

## THE RICS NEW RULES OF MEASUREMENT: DETAILED MEASUREMENT FOR BUILDING WORKS ('NRM 2')

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The RICS New Rules of Measurement: When I was studying for my QS degree, (I graduated in 1982) I remember my measurement lecturer holding up a copy of SMM7 and expounding it as "the future!" We had just spent 4 years toiling our way through SMM6 with a view to impressing our future employers with our new found wisdom and were not best impressed by notice of this future change. As it turned out it was a long time before SMM7 was regularly adopted as "the Method of Measurement".. NRM2 was published in April 2012. The first edition became operative on 1 January 2013 but its uptake has been very slow. People are resistant to change and I fear that it is the same now with the use of NRM2. DGA has been providing training to a national building contractor about measurement and has recently been asked to revert from training using NRM2 to SMM7 due to its lack of use.

### LAYOUT

It is a much chunkier document than previous standard methods and NRM2 rules address all aspects of Bill of Quantities production

- Includes setting out the information required from the employer and other construction consultants;
- Quantification of non-measurable work items;

- Quantification of contractor designed works;
- Quantification of risks;
- Guidance is also provided on the content, structure and format of Bill of Quantities.

It is suggested by the RICS that the new suite of documents will better reflect the way the industry now works:

- Better meeting the needs of clients;
- Providing for more up-front detail;
- Allowing better consideration of the full costs of a construction project (for example marketing costs, fees and charges, the cost of acquiring land, planning costs, relocation costs, and the cost of finance and so on). i.e. "from cradle to grave";
- Providing a better method for quantifying risk;
- No reference to Co-ordinated Project Information and the lettering used previously has now been replaced with a numbering system.

The layout is changed from SMM7, and NRM2 is divided into three parts with supporting appendices:

- Part 1: General - places the measurement for works procurement in context with the RIBA Plan Of Work and the OGC Gateway Process; and explains the symbols, abbreviations and definitions used in the rules.

- Part 2: Rules for detailed measurement of building works - outlines the benefits of detailed measurement, describes the purpose and uses of NRM2; explains the function of bill of quantities, provides work breakdown structures for bill of quantities, defines the information required to enable preparation of Bill of Quantities, describes the key constituents of bill of quantities, explains how to prepare bill of quantities. Considerable space is given over to the codification of bills of quantities and the use of the bills for cost management.
- Part 3: Tabulated rules of measurement for building works - comprises the majority of NRM2 being the tabulated rules for the measurement and description of building works for the purpose of works procurement.

## Bill Preparation

There is considerably more information relating to the preparation of the Bills of Quantities. In the past each quantity surveying practice produced their bills following their own preferences and historical development. This is the first time that the RICS has given guidance on coding and work breakdown structures in an attempt to align the bills with the cost plans produced using NRM1. In comparing SMM7 and NRM2 there is now no reference to Co-ordinated Project Information and the lettering used previously has now been replaced with a numbering system.

NRM2 concentrates the measurement of the items that carry the most costs. It provides a simpler method of measurement. This means that there are fewer items to measure. The remainder the 'labour' items - are not measured, e.g. working space (Level 3 Item 3, NRM p. 132), and level and compact the surface of the excavation to receive the foundations (Level 3 Item 5, NRM p. 132) is no longer measured.

The intent is that these low-value labour items are incorporated into the pricing of the work. However, these small-value items still have to be carried out and the contractor's estimator still has to include the cost of the work in the tender price.

The simplification of the method of measurement does not reduce the amount of measurement. The task of the estimator has expanded from simply pricing the items to adding to the measurement that is necessary to provide a comprehensive tender price. This means that parts of the measurement work have been transferred from the fees of the professional practice to the overheads of the contractor. Simplification has come at a price which may not be cost effective.

The Preliminaries section of the Bill of Quantities is now split into 2 parts:-

- Part A Information and requirements, and
- Part B Pricing Schedule.

The purpose of Part A is to describe the building project particulars i.e. the drawings upon which the Bill of Quantities is based, the work generally, the site, the form of contract, employers specific requirements etc. It also contains information on how to interpret the Bill of Quantities.

The pricing schedule is simply a schedule in which the contractor inserts preliminary costings relating the employer's requirements and his cost items.

### PROVISIONAL SUMS

NRM2 provides rules to deal with the quantification of non-measurable work items, contractor designed works and risks. Non-measurable work items are covered by provisional sums and are required to be identified as either defined or undefined.

Defined provisional sums are considered to have been accounted for within the contractor's price and programme. In effect, the contractor is taking the risk that their estimate will be sufficient.

Undefined provisional sums are not accounted for in the contractor's price and programme. This means that the employer is taking the risk for the works and the contractor may be entitled to an extension of time and additional payments.

### CONTRACTORS DESIGN

With contractor designed work, NRM2 requires that performance objectives or criteria that the contractor will be required to meet are to be clearly defined by way of a preamble to the work items that comprise the contractor designed works. Provision of these preambles is explained.

### RISK

Risk is included as a priceable section in the method. NRM2 requires that risks that the contractor/ sub-contractor are required to manage, should they materialise, are to be fully described so that it is transparent what risk the contractor is required to manage, and what the extent of services and/or works the employer is paying for.

Risks to be transferred to the contractor are to be listed in the Bill of Quantities under the heading 'schedule of construction risks'. A template for a 'schedule of construction risks' is in Appendix F of the rules. The employer is required to pay the risk premium to the contractor, irrespective of whether the risk transferred does or does not materialise.

NRM2 further states that the contractor will be deemed to have made due allowance in his risk allowances for programming, planning and pricing preliminaries. Risk allowances inserted by the contractor shall be exclusive of overheads and profit. Separate provision should be made in the BQ for overheads and profit.



## CONTRACTOR CREDITS

A further change from SMM7 is the inclusion of a template at Appendix F for Credits offered by the contractor. Provision for such provides the employer an opportunity to seek credits for old building materials; components and items; mechanical and electrical plant; and fittings, furnishings and equipment which arise from the stripping out or demolition works and for which the employer is content to pass ownership to the contractor for reuse. This can either be a list prepared by the employer and priced by the contractor or alternatively the contractor can be invited to offer a list.



## SUMMARY

In summary, there are significant differences in the approach to measuring work sections between NRM2 and SMM7 and it is vitally important that you are able to identify and allow for these differences, including changes in risk allocation, when preparing contract documentation and tender submissions. It will take time but NRM2 will slowly but surely become the established method for measuring construction work and regular use will engender ready acceptance.

NRM2 is a comprehensive document available as a free download to RICS members or can be purchased from RICS Books Ltd. For training on NRM2 or for further advice, please contact your nearest DGA office.

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## MORE INFORMATION

If you would like to find out more details about any of the subjects covered in this Ebriefing please contact DGA Group through the contact details below or at [DGAGroup@dga-group.com](mailto:DGAGroup@dga-group.com)

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