



# Digital innovations transforming the construction sector – EU policy initiatives

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# Building a European digital platform for the construction industry

*by Angelo Ciribini, professor of architecture*

<http://www.bimplus.co.uk/people/building-european-digital-platform-construction-in/>

- Digitalisation is fundamental to EU policy goals.
- That to remain competitive, the European Union must transform itself digitally. The construction sector must embrace the digital transformation across the entire value chain.
- Digitalisation of the construction industry responds to the sector's main challenges such as lack of skilled workforce, energy efficiency, lagging productivity, sustainability and many others.

# 2017 Construction Conference: Let's build changes!

(reshaping cities, sustainability, skills, digitalisation/innovation)

- New technologies pose challenges and are needed to improve the building process, productivity and performance. Impacts of digitalisation are likely to be huge. A challenge for SMEs and low skilled workers. Commission, Member States and industry to demonstrate leadership and collaboration.
- The skills challenge can only be addressed by the industry with support from the public sector. This is why partnerships between employers and education providers are vital.

[http://ec.europa.eu/growth/tools-databases/newsroom/cf/itemdetail.cfm?item\\_id=9190](http://ec.europa.eu/growth/tools-databases/newsroom/cf/itemdetail.cfm?item_id=9190)

# European Construction Sector Observatory

- launched in 2015
- individual country profiles, fact sheets on individual national and/or regional policy measures, trend and analytical reports
- **Analytical Reports:**
  - Stimulating favourable investment conditions
  - Improving the human capital basis

[https://ec.europa.eu/growth/sectors/construction/observatory\\_en](https://ec.europa.eu/growth/sectors/construction/observatory_en)

# European Construction Sector Observatory (2)

- **Trend Reports:**

- Building information modelling (BIM) in the EU construction sector (France, Denmark, Poland as detailed examples)

- Integrating digital innovations in the construction sector: The case of 3D printing and drones in construction (3 case studies as detailed examples)

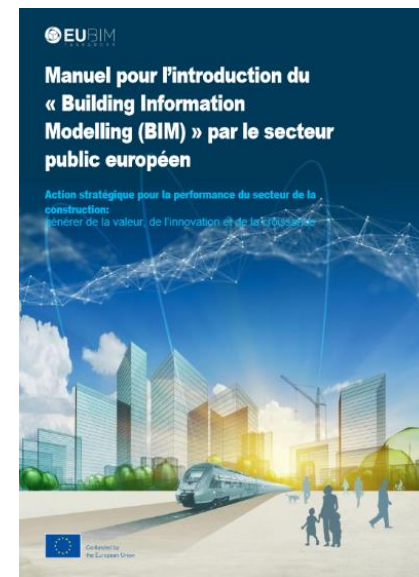
# Current EC initiatives on uptake



# Support public sector take-up

- *EU BIM Task Group*
- *23 member states: how to introduce BIM in the public sector: handbook in 18 languages.*

→ *Encourage alignment on the understanding of BIM*



Free download at [www.eubim.eu](http://www.eubim.eu)

# Support the construction value chain and SMEs

## *Study - Support digitalisation of construction and SMEs (May 2018 – May 2019)*

- *Digitalisation gap analysis*
- *Recommend 3 EC actions → synergy with other/existing actions*



## Support horizontal activities

- *Smart CE marking: digitising construction product performance data (with CPE and CEN TC 442)*
- *BIM standardisation: CEN/Cenelec TC 442*
- *Digital platform for the construction sector (concept)*
  
- *H2020, Erasmus+*

# Digital logbook for buildings

## Getting the building data and information in order



Image: <https://woningpas.vlaanderen.be/>



# **Cedefop's skills forecast till 2030: Less brawn, more brain for tomorrow's workers**

- + 3.7% working age population
- + 1% labour force

<http://www.cedefop.europa.eu/en/publications-and-resources/publications/9130>

- *Construction is competing with other sectors to attract young talent.*
- *It has to attract and retain a diverse group of multi-talented people.*
- *Negative image, a lack of skills for the future challenges*
- *A capable workforce to deliver transformational change*
- *New technologies, green construction and digitalisation set the future skills demand*

# ***New Skills Agenda for Europe***

*Communication COM(2016) 381*



Construction

## ***Blueprint for Sectoral Cooperation on Skills – Construction Sector***

- *a 4-year long stakeholders-led project (2019-2022)*
- *a sectoral strategy for skills intelligence and labour-market relevant skills development*
- *improving the sector human capital basis - a new generation of digitally aware multi-skilled workers (**digitalisation, energy efficiency, circular economy**)*

***Blueprint for sectoral cooperation on skills: supporting measures for the construction sector (occupational health and safety)***

*- December 2018 – June 2020*

# ***Study on mapping opportunities and challenges for micro and small enterprises in offering their employees up- or re- skilling opportunities (2019)***

## **Main obstacles for not participating in training**

<b>Main obstacle</b>	<b>% of respondents</b>
No need for (further) education or training	59.6
Schedule	9.0
Family responsibilities	7.8
Cost	6.1
Lack of employer's support or public services support	3.5
Health or age	2.9
No suitable education or training activity (offer)	2.2
Distance	1.2
Prerequisites	0.9
Negative previous learning experience	0.2
No access to a computer or internet	0.1

Source: Eurostat – AES, 2016

# What's next?

Commission policy areas and financial instruments to define a common policy vision for the EU built environment



**Thank you!**

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