

ANSWERS TO QUERIES RAISED AT SCSi / CIF ARM 5 CPD ON 10 FEBRUARY 2025

10/03/2025

Ref	Question	Answer
1	With relation to the new general rules for Contractor-Design development will this lead to a softening of the requirements of a PW-CF1 which is defined to be 'fully' designed by the employer?	<p>The PW-CF1 Conditions of Contract are published by the Office of Government Procurement. The requirements for the use of those Conditions will be determined by the sponsoring body and do not fall within the remit of the ARM Joint Committee.</p> <p>The inclusion in ARM 5 of the Rules for 'Contractor Design Development Works' recognises the established practice in the industry whereby discrete parts of the work inputs needed to complete a construction project (see examples listed in ARM 5, page 6, first paragraph of para 01:11) are not fully designed by the Employer's Design Team at tender stage and the undertaking of the detailed design falls to the appointed Contractor.</p> <p>The Rules covering Contractor Design Development Works provide for the description and measurement of such works to facilitate their inclusion in a Bill of Quantities.</p> <p>The use of the ARM Rules relevant to Contractors Design Development Works is appropriate where the Contractor is required to take responsibility for the design development of discrete parts of the project. The design objectives or criteria that the Contractor is obliged to satisfy in respect of Contractor Design Development Works must be clearly defined in outline drawings and specifications that are referred to within the Bill of Quantities descriptions of relevant items.</p>
2	Does ARM5 meant public bodies must use ARM 5 or is the use of the TII method of measurement for civil works projects?	<p>OGP have issued guidance on this https://constructionprocurement.gov.ie/mandatory from January 2025 use of ARM-5 and CESMM 4-Revised/</p>
3	Can a phraseology export for ARM5 be provided for RIB CostX?	<p>This is a commercial matter and not within the remit of the ARM Standing Committee.</p>
4	Will ARM5 be made available in excel format?	<p>No</p>
5	Will it be noted in ARM5 that the BOQ reflects the specification & drawings?	<p>Work Section 01, in the Definitions para, defines the BoQ as follows: <i>Bill of Quantities – a list of items providing appropriate descriptions and accurate quantities incorporating the information on the drawings, specifications and other works requirements for the work needed to deliver a project, prepared in compliance with the requirements of this document.</i></p>
6	ARM 4 C.3.4 - Removing Fittings and Fixtures - option to use 1Item	<p>No - not in accordance with the Rules of Work Section 03</p>
7	Does ARM5 address measurement from a Model versus measurement from 2D drawings?	<p>ARM 5 provides the Rules that are to be used when preparing a Bill of Quantities regardless of how the Drawings and Specification are provided.</p>
8	In relation to Builders work and Firestopping, will each opening for say Ductwork be required to be measured under builders work and then again the fire stopping to that opening be measured separately under Firestopping? Or could you combine the description for each ope to include both BWIC and firestopping? If separated these sections could be very long and cumbersome to navigate for tenderers	<p>The work required to form an opening is to be measured in accordance with the Rules of Work Section 17 and the work for Firestopping is to be measured in accordance with the Rules of Work Section 18. As per Work Section 01, Para 4 (<i>Application of Tabulated Rules</i>), <i>No more than one requirement from each of the Category 1, 2 and 3 columns can be applied in one description. For Work Sections with a Category 4 column, as many requirements, if any, of the Category 4 column that are applicable to the item of work being measured shall be satisfied in the description.</i></p>
9	Have the mechanical and electrical engineers been involved in the re-design of the measurement of M&E work? Sub-Contractors have tended to price the Service Engineer's breakdown rather than the measured mechanical and electrical work in the BQ. This is obviously very disappointing to the QS who has spent many hours measuring the mechanical and electrical work in the BQ.	<p>There consultation with the Mechanical and Electrical Contractors Association and ACEI reps during the ARM 5 drafting process. It is fair to say that the published Rules are a compromise intended to provide a workable solution where relevant parties have different perspectives on what level of design is appropriate prior to work being tendered.</p>
10	Will hard copies of ARM5 be available for purchase?	<p>Subject to demand, the Joint Committee will consider publishing a hard copy towards the end of 2025.</p>
11	Are there any Guidance notes / worked example to show how the coding should work	<p>No guidance has been published to date but it is believed that the presentation of the Rules will facilitate experienced Qs and their technical advisers in developing libraries of codes suitable for their particular BQ software</p>
12	For some descriptions Category 4 can have multiple selections, in this case which code should be used for category 4	<p>This is a matter for those developing their library of descriptions to consider, as appropriate.</p>
13	is the measurement of M & E works now considered to be a specialised area requiring additional qualification?	<p>Like all other work that may require to be measured for inclusion in a Bill of Quantities, the personnel involved in measuring and describing the work will need the relevant knowledge, competence and experience to ensure the BQ content is correct.</p>

