

ENGINEERING EQUIPMENT AND MATERIALS USERS' ASSOCIATION

Design and installation of on-line analyser systems A guide to technical enquiry and bid evaluation

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ENGINEERING EQUIPMENT AND MATERIALS USERS' ASSOCIATION

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Comments are considered by the relevant EEMUA Technical Committees and may be incorporated in future editions of this Publication. New editions are publicised on the EEMUA website.

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1. Introduction

This Publication is intended as a guide to assist in the development of a specification or material requisition for analysers and their associated support systems. It should be used for enquiry purposes and the subsequent assessment of the bids presented by the prospective vendors. The intention is to cover the general principles and items that need to be addressed when purchasing large analyser systems.

This Publication is not intended as a design specification in its own right and design guidance has been deliberately omitted. It should be read in conjunction with EEMUA Publication No. 138 Design and installation of on-line analyser systems, Second Edition, March 2010, ISBN 0 8591 174 8, which provides further guidance on specific design details which need to be included in the specification or material requisition used for the purchase of analysers and associated systems.

To simplify the specification and bid process it is desirable to have a standard format for both the enquiry documentation and the response from the analyser vendor. This Publication is intended to provide that framework.

The Chapter entitled 'Scope of Supply' lays out the headings and any relevant associated comments for the specification of a complete analyser system. Analyser systems are not all the same and individual requirements for total content will invariably differ. However this Publication is laid out such that individual sections can be selected or omitted as required. The recommended approach is to include all section headings and where relevant state as "Not Applicable".

The Chapter entitled 'Bid Technical Evaluation' covers procedures for bid assessment and gives suggested points against which bids should be analysed.

This Publication supersedes EEMUA Publication 138S1 Design and installation of on-line analyser systems – a guide to technical enquiry and bid evaluation.

2. Preliminary Details

2.1 Brief Project Description

The specification document should contain a brief description of the project associated with the analyser installations including site location, type and number of analyser houses, tag numbers for the proposed houses and analysers, and the major obligations expected of the systems vendor, e.g. design work, manufacture, procurement, testing, transportation to site, commissioning and training.

The analyser and installation may be supplied by the same or separate vendors. The normal preference is for the analyser vendor to also supply the sample conditioning system and housing of the installation as this gives a single point of responsibility. If several analysers are being installed at the same time, the complete installation can be supplied by a specialised analyser systems sub-contractor. See EEMUA Publication 138 – Design and installation of on-line analyser systems for further information on analyser installation design.

2.2 Type of Response Expected from the Vendor

The type of response required of the vendor should be clearly stated, e.g. answer all sections on an individual basis, highlight deviations from the specification with technical reasons for non-compliance and the alternatives proposed.

It should be made clear that any drawings and data presented with the bid should be relevant to that bid. Standard drawings are only acceptable if applicable for the specific application. Typical drawings or examples from other projects are generally unacceptable.

The language in which the bid is to be submitted should be specified.

2.3 Critical Criteria on Bid Rejection

Consistency of response from all vendors is necessary to provide a fair basis for technical comparison of bids.

It should be made clear to the vendor that non-compliance with the requested response format may lead to automatic rejection of the bid.

A high degree of importance should be placed on technical competence in sample system design as this is the area whereby the analyser systems will most likely fail. Typical drawings or examples of past similar applications are generally not sufficient to determine the competence and quality of design being offered for the specific project.

Design for ease of maintenance should also be emphasised as an important aspect in assessing the bids.

3. Scope of Supply

This Chapter covers typical items and technical requirements that should be included in the enquiry document with examples to emphasise the types of clause that should appear and the associated technical and scope considerations. It does not necessarily include the complete set of clauses or technical requirements that may be required for all projects. These need to be developed on a specific project basis.

The final bid enquiry document should contain an itemised list or table identifying all the major hardware assemblies (with tag numbers and quantities as appropriate) and the engineering services (inspection, testing, site acceptance, documentation, training, etc.) that are included within the vendor's scope. This may also be used as the basis for a commercial breakdown of the costs.

3.1 Vendor/Client Interfaces

Interface points should be clearly defined in terms of site work tie-ins.

Where testing of the analyser installation is required it should be made clear who is responsible for providing any necessary test equipment and test gases/liquids.

The Vendor should make due allowances within the bid for inspection and quality assurance checks by the client/purchaser.

3.2 Procurement Responsibilities

It should be made clear whether the systems vendor is to buy in the analysers or if the client will 'free issue' them to the vendor for installation.

When analysers are procured by the systems vendor the right for the client to inspect the analysers prior to dispatch to the systems vendor's works should be reserved. The systems vendor is to inform the client when inspections are due.

The client should reserve the right to override any vendor selection of type and make of analyser or pre-specify the required type and model(s) if only specific types are acceptable. This is also applicable to other systems components where specific equipment is preferred or required for consistency with other equipment already used on site.

When analysers are supplied 'free issue' to the systems vendor, this should not free the systems vendor from obligations to ensure the analysers meet performance requirements when installed within the overall system.

3.3 Standards and Codes of Practice

The specification should call up all codes and standards relevant to the work. A comprehensive list is given in EEMUA Publication No. 138. Additionally, there may be some project specific standards and client specific Codes of Practice which should be attached to the enquiry specification.

The systems vendor should acknowledge full conformity to all listed documents (or highlight any deviations) and be prepared to have all such documents available in the event of a dispute.