

Budget Heading 04.03 01 08  
IMPROVING EXPERTISE IN THE FIELD OF INDUSTRIAL RELATIONS  
VP/2018/004/0066



# DISCUS

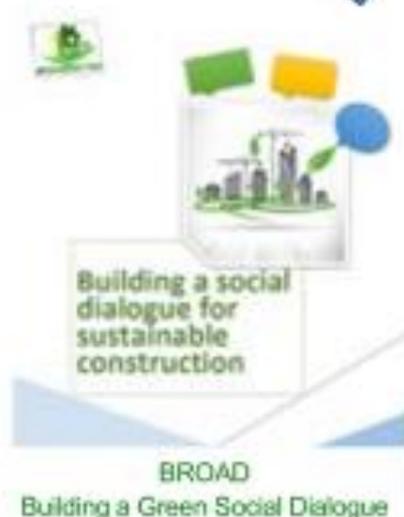
## Digital Transformation in the Construction Sector: Challenges and Opportunities

### PROJECT PRESENTATION

**Serena Rugiero**  
**Fondazione Di Vittorio-FDV**

**Rome, 23 January, 2020**

# Why DISCUS Project?



# Partners of the DISCUS Project



*Non ti lasciamo solo*

European Federation  
of Building  
and Woodworkers



## Associated organisations

# Why DISCUS Project?

## Construction is one of the biggest industrial sectors of the EU economy

- ❑ 9% of EU GDP
- ❑ Around 18 million workers
- ❑ Multiplying effect of the demand for building
- ❑ 40% of EU energy consumption
- ❑ 36% of total green-gas emissions
- ❑ 233 million residential and commercial buildings
- ❑ Circular economy

# Why DISCUS Project?

The **financial and economic crisis** had a major impact on the construction sector in nearly all EU Member States (MS): from July 2005 up to July 2015 the EU-28 index of production for construction fell down 26.2%.

According to ILO (2015) at present the **global construction output has recovered from the crisis** and it is expected to grow in the coming years.

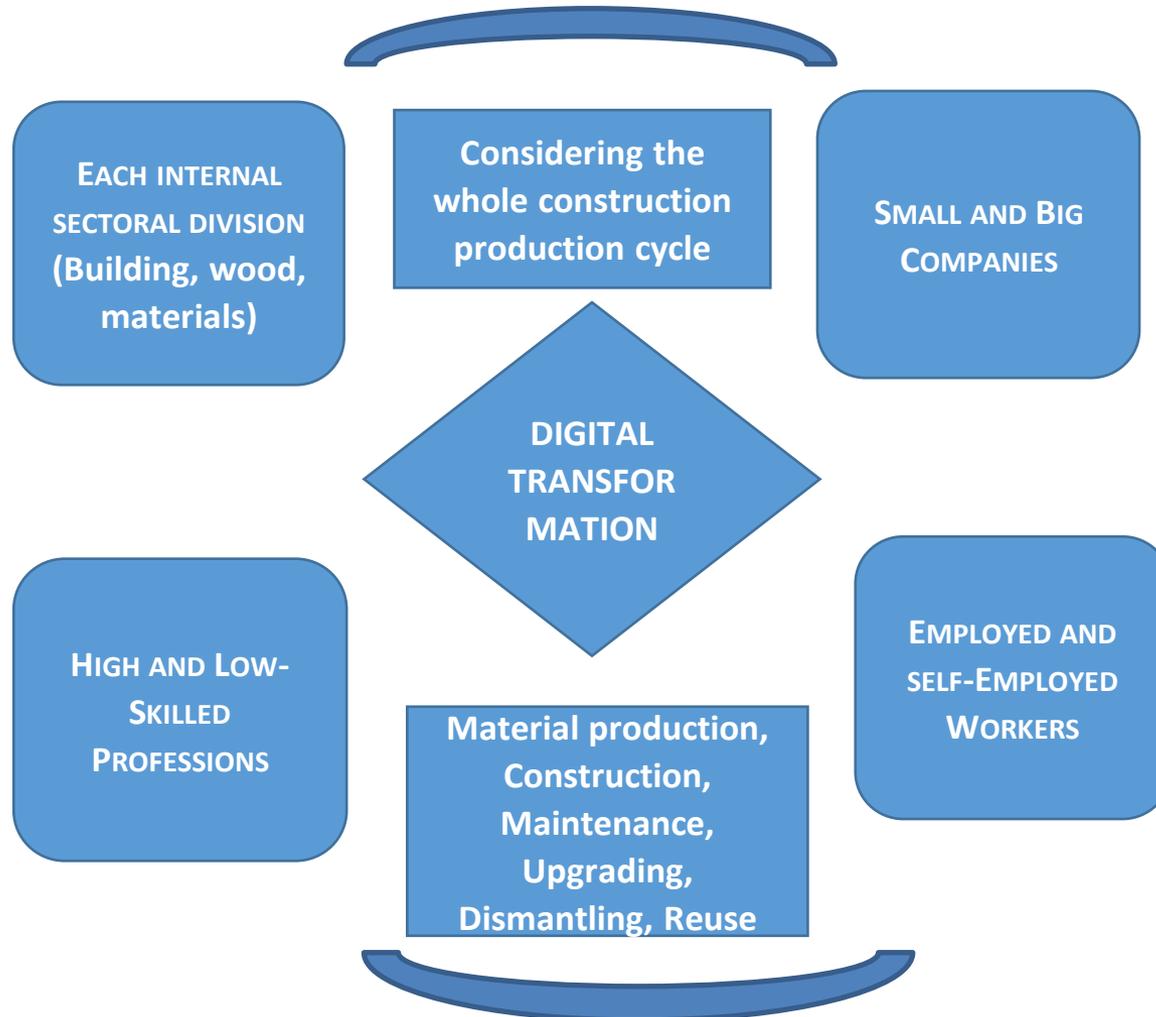
**Over the last few years the construction sector has been revolutionized by important drivers of change that are simultaneously at play:**

