

ADVANCING THE ADOPTION OF OPEN STANDARDS AND DIGITAL TECHNOLOGIES IN THE CONSTRUCTION VALUE CHAIN

A strategic partnership between European Engineering Consultancies (EFCA) and buildingSMART International (bSI)



Introduction

- The consulting engineering sector plays a pivotal role in the construction industry. Its positive impact on society's growth and sustainability is a result of the expertise of its highly qualified personnel and constant innovation, as breakthrough technologies are adopted by the sector. Consulting engineering firms have extensive knowledge regarding construction management, stakeholders, contracts, technical applications, and quality control.
- To address the complex and evolving challenges faced by the sector, the entire construction industry and consulting engineering businesses must adopt and utilise standardised work practices enabled by technology, such as BIM (Building Information Modeling).
- To enable digital transformation, which will in turn facilitate the green transition, the construction ecosystem needs open standards, such as those created by buildingSMART International (bSI). These will support interoperability, improved cooperation, and innovation, which are pre-requisites to success.

Purpose

- The goal of this joint communication is to highlight the strategic value of the partnership between buildingSMART International and the European Federation of Engineering Consultancy Associations (EFCA). This partnership will help to accelerate the adoption of open standards and electronic technology in the construction industry and consulting engineering sector.
- The partnership also aims to improve the sector's sustainability, circularity, and competitiveness, ultimately contributing to the wider objectives of delivering low carbon and circular economy policy objectives.

Objectives

The main objectives of this collaboration are to:

- Encourage the consulting engineering sector to adopt open standards, such as those created by the buildingSMART International community to enhance sustainability, circularity, and competitiveness.
- Enable consulting engineering firms to share best practice and practical knowledge about the benefits of adoption and application of open standards and digital technologies.
- Encourage the use of open standards and digital technologies that satisfy the requirements of consulting engineering firms and the construction value chain.
- Assist the buildingSMART community in prioritising the development of open standards in alignment with the market demands.
- Explore the “model as a legal contract” concept.
- Promote the concept of “single source of truth” in contract and risk management.

Activities

To achieve our objectives, the collaboration between EFCA and buildingSMART international will focus on the following activities:

- Co-hosted webinars, and workshops on the adoption and application of open standards and digital technologies in the consulting engineering sector.
- Joint research initiatives and studies on how open standards and digital technologies affect and benefit the consulting engineering sector.
- Information-sharing and communication efforts to educate consulting engineering firms' customers about open standards and digital technologies.
- Advocacy, to encourage the consulting engineering sector to adopt and use open standards and digital technology.
- Working together with other organisations and stakeholders in the construction industry to facilitate the adoption and application of open standards and digital technologies in the consulting engineering sector.

Outcomes

- The adoption of open standards and digital technologies in the consulting engineering sector through the partnership between EFCA and buildingSMART International will lead to significant sustainability and circularity outcomes in the construction industry. For example:
 - Low Carbon: By utilising digital technologies such as BIM, the consulting engineering sector can increase its efficiency and reduce waste, leading to a reduction in carbon emissions. The use of open standards will also enable better collaboration among stakeholders, reducing the carbon footprint of transportation and enabling a more sustainable supply chain.
 - Circular Economy: The adoption of digital technologies and open standards will allow for better tracking and management of materials and resources, enabling the entire construction industry to move towards a more circular economy. The ability to share data and information through open standards will also increase transparency and promote the reuse of resources, contributing to a more sustainable construction industry.
- Digital transformation: The partnership will provide the consulting engineering sector with the tools and support needed to thrive in the digital era. This will help to modernise the industry, enabling companies to improve their competitiveness and deliver more efficient and sustainable solutions.
- Better decision-making: The use of digital technologies and open standards will allow for better decision-making and risk management, reducing waste and increasing efficiency. This will result in cost savings for clients and improved outcomes for society.
- Grow the network: The partnership will aim to mutually grow the respective networks to encourage more collaboration and alignment.

Conclusion

- The partnership between EFCA and buildingSMART International offers an opportunity to drive sustainability and circularity in the construction industry through the adoption of digital technologies and open standards. The outcome of this collaboration will be a more efficient and sustainable consulting engineering sector, contributing to the delivery of low carbon objectives and the circular economy requirements.
- By collaborating, we can provide consulting engineering firms the tools, direction, and assistance they require to thrive in the digital era and aid in the creation of more robust, efficient, and sustainable infrastructure. The achievement of EFCA's objectives as well as the expansion and competitiveness of the consulting engineering sector will be aided by this partnership.

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