



First Transnational Workshop

Project **DISCUS** Digital Transformation in the Construction Sector:  
Challenges and Opportunities

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# NATIONAL REPORT BULGARIA

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# THE CONSTRUCTION SECTOR: MAIN CHARACTERISTICS

- **rapidly developing** economic environment, with **5205 economic entities – micro & SMEs** (5158 Bulgarian and 47 foreign companies) & **positive revenue dynamics**
- **huge investment costs**
- **shortage** of workforce with different types of **qualification** - economic, technical, legal – out of **246,100** employed (16,000 women), 4,79% growth
- **risk factors** - outdoor work, big heights, failure to comply with safety and health rules and heavy mechanization, constant change



# THE CONSTRUCTION SECTOR: MAIN CHARACTERISTICS

**5205 construction companies registered in the Central Professional Register of Builders (CPRB) with the Bulgarian Construction Chamber in 5 groups:**

1<sup>st</sup> group – “Structural engineering - residential, public servicing, industrial” (civil engineering revenue is 48.1%);

2<sup>nd</sup> group - "Construction of transport infrastructure";

3<sup>rd</sup> group - "Construction of energy infrastructure";

4<sup>th</sup> group - "Construction of public infrastructure, hydro-technical construction and environmental protection";

5<sup>th</sup> group - "Separate types of construction works".



# THE CONSTRUCTION SECTOR: MAIN CHARACTERISTICS

- **Since April 2019 has been introduced Central Professional Register of Builders (CPRB) **Electronic system with Qualified Electronic Signature (QES) mode** that requires: regularly updated **curricula**, suitably equipped **laboratories ...****
- Future (short or medium-term) social and economic challenges: providing **measures for upgrading and retraining of staff skills**, taking into account new technologies, materials and equipment & **increasing the attractiveness** with opportunities for **wage growth and development.**



## Overview of policy & legal framework and challenges in the construction sector

- Deficiencies in legislation, normative acts, regulations, standards and certificates
- Income/profit tax - high tax rates and lack of zero tax on reinvestment of profits hinder and stop entrepreneurs from investing in new products.
- Value added tax, which is 20%.

**Needs** to improve the conditions for development of the innovation process and digitalization in BG by:

- Development of the **national network of highways** and connecting it with the **European transport corridors**
- Establishment of a **cadaster** in which all the **real estate** on the territory of the country will be registered;
- Creation of a **cadastral map** of the Republic of Bulgaria;



## Overview of policy & legal framework and challenges in the construction sector

- Adoption of **Law on Geodesy and Cartography**;
- Creation of **interconnected information systems** of the cadaster and the property register;
- Improving the **coordination** and the relations with other data exchange institutions in the creation of the cadastral map and the property register;
- Development of a **National Planning Scheme**;
- Assign the elaboration of general and detailed **development plans** for implementation of the Law on the Black Sea Coast in order to determine the zones with special territorial-planning protection;
- Assignment of an update of detailed planning schemes for **settlements** of national significance;