14	ARM5 is required for Public Works Contracts, but where does ARM5 stand with the likes of RIAI contracts?	ARM 5 deals with measurement, regardless of the form of Agreement to be signed by the parties. Its status relative to the contractual agreement entered into by the parties commissioning and constructing the project involved will rely on its incorporation into any Agreement and the wider Contract Documentation.
15	If a Main Contractor tender was undertaken in Q4 2024 and therefore the BOQ is based off ARM4, do we have to continue using ARM4 when assessing variations, or do we now use ARM5?	If the tender document was prepared using ARM 4 then the post contract processes will also use ARM 4.
16	Is the Matrix of Building and Site Elements still relevant now for BQ structure or is it obsolete now?	The format used to present a Bill of Quantities - whether in trade, element or operations format - is not prescribed or restricted by ARM 5.

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17	Is there a danger with the 'Contractor Design' rules that Design Teams will see that as an out on PWC projects to not fully detail some elements - to avoid this, will this be communicated to other membership bodies (RIAI, IEl etc)	The introduction of Rules that provide for Contractor Design recognises an industry practice that the Rules of ARM 4 did not provide for, notwithstanding Contractor Design being called for in some Specification documents.
18	Is earthwork support now measured in all scenarios?	It is to be measured in accordance with the Rules of ARM5
19	For mechanical installations, ARM5 requires you to measure pipework linearly. Does this measure include for say, elbows, tees, reducers etc. Same question for electrical containment.	The Rules of the Mechanical and the Electrical Work Sections state that pipework and electrical containment are ' <i>measured over all fittings</i> '
20	Is the NBS Chorus (for the production of preliminaries) aligned with ARM5?	No.
21	Is Specialist Subcontractor Design for an element of work now a measured item? And yes/no dependent, how is this dealt with, described, measured etc?	Regardless of whether design is by the Contractor or subcontractors / specialists, the measurement requirements are set out in detail in the General Rules Work Section - see Para 11 on page 6.
22	ARM 5 seems to only have nr option only - no item	ARM 5 provides for the use of various units of measurement, including 'Item'.
23	Can you clarify if there are any publications available to confirm the agreed details to be provided by the M & E Engineers to facilitate measurement EG pipes and cables	The Rules of ARM 5 deal with the information to be provided in a Bill of Quantities. A prudent Client who is commissioning a Bill of Quantities for a project will ensure that the relevant Design Team members understand the requirements of them when they are appointed.
24	With regards the off site fabrication section, does this include items such as timber framed panelised systems or light gauge systems which come to site ready for installation	Yes
25	How are service trenches dealt with? they seem to have been moved from the services BWIC section in ARM 4	<i>Builder's Work in Connection with Mechanical and Electrical Services</i> now enjoys a Work Section of its own - Section 17. Trenches are covered on page 72 and Measurement Rule 10 deals specifically with the measurement of ' <i>Service trenches, chambers and the like</i> '.
26	Other members of the Design Team (Architect + Engineers + M&E) will have additional work, will this be a problem to get them to comply	The extent of the work required from designer members of the project team is not affected by the use of ARM 5.
27	Question Nr. 1 01 General Rules, p.4, 2nd last paragraph 'Deemed to be included' ... but the requirement for it must be clearly shown on drawings or described in the specifications ... Explain the rationale for the inclusion of the additional wording and the reason for the departure from the default position / status quo from ARM4 (and indeed other methods / rules of measurement). Why did the ARM5 Committee consider it necessary to depart from current practice?	Work that is ' <i>deemed to be included</i> ' had to be called up as required in the Contract Documents under the provisions of ARM 4, which stated "Where there are specific requirements for such work they shall be stated". The language used in ARM 5 has been amended to identify that it is sufficient for such works to appear on a drawing or in a specification.
28	Is there a redline version of ARM5 to show differences between it & ARM4?	No - the presentation of ARM 5 (landscape format) and the multiple changes to the Rules make red-lining impractical and potentially misleading.
29	Does the requirement now to state the BOQ is not a specification or design document align with current H & S legislation?	At least since the introduction of the ARM Rules, the Bill of Quantities has never been intended to form part of, or an alternative to, the Specification. Where Design Teams chose to make it a Specification document then the Bill and the Contract Documents would typically have made that status clear. The General Rules Work Section, para 2, makes it clear what the status of Bill is with respect to the specification and ordering of materials or goods.

