

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:	Association of Consulting Engineers of Ireland (ACEI)
Select the sector title that best describes your area of work:	CS Engineer + ME Engineer
Indicate whether the views expressed are those of a business, organisation or are in a personal capacity:	Organisation The ACEI represents 96 member firms
Do you work in the public or private sector?	Other Both Private and Public

SECTION B – Response to structured questions

Q1.	Does your organisation already have BIM policies/protocols/procedures?
The ACEI has agreed a BIM vision for the future of the construction industry in Ireland which has also been shared with the Construction Industry Council (CIC).	
Q2.	Has your organisation invested in BIM software?
The ACEI has not, however a number of our member firms have invested in BIM software.	
Q3.	Has your organisation a dedicated BIM manager?
The ACEI has not, however a number of our member firms have a BIM Manager or BIM Leader within the organisation.	

Q4.	Please outline the obstacles that exist to the successful adoption of BIM in your own organisation
<p>ACEI member firms suggest the following obstacles exist:</p> <ul style="list-style-type: none"> - Lack of capital/funding to commence changeover to BIM which requires training / upskilling and investment in hardware and software. - Inability to accommodate the lack of productivity experienced during a transition to BIM processes - Pre-existing fee structures and stage breakdowns do not encourage or reward the use of a BIM process from project commencement. 	
Q5.	Please outline the obstacles that exist to the successful adoption of BIM in the construction sector
<p>ACEI top member firms have been taking part in the Enterprise Ireland / CitA national BIM survey for the last two years. The obstacles noted within the survey were:</p> <ul style="list-style-type: none"> - Clients unaware of the value proposition - Difficulties in implementing BIM within smaller companies - Lack of standardised tools and protocols - A lack of BIM skills within current staff - Issues regarding data ownership and liability - Uncertain legal environment for BIM to work 	

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.

The ACEI welcomes the development and issuing of a GCCC position paper on Building Information Modelling (BIM). The ACEI would also welcome a consistent approach from the public sector on this topic. The GCCC position paper recognises that BIM process have already been requested and adopted on a number of public sector projects including the National Children’s Hospital at the St James’s Hospital campus, on the Grangegorman Development and across the PPP programme. The ACEI notes that there are a far greater number of projects where BIM has been stated as a client requirement in Public Sector tender documentation with little more than a few sentence statements.

By way of examples, ACEI highlights in particular: larger (and some very small), projects being delivered by the HSE; housing projects being delivered by Fingal County Council and projects for third level institutions. In the procurement process for the aforementioned projects, the usually very brief, statements about BIM requirements have been inconsistent and lack Employer Information Requirements (EIR) including the detail necessary for ACEI member firms to accurately generate a fixed price lump sum for services, which is a definitive requirement.

As a result of our member firms' experiences to date we would very much welcome a consistent approach and application to the tendering of ACEI firm services through BIM processes. The opening two words of the Statement of Intent being “Properly implemented” are particularly

appreciated.

The ACEI welcomes the opportunity to work with the GCCC to achieve the proper implementation of a mutually beneficial approach to the successful delivery of public sector projects in Ireland. The association also welcomes the envisaged outcome of the position paper in relation to ensuring a “consistent and coherent approach to procuring BIM on public sector building projects” which would be far more appealing to our members than a varied and inconsistent application causing repeated issues for member firms at both procurement and application stages.

ACEI welcomes the statement “In this way businesses can plan for the change rather than realise too late that they no longer have the capacity to contribute to the industry and to earn a living”. The vast majority of ACEI member firms are SME’s and the ACEI would hope that any changes proposed to procurement methods or requirements are considered, planned and staged to allow SME’s time to adopt both in theory and practice.

“The paper notes The UK government mandated the use of BIM to Level 2 on all central government projects by 2016”. Our understanding of the mandate is for all projects, so long as there is a projected positive return on investment and value in the data to be created.

The footnotes number 4 and 5 on page 4 describe the BIM maturity levels. Our reading of the text on the paper would suggest that the paper proposes a centrally held Common Data Environment (CDE) for Level 3 only. We would suggest the paper needs to reflect that a CDE is a requirement of Level 0 BIM and undertaking work to BS 1192.

The 7th bullet of Section 2.1 suggests that Level 2 maturity of BIM is not “full” BIM. We would suggest the paper reflects the different possible maturity levels and the achievement of more/less benefit the higher the level. The suggestion that Level 2 is not full BIM may develop a negativity in readers about this maturity and drive them to seek during a procurement process a Level 3 BIM Maturity, which the construction industry (including software and BIM tool providers) is not ready to deliver.

