as well as providers of services;
- surveillance of correct use weighting and cashing equipment and correct price calculation;
- inspection of used on market metrological devices;
- market surveillance of pre-packed products.
According to paragraph 42 of the Regulation of the Cabinet of Ministers No.181 from April the 30th, 2001 the State Construction Inspectorate and Consumers Rights Protection centre are authorised market surveillance bodies of construction products.

As management of construction activities is competence of municipalities, municipal construction inspectors are often involved in market surveillance activities at the construction sites organized by State Construction inspectorate.
Officers of State Construction Inspectorate are performing market surveillance on construction site and, if necessary at the production sites.

Officers of Consumers Rights Protection centre are performing market surveillance on market places – distribution sites and shops.

Usually officers of both inspectorates are performing common inspections on market places.
According to Paragraph 46.1 of the Regulation of the Cabinet of Ministers No.181 the State Construction Inspectorate has a right:

- enter construction site and check attendant documentation for the delivered construction products and if necessary organize testing of the construction products;

- jointly with the inspector of the Centre of Protection of Consumer Rights check the declarations of the conformity offered in the market and the trade places of the construction products;

- stop construction process where construction products are build-in that do not have conformity assessment or having incorrect conformity attestates (conformity declarations);

- enter the production sites of the construction products, check assessment documentation of the construction products and organize tests of the samples and the audit of the control system of the production process, if discrepancy of the manufactured construction products is detected during market surveillance.
Market surveillance of construction products by construction inspectors is expressed mainly as verification of conformity attestation documentation. Market surveillance officers by visiting of market places:

- claiming for conformity attestates (copies of conformity declarations) of construction products;
- checking validity of the conformity declarations;
- control of correct CE marking.

Taking of samples of products for testing is applied only in special occasions. Usually this results with court cause. In ordinary cases checking is aiming to control of traceability of conformity assessment procedures, documents and notified bodies involved.
The most frequent violations in area of construction products are:
- marketing of regulated products without proper conformity declaration and CE marking, if relevant;
- marketing of products subjected to harmonized standard without CE marking;
- reference to incorrect technical specifications in conformity declaration;
- involvement of not notified conformity assessment body in conformity attestation process.

In utmost situations falsification of conformity attestation documents are sometimes met
Some problems in market surveillance are arising due to discrepant requirements from one side in harmonized product standards and Latvian Building codes (LBN) and former Soviet Construction codes (SNiP) from another side. There are some requirements and parameters in LBNs conflicting with harmonized product standards.
It makes problem for producers of construction products to fulfil the conflicting requirements of Latvian Building codes and harmonized product standards. It is burden for producer - usually it increases the production and conformity assessment costs. Producer of construction product shall follow the harmonized product standard and procedure of conformity assessment, bur contractor shall fulfil the requirements of building codes. It elevates the building costs.
This problem in great extent will be solved by implementation of Eurocode standards in Latvian Building regulation system.

It is Eurocode National implementation plan on place. Soon it will be listened at the hearings of the Cabinet of Ministers.
Andris Steinerts - Implementation of Eurocode and market surveillance of construction products in Latvia
Consortium of European Building Control, Riga, May the 12th, 2008

It will be implemented Eurocode in Latvia as mandatory building code for structural design until the 2010. The following steps for this shall be undertaken:

- adopt Eurocode standards in Latvian National Standardization system;
- translate standards in Latvian;
- elaborate and implement National annexes to Eurocode standards;
- train Latvian experts and university professors in Eurocode methodology;
- implement design according the Eurocode methodology in university curricula for training civil engineering students;
- implement requirements of Eurocode in Latvian Building codes;
- inform structural design practitioners regarding specific of structural design according Eurocode;
- draw or translate textbooks for training of students.
Andris Steinerts - Implementation of Eurocode and market surveillance of construction products in Latvia
Consortium of European Building Control, Riga, May the 12th, 2008

From June 2006 till August 2007 it was realized financed by Transition facilities program project LV/2005-IB/EC/01 “Implementation of Eurocode standards in structural design practice in Latvia”. Project was implemented with assistance of German Institute of Construction Technology (Deutsches Institut für Bauwesen)
The results of the Project were:
- assessment of the present state of structural design practice in Latvia;
- lectures for professors of universities to promote higher education (training of trainers);
- supporting improvement of higher education of civil engineers;
- informative seminars for structural designers;
- preparing legal implementation of the Eurocodes;
- two study visits to Germany for Latvian experts.
German experts train Latvian professors in methodology and contents of Eurocodes

16 German professors from 12 German universities and 8 specialised experts have conducted training seminars. The overall duration was about two and a half month.

- Professors of Riga Technical University (RTU) and Latvia University of Agriculture (LLU) were introduced in details with specific of structural design according to Eurocode standards;

- 13 multi-days lecture courses in summer of 2006 were held on different aspects of structural design;

- The leading Latvian experts improved their knowledge and skills in structural design and training methodology.
- Professors of RTU and LLU were introduced with training methodology of structural design subjects according to Eurocode standards in some German universities:
  - Munich Technical University (prof. Zilch, Kr.Gläser - design of concrete structures);
  - Technical University of Berlin (prof. Savidis – geotechnical design);
  - Technical University of Brunswick (prof. Budelmann, Dr.Hinrich, Dr.Laube – fire resistance of concrete and masonry structures);
  - Technical University of Dresden (prof. Jäger - design of masonry structures).
Textbooks used in European universities for training of students in structural design subjects and handbooks for structural designers were purchased in frame of twinning project.

Some German university professors (prof. Zilch, prof. Jäger) as present to Latvian universities made as gift some original textbooks.
13 booklets on different aspects of design of engineering structures according to Eurocode were written by Latvian professors.

These booklets were presented at the seminars for structural designers - practitioners.
One of most important benefits for Latvia is drafting of National Annexes to Eurocode standards.

- It was established the Working group There were 10 meetings of working group arranged

Handouts on main principles of structural design according to Eurocode, as well as booklets prepared were distributed to participants.
Andris Steinerts - Implementation of Eurocode and market surveillance of construction products in Latvia
Consortium of European Building Control, Riga, May the 12\textsuperscript{th}, 2008

Eight one day informative seminars for structural designers – practitioners were held in summer of 2007;
Handouts on main principles of structural design according to Eurocode, as well as booklets prepared were distributed to participants.
Now it is going on implementation of “dual approach” (coexistence period) of Eurocode and existing Latvian Building codes of structural design. This process started in 2004 by implementation of coexistence period in geotechnical design (in this time ENV 1997).
Andris Steinerts - Implementation of Eurocode and market surveillance of construction products in Latvia
Consortium of European Building Control, Riga, May the 12th, 2008

It was amended LBN 003-01 “Building climatology” to implement characteristic and design values of snow loads and wind actions for design according to Eurocode standards. The problem is the difference of statistical estimation of values of actions according in LBN codes, coming from SNiPs, and Eurocode. Eurocode approach is possibility per 50 year period, LBN – possible in 5 year period
This transition period will last till 2010. In this time two original Latvian Building codes for design of metallic structures shall be approved and national annexes to main Eurocode standards elaborated. For some standards recommended values of Nationally determined parameters (NDP) will be in use.
Andris Steinerts - Implementation of Eurocode and market surveillance of construction products in Latvia
Consortium of European Building Control, Riga, May the 12th, 2008

Thank you for your attention