

Wrocławska

# CECEM Koszalin

#### TOPIC: Comparative study of Building Law in Poland and Russian Federation

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#### The idea to write the article







#### **Building codes around the world**





#### Implementing Building Law, two ways

- National- being initiated by the government or standard organization connected to it and applied to the whole country territory.
- Local-local administration choose to start own rules valid for their jurisdiction.

Every regulation no matter the country generally includes standards for structure, placement, size, usage, wall assemblies, location; rules regarding parking and traffic impact; case of fire and unusual events; requirements for specific building uses etc.



## **Approach in Poland**

- In 2004 Poland has joined the European Union and started to use the Eurocodes
- Before that time Poland was using its national Polish Standards



#### **Eurocodes**

EN 1990 Basis of structural design	Safety, serviceability, durability of structures
EN 1991 Actions on structures	Loads, actions
EN 1992 Design of concrete structures	Design of structures from different materials
EN 1993 Design of steel structures	
EN 1994 Design of composite steel and concrete structures	Y//
EN 1995 Design of timber structures	]//
EN 1996 Design of masonry structures	Y /
EN 1997 Geotechnical design	Geotechnical and seismic design
EN 1998 Design of structures for earthquake resistance	$\mathcal{H}$
EN1999 Design of aluminium structures	7



### Other documents regarding construction sector in Poland

- Building Law (Prawo Budowlane)
- Regulation on technical conditions of the buildings and their location (Rozporządzenie Ministra Infrastruktury w sprawie w sprawie warunków technicznych, jakim powinny odpowiadać budynki i ich usytuowanie)



#### **Approach in Russian Federation**

- Technical regulations about safety of buildings and constructions (Технический регламент о безопасности зданий и сооружений)
- Technical regulations about requirements of fire safety (Технический регламент о требованиях пожарной безопасности)
- Technical regulations of the Eurasian Customs union "Safety of elevators" (Безопасность лифтов)



#### **Approach in Russian Federation**

The part of national standards and sets of rules, approved by the resolution of the Government is obligatory to use. The others are applied as voluntary. At the same time the executive authorities develop and approve lists of the regulations recommended for implementing to meet the requirements of technical regulations.



#### Types of regulatory documents in Russian Federation

Federal norms are divided into three parts. Republics of the Russian Federation prepare their own regulatory documents called territorial construction norms (TSN) for issues not regulated federally.





# Construction Standards and Rules (Строительные нормы и правила)

Set of the regulations of technical, economic and legal character regulating implementation of urban planning activities, and also engineering researches, architectural and construction design and construction adopted by executive authorities.



Part 5 Rates of material and labour resources



-about requirements of fire safety -about safety of buildings and constructions -about safety of objects of an inland water transport -about safety of objects of sea transport

-buildings and constructions -construction materials and products -highways

-infrastructure of railway transport -infrastructure of the underground tube

-objects of sea transport



-objects of an inland water transport



#### Other documents regarding construction sector in RF

- GOSTs (Межгосударственный стандарт)- quality control of the ; includes the construction branch but also many other categories like food
- Urban Planning Code of Russian Federation (Градостроительный кодекс Российской Федерации)- governing urban-planning but also architectural and construction design including survey researches, renovation which affect reliability and safety of construction, reconstruction, usage of buildings



#### **Eurocodes and SNiPs (SPs)**

#### **Eurocodes**

- based on the limit state design system
- divided into different parts by the material issue
- significant metal saving
- reduction of the cost of design and construction installations

#### **SNiPs or SP**

- based on the limit state design system
- divided by the structural design issues
- include norm of design of constructions of a different functional purpose
- town planning, engineering systems, architectural supervision



#### **Using Eurocodes in RF**

Основные тематические блоки, изучаемые в программе:

- Терминологический словарь
- Основы проектирования (EN 1990)
- Нагрузки и воздействия (EN 1991)
- Проектирование железобетонных конструкций (EN 1992-1-1)
- Проектирование стальных конструкций (EN 1993-1-1)
- Проектирование сталежелезобетонных конструкций (EN 1994-1-1)
- Проектирование конструкций на аварийные воздействия, в том числе на воздействие пожара (EN 1991-1-7)
- Геотехническое проектирование (EN 1997-1)
- Проектирование сейсмостойких конструкций (EN 1998-1)
- Цементы. Технические требования. Методы испытаний согласно европейским стандартам (EN 197-1, EN 196)
- Бетонные смеси. Технические требования. Методы испытаний согласно европейским стандартам (EN 206-1, EN 12350)

http://mgsu.ru/universityabout/Struktura/Instituti/IDPO/pk/evrokody-v-rossii.php



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- Polish Comitee for Standarization Designing building structures using Eurocodes
- Anastasia Lukianenko Comparison of Russian norms (SNiPs) and European norms (Eurocodes) for road and railway bridges
- The act of 24th December Urban Planning Code of Russian Federation
- Federal law of 27th December 2002 About Technical Regulation
- The federal law from 30th December 2009 No. 384-FZ Technical regulations about safety of buildings and constructions
- Technical regulations of the Eurasian Customs union of TR TS November 2011 Safety of elevators
- General department of standardization, technical regulations and certifications, 1994, SNiP 10.01.94\* System of normative documents in construction. Basic principles, Moscow
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