Section 2.4 notes “Much of the ‘heavy lifting’ has been undertaken in the UK in response to their Government mandate and is readily transferrable to the Irish construction industry”. We very much welcome this statement. The ACEI would agree with the sentiment that there is no need to reinvent something that has already been created in the UK and other nations. A number of our member firms operate both in Ireland and the UK and beyond, therefore a very similar approach would allow them to work efficiently in these markets when exporting their services, which has been essential to them over preceding years. Mirroring and leveraging the UK BIM development and standards allows our member firms to access currently available tools, guidance and a wealth of relevant knowledge.

Page 6 of the paper outlines the new role required under PAS 1192-2 - a Project Information Manager. The paper states [this] “should not be performed alongside other roles except on smaller projects”. While we agree that, this role requires additional resourcing to discharge correctly, one interpretation of the text here might be that the role would not be permitted to be undertaken by already appointed firms to an existing project role, including that of a consulting engineer on a project. We would propose the paper makes it clear that there is nothing preventing this, provided there is demonstrable evidence that it can be properly resourced alongside current project commitments.

The paper correctly highlights one of the key challenges to implementation as “Raising the capital for new technology and training”. Our member firms will have to invest significantly to deliver BIM which ultimately has the ability and possibility of gaining significant savings, providing further advantages for the public sector.

Without investment by our member firms, future savings will not be possible. Therefore, ACEI urgently seeks Government funding assistance to allow our member firms to commence and further develop their BIM capabilities. We suggest that early funding of our member firms for this cause will release a much greater return in savings into the future. We note that BIM funding is currently available to Enterprise Ireland clients, however, the vast majority of ACEI member firms are not clients of Enterprise Ireland.

The paper states that “Level 2 does not require significant changes to the procurement or contract regime”. We would note that for a successful BIM project, a key element within the Roles and Responsibilities section should be agreed, i.e. the responsibility for design co-ordination of the various design disciplines (Reference BS 1192). Currently, we would suggest, there is a wastefulness and lack of efficiency surrounding this issue on numerous public sector projects and there is an opportunity now to try and resolve this in the future.

The paper states that “Early contractor involvement is necessary for Level 3”. We would suggest that early contractor involvement is not linked, restricted or limited to any BIM maturity level and is therefore maturity level neutral.

Continuation below of ACEI responses to the paper:

The paper asks the question – “Is the culture change that is necessary for the successful implementation beyond Level 2 possible – can the industry trust itself?”. The ACEI would welcome the opportunity to work with the GCCC on this question. Currently there are many issues surrounding the introduction of Level 3 maturity including those related to legal, contractual and technological areas, which need to be urgently addressed.

The ACEI would welcome a positive outcome in relation to: “An aligned set of requirements across both public and private sectors will reduce the burden on consultants and contractors in responding to client requirements”.

Section 3.4 introduces a “An oversight body” for the BIM adoption strategy. The ACEI would welcome an involvement in this body.

Section 3.5 Indicative timeline for adoption: ACEI welcomes the use of pilot projects for learning and feedback purposes. We would suggest that pilot projects within lower bands are essential prior to finalisation of the strategy. While a high band project can commence using BIM, these type of projects take longer to complete and therefore a full cycle of design, construction, operate will take some time. Pilot projects on lower bands allow for a reduced learning period and facilitate the provision of timely feedback to the oversight group in order to carry out any necessary revisions to the strategy.

We welcome the statement “Note 2: Contracting authorities should adopt BIM Level 1 requirements before the adoption strategy requires Level 2 to be applied to their projects.”

There are a number of notes related to the indicative timeline for adoption table and BIM maturity requirements. We would suggest that BIM to a higher maturity level may not be efficient or beneficial to some Band 1 and Band 2 projects, such as single storey extensions to existing schools, which do not contain any existing BIM data. We believe the table and notes are lacking a “so long as there is a projected positive return on investment and value in the data to be created” statement.

We welcome the Transport Infrastructure Ireland’s (TII) presence on the adoption table. We recognise the GCCC paper is considering both building (vertical) and civil (linear) projects by including TII, along with the referencing of civil engineering projects within project banding. We would highlight that civil engineering projects are vastly different to building projects and that what works for one type (i.e. a type of data drop) does not work for the other. Therefore, any future strategy needs to be attentive to this when setting relevant standards.