

## Advice notes for users of ARM 4

The ARM Joint Committee representing the SCSl and CIF, together with an observer representing the Government Contracts (Construction) Committee, maintains oversight on the content and implementation of the Agreed Rules of Measurement (ARM) in the Republic of Ireland. ARM 4 is the version currently in use, together with Supplement 1 (Amendments to ARM 4 to incorporate the Public Works requirements) and Supplement 2 (Alternative Rules for the measurement of Services).

The Joint Committee has become aware of concerns in the industry and amongst parties commissioning construction contracts about the standard of some Bills of Quantities currently being issued with tender documents.

Queries submitted to the Joint Committee indicate that compliance with the requirements of ARM 4 and of Supplements 1 and 2 is less than satisfactory. This may carry serious implications, particularly where the Employer is allocated the risks arising from errors in the Bills.

The following advice note is being issued by the ARM Joint Committee to assist practitioners to comply fully with the relevant ARM requirements. Such adherence is particularly important for Public Works Contracts where 'quantities form part of the Contract' and are subject to differing Rules under Supplement 1. This advice may in some cases also apply in private sector work (see 2, 3(iv), 3(vii)) but, regardless of the Client, the maintenance of appropriate professional standards in the preparation of all Bills of Quantities is encouraged. Failure to do may give rise to reputational damage to both the practitioners involved and the profession in general and to potential negligence claims.

1. The Schedule issued with the Public Works tender documentation (see Construction Procurement Reform) is clear that ARM 4 with relevant supplements 1 and 2 are to be used for the preparation of Bills of Quantities for construction projects. Qualification to those Rules is not permitted. A hierarchy of contractual precedence for contract documents is provided in the Public Works Contracts with the Pricing Document, in this case the Bill of Quantities, at the lower end of the list. Accordingly, any purported qualification to the ARM 4 Rules inserted in either the Work Requirements or the Pricing document will not have legal effect as the Schedule to the Conditions of Contract take priority over those other documents. Schedule Part 1 to the Conditions of Contract for Employer Design projects will normally identify ARM 4 Supplement 1 as the measurement rules adhered to.
2. **General Rules, Rule 2 (Section A)**. This is the same in both ARM 4 and in Supplement 1 and is the source of a significant proportion of the queries directed to the Standing Committee with respect to the use of 'bulked' or 'composite' descriptions. The Rule requires that *'not more than one requirement from each of the Category 1, 2 and 3 columns can be applied in any one description'*. This prohibits the amalgamation of different types of work in the same description. For example, a single Bill of Quantities item cannot include a concrete ground slab, the surface finish to it, its steel reinforcing and the damp proof membrane below it since the four types of work each have their own entry in the ARM Rules.
3. Practitioners are advised to take the requirements of ARM 4 Supplement 1 into consideration when preparing Bills of Quantities and, in particular, to note the following;
  - i) **General Rules, Rule 7 (Section A)**. The requirement of Rule 7 in Supplement 1 with regard to the provision of a *'detailed description'* differs considerably from the same Rule in ARM 4. Supplement 1 is specific that the requirement for a detailed description is satisfied by a

reference to a 'Standard' specification (note upper case 'S' in Supplement 1) and that EN or National Standards are adequate once the detail provided in the Standard is adequate to 'identify the material or process required'. A reference to a specification document provided by a Design Team member does NOT satisfy the requirement for the provision of a detailed description. It is essential that descriptions in Bills of Quantities fully describe the essential information that the Rules require to be provided.

- ii) **Provisional sums or quantities.** These mechanisms are not permitted by ARM 4 Supplement 1.
- iii) **PC Sums** may only be used in tender documents as specific Reserved Sums for Named Specialists and for the cost associated with the appointment of a Standing Conciliator (Rule A10). In both instances the amounts in the Bill of Quantities, together with any ancillary items such as profit percentages, must be adjusted and replaced by the actual quoted sums and ancillary percentage amounts for the respective services before a tender is accepted.
- iv) **Samples, tests and surveys.** The scope and requirements called for in the Works Requirements (drawings and specification) must be fully described in the Pricing document so that a facility is provided to the Contractor to price them.
- v) **Preliminaries Rule 2 (Section B).** BQ items are required for all entries made by the Employer in Schedule Part 1 to the Form of Tender. This includes items for the various types of insurance to be provided by the Contractor and relevant information such as permitted excesses, special conditions (e.g. asbestos cover) as well as Bond requirements, contract duration, sectional completion requirements, retention percentages, arrangements about payment for materials, weather station information with respect to weather events, etc. For Schedule Part 1 item K (risk transfer allocations), items for pricing of risk transfer need to be given and the allocation of the risk for delays and compensation events identified.
- vi) **Schedule part 1 K18 to K21 decided not to be 'Compensation events'.** Where the risks described are allocated to the Contractor, the relevant BQ items affected by that risk allocation need to be clearly identifiable as ones where the quantum risk is with the Contractor and, for example, where the quantities priced in the BQ will not be adjustable under Schedule Part 1 item K17 in the event of a discrepancy between the extent of the work called up in the Work Requirements / Bill of Quantities and what is actually required to deal with the site conditions encountered.
- vii) **Groundwater** – the implications of its presence (i.e. excavation, earthwork support) and its disposal must be dealt with in accordance with ARM 4 Rules. If there is ground water anticipated by the Works Requirements then the assumed starting level must be stated (in the Works Requirements and the Bill of Quantities) to facilitate the subsequent re-measurement of the associated BQ items, including disposal, when the actual level is agreed. An item in the BQ for 'disposal of ground water' is meaningless without the required ancillary information and this is particularly the case if the Works Requirements do not provide for the presence of ground water.
- viii) **Bill of Quantities to match the Works Requirements.** The Bill of Quantities is NOT part of the Works Requirements and, in the event of a dispute about whether the provision of an item of work is a contractual obligation, the provisions of the Works Requirements will decide the matter.
  - a. If the work is called for in the Works Requirements and not included for in the Bill of Quantities then the Contractor is obliged to undertake the work but may wish to treat its execution as the basis of a Claim using the provisions of the relevant clause of the PWC Contract being used for the particular project.
  - b. If the work is not called for in the Works Requirements but has been included for in the Bill of Quantities then the Contractor is not obliged to carry out the item unless issued with a

Change Order instructing an amendment to the Works Requirements, which will then be valued in accordance with the provisions of the Conditions of Contract.

- c. Schedule Part 1, item K17 sets out the arrangements in the event of a discrepancy between the Works Requirements and the Bill of Quantities. All such discrepancies are deemed Compensation Events, subject to the cost of each being more than €500.
- d. Please note that sub-clause 1.3.4 in the PWC contracts was introduced to afford a clear operation of the Schedule Part 1, item K17 process by requiring that the ER must issue an instruction to resolve any discrepancy between the Works Requirements and the Pricing Document, either in favour of the Works Requirements or to change the Works Requirements to match the Pricing Document item.

Michael Mulryan

Chair of ARM 4 Joint Committee

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