- The transition to a sustainable construction in a low carbon economy.
- The evolution of technologies and digitalisation that has an impact on all the construction processes.

**Digitalization and technological change, and their combining with social and environmental issues, are major challenges for industrial relations and social dialogue in Europe.**

# Why DISCUS Project?

**Digitalization permeates every aspect of the construction sector:** affecting all the stakeholders, for the entire lifecycle, in all the value chain.



# Why DISCUS Project?

- 93% of construction players agree that digitalization will affect every process
- < 6% of construction companies make full use of digital planning tools (Think acts, 2016).

The topic of digitalisation and technological innovation has been analysed in the manufacture sector in several studies but there is a lack of in-depth analysis and data collection for the construction sector especially as regards the role of industrial relations.

 Construction players need **a new role of industrial relations and social dialogue for the anticipation and implementation of digitalization and technological changes** so as to reduce the risk of unemployment and promoting jobs that are high skilled, green and good, respecting the dignity of the workers (“decent work”) and social inclusion.

 This project aims to analyse and to strengthen the role and contribution **of innovative industrial relations structures, including social dialogue**, in responding to the major challenges and opportunities brought by digitalisation and technological changes, **on multiple levels.**

# PROJECT OBJECTIVES

Digitization accelerates the flexible organization of work.

**There are critical points and positive impacts led** by the introduction of new digital technologies.

The most **critical points are:**

- Job replacement and destruction
- Data protection
- Surveillance
- New risks for health and safety

The **potential of digitalization as benefits are:**

- Improved productivity and better quality
- Reduction in project costs
- Reduction in time to completion
- Increasing efficiency
- Decreasing in waste
- Enhancement of qualified professions
- New opportunity for cooperation and participation
- Accident prevention

# PROJECT OBJECTIVES

- To address technological change and the digitisation of the economy it is necessary to orient change through a **Just Transition** in terms of **outcomes** (decent work for all in an inclusive society) and of **process** (managed transition) (ILO, 2018). In particular, social dialogue and collective bargaining are key tools for managing change (ITUC, 2017).
- Given the multi-dimensional and complex nature of digitalization and technological change which create highly diversified organizational forms, it needs a **multi-level governance** of the policies and measures in support of digital innovation.
- **Social dialogue** – at the European, national, sectoral, regional level – as a form of governance itself is a crucial factor in facing the challenges arising from the digital transition, identifying and checking the consequences (both expected and unforeseen) and the resulting risks (regarding employment, the health and safety of workers, inequality and social exclusion with respect to the territorial impact).
- From this point of view, it is therefore fundamental to increase the role of social dialogue, first and foremost by strengthening its inclusive nature, through the promotion of an enlarged (**multistakeholder vision**), based on the involvement of a wide range of potential protagonists: first of all, the associations representing the world of work, businesses and public institutions, but also those of experts, environmental organisations and civil society.

