

On behalf of the Office of Government Procurement who is co-ordinating this consultation process we thank you for taking the time to participate in this consultation on the development of a BIM Adoption Strategy for the Public Sector.

Please note that all responses received by the Office of Government Procurement will be published within one month of the deadline for receipt stated below.

Fields highlighted in yellow with bold text indicate a mandatory response, all others are at the discretion of the respondent. If mandatory fields are not completed the response may not be considered.

Responses to be emailed to publicworkscontractsreview@per.gov.ie by close of business on **Thursday, 13 April 2017**.

SECTION A – Respondent’s details

Name:	Engineers Ireland
Select the sector title that best describes your area of work:	Other Engineers Ireland is the professional body for engineers in Ireland.
Indicate whether the views expressed are those of a business, organisation or are in a personal capacity:	Organisation Engineers Ireland has over 23,000 members from every discipline of engineering.
Do you work in the public or private sector?	Other Engineers Ireland is a professional body established by an Act of the Oireachtas and Royal Charter.

SECTION B – Response to structured questions

Q1.	Does your organisation already have BIM policies/protocols/procedures?
	n/a
Q2.	Has your organisation invested in BIM software?
	n/a
Q3.	Has your organisation a dedicated BIM manager?
	n/a
Q4.	Please outline the obstacles that exist to the successful adoption of BIM in your own

	organisation
n/a	
Q5.	Please outline the obstacles that exist to the successful adoption of BIM in the construction sector
<p>BIM has the potential to deliver projects more efficiently and effectively through collaboration and innovation. Moreover, for an open economy with a strong ICT sector like Ireland, the adoption of BIM for public works contracts could stimulate the economy [1]. However, there are a number of challenges which must be overcome to ensure successful adoption [2].</p> <p>The second national survey to benchmark the level of BIM adoption in Ireland was published in November 2016 [3]. When survey respondents (predominantly directors/principals/associates) were asked to rank a set of challenges in achieving large-scale BIM adoption in Ireland, the dominant challenge was that clients are unaware of the value proposition. Other results showed the need for training programmes and demonstrating the benefits of BIM adoption. Based on these results and other studies, Engineers Ireland would like to draw attention to four key challenges.</p> <p>Firstly, software interoperability, particularly in the context of multidisciplinary teams, is a major challenge. Various types of construction projects draw on specialist software and these packages must be compatible to enable collaboration and efficiencies [4]. Software interoperability must continue to improve as must the willingness of engineers to embrace new and multiple types of software.</p> <p>A second challenge relates to more specific engineering design issues. These include, for example, the modelling of complex geometry in linear alignments, whether as a result of the interaction of a large number of objects (e.g. in a building) or the variation of objects with topology (e.g. railways and highways) [4]. Higher level education and private sector engineers have made great strides forward in this area and should be further encouraged by, for example, funding research and innovation in BIM.</p> <p>Thirdly, related to the above design challenges, is the continuing shortage of skills in the BIM field and the wider engineering sector. While 76% of the BIM adoption survey respondents are confident in their organisation's BIM skills and knowledge [3], it is vital that Ireland is well positioned to reap the benefits of a recovering construction industry – particularly one in which BIM will play a larger role. For BIM adoption in the public works contracts, sufficient lead-in time will be required for skills development.</p> <p>Finally, and perhaps most importantly, clients (including public sector clients) must appreciate the front-loading of work at the design stage of the project and the benefits of BIM at the later stages, e.g. during construction [3,4]. The GCCC Position Paper references the potential cost savings to the client [5]. These benefits must be clearly and widely communicated. Moreover, the evidence base for cost savings (and the communication of same to clients) should be further reinforced.</p> <p>References</p> <p>[1] Fraser, S. (2014). How BIM can be adopted within public works contracts. Engineers Journal, 3rd July 2014.</p> <p>[2] Deeney, J., Hore, A.V. & McAuley, B. (2013) Public / Private BIM: An Irish Perspective, Proceedings of the CITA BIM Gathering, Dublin, 14-15th November, pp. 25-34</p>	

- [3] Hore, A.V., Hunt, J. & McAuley, B. (2016). BIMireland 2016 Survey. Leadership in Transition Survey Report. November 2016.
- [4] Ryan, R. (2017). Building information modelling in infrastructure projects. Engineers Journal, 14th March 2017.
- [5] Giel, B., Issa, R.R.A. & Olbina, S. (2011). Return on investment analysis of using Building Information Modeling in construction. Journal of Computing in Civil Engineering, 27(5), pp. 511-521.

SECTION C – Response to Position Paper – respondents may wish to provide the response to this section in a separate document, this should be attached with this response and sent to the email address above.

Topic 1 (limited to 3000 characters)
Topic 2 (limited to 3000 characters)
Topic 3 (limited to 3000 characters)
Topic 4 (limited to 3000 characters)
Topic 5 (limited to 3000 characters)
Topic 6 (limited to 3000 characters)
Topic 7 (limited to 3000 characters)
Topic 8 (limited to 3000 characters)
Topic 9 (limited to 3000 characters)
Topic 10 (limited to 3000 characters)