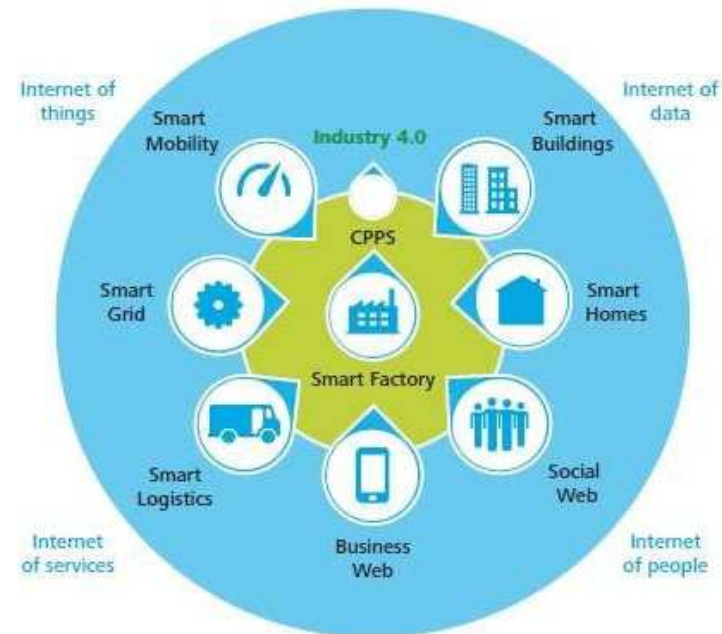


## Overview of policy & legal framework and challenges in the construction sector

- Creation of a specialized cadasters of **hydro-technical facilities, protected natural spaces and cultural monuments**;
- Harmonization of the **technical normative acts** on the design and execution of the construction works related to the **essential requirements** for construction: load bearing capacity, fire safety, hygiene, health and environment protection, safe operation, protection against noise, heat conservation and energy saving;
- Notification to the European Commission of persons to assess the conformity and persons to issue **European Technical Approvals** in the field of the **EU Construction Products Directive**.

## Relevant institutional initiatives in support of digitalization and technological innovation in the construction sector

- **Concept for Digital Transformation of Bulgarian Industry 4.0** to build prerequisites for modernization, automation & competitive positioning of the Bulgarian economy (2017-2030)
- 58% of Bulgarians are connected online, but 2/3 have no **basic digital skills** and the number of graduates in **science, engineering and mathematics** has not increased
- **7<sup>th</sup>** in **public sector open data**, but limited use of **e-government services**
- Total coverage of **fixed broadband networks** is 95%, 60% in rural areas
- **11<sup>th</sup>** in **high-speed broadband access** with 55% fixed subscriptions







## Major trends in the construction sector

- **Drones** for capturing building sites, real-time mapping, tools to remote areas, delivering raw materials, and for surveying objects. **Registration & qualification** for their operation.
- **Robots** for packaging and palletizing of building materials, for carrying out some labour intensive tasks and dangerous activities - bricklaying, casting and production of walls etc.
- **Self-managed vehicles** that allow people to read or sleep on the way to work or elsewhere.
- **3D Printing** for of parts for specialized equipment.
- **Polyaspartic coatings** - to reduce the drying time of concrete surfaces and provide protection against UV rays, chemical materials and others.



## Major trends in the construction sector

- **Economic trends: production rising by 10.2% to BGN 14 827 million of which Building construction segment is 56.4% of the total output**
- **Employment trends: steady increase in employment and declining unemployment by 5.7 thousand or by 26.8%**
- **Changes and innovations: a conservative area**
- **Skill needs and training in relation to digitalization and innovation**
- **European Construction Industry Manifesto for Digitalisation with 3 pillars:**
  - The EU must take the political lead on digital construction;
  - The need for an appropriate regulatory framework on data policy;
  - An EU budget for the development of digital skills, R&D and the deployment of IT infrastructure.



# SOCIAL DIALOGUE, INDUSTRIAL RELATIONS AND INNOVATIONS

- At national level: the industrial relations are between nationally representative TU: the Federation of Independent Construction Trade Unions (FICTU is affiliate of Building and Wood Workers' International (BWI) & has more than 34 organizations in over 30 settlements in the country, with more than 1117 collective members ) with CITUB and the Construction, Industry and Water Supply Federation - Podkrepa (CIWSF - Podkrepa) with the Confederation of Labor PODKREPA and
- representatives of the employers' organizations - the Bulgarian Construction Chamber (BCC) and the Bulgarian Branch Chamber "Roads" (BBC "Roads").
- A Branch collective agreement between the social partners is signed annually or once every two years



# WETCO Main areas of activities

Trade Union Training

Vocational Education and Training

Adult Training, incl. Workplace Training

Key Competences Training

Training of Trainers

Career Guidance and Counselling

European and National project Management

Information campaigns etc.

**Mission:** to respond adequately to the challenges of the dynamic socio-economic changes, affecting industrial relations at national, European level and world wide by providing date information, opportunities for acquiring systematic and proactive knowledge, acquisition of necessary skills, qualification, competencies and forming attitudes towards enhancing the competitiveness.