# Research Questions

- **Discuss identify five relevant fields of actions:**
  - a) Employment**, with an increasing polarisation between qualified and non-qualified professions; the emergence of new professional figures and, on the other hand, the risk of the substitution of competences and professions; the need for continuing education; a growing segmentation between craft and labour work which is typical of this sector (Build-Up Skills, 2014; ILO, 2011);
  - b) Organisation of work**, with the emergence of new risks as well as new opportunities for involving workers and protecting health and safety (EU-OSHA, 2014);
  - c) Sectoral**, with the blurring of business borders and the traditional distinctions between sectors, with a greater integration between the phases of the value chain (with new relations between research and develop, data management, functioning of machinery and instruments, the provision of services) (ILO, 2015);
  - d) Territorial**, with new relationships between the public players, the social partners, the scientific community and experts, the population and civil society in the direction of forms of multistakeholders in social dialogue to respond to the complex challenges of planning and territorial innovation (BROAD Project, 2017);
  - e) Socio-environmental**, with more opportunities for energy efficiency in housing and the quality of living and urban spaces (Eurofound, 2013; Laurent & Pochet, 2015).

# Research Methodology

Research report at national level and at European level related to:

- the transformations taking place in production cycles oriented towards digitalization and technological innovation in the construction sector and their impact on the labour market, work organisation and working conditions, sectoral level, territorial level and proper transition;
  - the role of industrial relations and social dialogue for digitalisation and technological innovation to identify the most relevant practices and experiences at all levels: European, national, sectoral, regional level as well as at company level.
1. The **desk research** for the **preliminary report and the national reports** was based on the consultation of documentary sources and an analysis of secondary data.
  2. The national reports were based on a common methodology that includes **i) conducting in-depth interviews with “privileged witnesses”** – key players in industrial relations and social dialogue in the field of construction; **ii) case studies** to analyse concrete experiences of industrial relations coping with digital and technological changes in the construction industry **across different levels and territories (considering the whole value chain)**.
  3. Workshops at national and European level that allowed an **exchange of knowledge, a comparison between different experiences** in the partner countries of the project and mutual learning.

# Action Implementation: project activities

The project, divided into two years of activity, was articulated in the following phases corresponding to modular objectives:

## YEAR 1



**KICK OFF MEETING**

**13 MARCH 2019**  
VIDEOCONFERENCE

Set-up of the SC Structure and methodology for the baseline report and national Reports  
Organisation of the first international workshop

**BASELINE REPORT + NATIONAL REPORTS**

**SPRING 2019**  
BASELINE REPORT  
MADE BY FDV

**FIRST TRANSNATIONAL WORKSHOP**

**3 JULY 2019**  
MADRID

Presentation of the Baseline Report  
Presentation of the of the national reports

**QUALITATIVE SURVEY**

**JULY-DECEMBRE 2019**

Belgium, Bulgaria, France, Germany, Italy and Spain

**SECOND TRANSNATIONAL WORKSHOP**

**16 JANUARY 2020**  
ROME

Presentation and discussion among the national stakeholders of the findings of the interviews

**DIGITAL TRANSFORMATION IN THE CONSTRUCTION SECTOR: CHALLENGES AND OPPORTUNITIES**

# Action Implementation: project activities

YEAR 2



KICK OFF MEETING

13 FEBRUARY 2020  
VIDEOCONFERENCE

Structure and methodology for the CASE STUDIES

CASE STUDIES

FEBRUARY-JUNE 2020

3 CASE STUDIES IN EACH COUNTRY

THIRD TRANSNATIONAL WORKSHOP

18 JUNE 2020  
PARIS

STAKEHOLDERS MEET TO DISCUSS THE FINDINGS OF THE OVER-ALL RESEARCH ACTIVITIES

FINAL REPORT

JULY-DECEMBRE 2020

ENGLISH LANGUAGE PRODUCED BY FDV+PARTNERS+ASSOCIATES

EXECUTIVE SUMMARY

JULY-DECEMBRE 2020

RECOMMENDATIONS FOR IMPROVING I&R IN A 20PAGE BROCHURE PUBLISHED 6 LANGUAGES PRODUCED BY FDV+PARTNERS+ASSOCIATES

FINAL EUROPEAN CONFERENCE

18 FEBRUARY 2021  
BRUSSELS

50 PARTICIPANTS INCLUDING SC, WORKSHOPS' PARTICIPANTS, EXPERTS AND STAKEHOLDERS ORGANISED BY FDV+PARTNERS+ASSOCIATES

DIGITAL TRANSFORMATION IN THE CONSTRUCTION SECTOR: CHALLENGES AND OPPORTUNITIES

**Thanks!**

**[www.discusproject.eu](http://www.discusproject.eu)**