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30	<p>Question Nr.2 02 Preliminaries 4. Contractor's General Facilities and Obligations p.14, Item 9. Protection of the Works from inclement weather Why did the ARM5 Committee not choose to use the term 'adverse' weather instead of inclement weather bearing in mind the impacts of</p>	<p>Question 2: The 'inclement weather' requirement places an obligation upon the Contractor to protect against a broader range of weather than just 'adverse weather'. The term 'adverse weather' could arguably limit the protection obligation to only those weather events that were either defined in the Contract or otherwise are of a greater risk to the works than just inclement</p>
31	Will fees have to increase to reflect the additional works?	Additional work is not envisaged arising from the use of ARM 5. It is arguable that the clarity of its Rules and the provision of Rules for types of work not previously provided for may actually reduce
32	Does contractor design development mean that the contractor is to account for all priced items in compliance with BCAR and other regulations? Would this provide an out for the client / design team for architectural and other consultants specifications if they are found to be non-compliant?	The expectation is that the Contractor will be responsible only for the development of the outline design of performance specification provided by the Employer. The Contractor will be responsible for that element that is designed by them.
33	How / when should practioners use the coding structure. eg 07.01.02.01?	The use of a coding structure is at the discretion of practitioners but the presentation of the document readily facilitates the adoption of such a structure.
34	Are there any Guidance notes / worked example to show how the coding should work	Not yet
35	for some descriptions Category 4 can have multiple selections, in this case which code should be used for category 4	The requirement of the Rules is that as many of the entries in the relevant Category Column 4 that are appropriate to a BQ description may be included in the same description. Coding the description it is at the discretion of the practitioner and may be determined by whatever QS software package is being used.
36	<p>Great presentation. Looking more granular at material classification for LCA and LCC value engineering.</p> <p>For a Carbon QS, will ARM 5 allow us to get a breakdown of material elements, for our Carbon inventory.</p> <p>This is so, we can build the Carbon measurement and tracking into Cost X. I know we can get this info at a uniclass SS system level, but can we get a breakdown of all our different concrete mixes, especially when we could have 4 types of clunker replacement mix in the in-situ concrete</p>	<p>Descriptions in a Bill of Quantities prepared in accordance with ARM 5 may encompass labour, plant and materials required to deliver the particular work that is to be priced. There may also be some descriptions that rely on the Provisional Sum, Prime Cost or Reserved Sum mechanisms to cover either the supply of materials, the installation of an item or the full provision of a specific piece of required work.</p> <p>The Carbon QS will need to identify and extract the material content from the ARM5 BoQ description to enable the production of a Bill of Materials.</p> <p>When used in conjunction with the International Cost Management Standard (ICMS), the ARM 5 Bill of Quantities structure will map to Uniclass and enable carbon 'hotspots' to be identified within the structure.</p>
37	We have difficulties receiving appropriately and fully priced M&E BoQ's measured to ARM4 Supp 2. If ARM5 requires this to be measured in even greater detail, will there be strong guidance and instructions as to how to deal with tenderers that don't include fully priced M&E bills. i.e. disqualify the lowest tenderer and move on to access the next?	It is understood that practice guidance is under development by the professional bodies.
38	With Contractor Design, if "design development" introduces additional measured work, would this not be picked up anyway (ie, the Contractor is compensated) in the post contract management of the contract?	The requirement is that the Contractor is afforded the opportunity to include within their tender price for the full costs associated with the item that they are to design, including the design work. The particular work would not be subject to remeasure unless the extent or the requirements for the work are varied by the Design Team.
39	Are we better to measure by works section and uniclass code BoQ's going forward?	As has always been the case, the manner in which the work required is measured and the Bill of Quantities is measured is at the discretion of the QS except where the Client, or in some cases the Project Design Team, have stated specific requirements - particularly for the presentation of the BQ.