



BP GROUP RECOMMENDED PRACTICES AND SPECIFICATIONS FOR ENGINEERING



THE INTRODUCTORY VOLUME

August 1998

PREFACE

This Introductory Volume contains information and guidelines on the philosophy and use of the BP Group Recommended Practices and Specifications for Engineering (RPSEs). There is also information on external standards organisations and BP representation there on.

Holders of BP Group RPSEs must be registered with STANDARDSLINE in order to receive updates.

The Introductory Volume, all the RPSEs, the Quarterly Status List and our Newsletters are available via the BP Intranet:
<http://info.bpweb.bp.com/standards/default.htm>

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SCOPE AND PURPOSE The Introductory Volume provides an introduction to Engineering Standards in BP. It describes the generation and management of the BP Group Engineering Standards Programme by the Engineering Standards Forum but principally focuses on the development and use of the BP Group Recommended Practices and Specifications for Engineering. It contains the General Foreword, a statement by the BP Group Chief Engineer, outlining the principals and practices for the use of Engineering Standards in the BP Group.											
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CUSTODIAN (See Quarterly Status List for Contact) Standards											
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GENERAL FOREWORD

Introduction

The BP Businesses have developed over a number of years an engineering knowledge base that includes Recommended Practices (RPs) and Guidance for Specification (GSs). These are indicative of a general standard of engineering that has contributed to the safe and successful operation of a wide range of petroleum and petrochemical plant over a number of years.

The RPs may cover engineering design, construction, installation, operation and maintenance, sharing experience and advising on alternatives for consideration by technical professional staff. The GSs are guidance for developing technical specifications for application and procurement of methods, equipment and materials.

In furtherance of the perceived benefit of sharing Business best practice in engineering for continuously improving business performance, the RPSEs are maintained under the overall direction of Business Management through the BP Group Engineering Standards Forum. Co-ordination and publication is provided from BP Group Research and Engineering, Sunbury.

Objectives

The objective of the BP Group RPSEs is to provide general technical guidance for design and procurement, to assist engineers in achieving fitness of purpose and optimum whole life cost.

The user of an RPSE document is responsible for determining what is appropriate to suit particular circumstances. Local conditions including organisational, customary practice and regulatory, may dictate that other approaches are more appropriate.

In addition, industry standards (whether local, regional or international) may contribute to the solution. For engineering standards, the approach increasingly is to rely as far as possible on industry standards and practices. Oil industry engineers actively participate in developing these common standards with particular focus on ISO/TC67, the International Standards Committee for “Materials, Equipment and Offshore Structures for Petroleum and Natural Gas Industries”. The RPSE knowledge base enables BP engineers to contribute more effectively within the groups charged with developing common industry standards.

Consistent with the responsibility and freedom given to BP engineers to establish appropriate engineering standards, it follows that the RPSEs are not mandatory nor is there any BP Group endorsement of them or requirement that they should be referred to or used in any particular circumstances.



Introductory Volume

The Introductory Volume to the BP Group RPSEs contains further information on a philosophy for engineering standards that has been developed by the BP Businesses as represented in the BP Group Engineering Standards Forum. There is also guidance to assist users of BP Group RPSEs, and sections for filing the Quarterly Status List and occasional Newsletters.

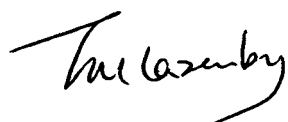
Quarterly Status List

The status of each RP and GS is set out in the Quarterly Status List. An update is issued quarterly to all registered recipients and is otherwise freely available on request to [Standardsline](#), Sunbury. The Quarterly Status List also identifies the key specialist who is responsible for the technical content, and who may be contacted for further advice.

Feedback

Users of the RPSEs are encouraged to participate in the network conferences and conversations to share the most up-to-date information. And they may contact [Standardsline](#), Sunbury with any comments or suggestions which could lead to improvement and updating. Such feedback will assist materially in maintaining and enhancing the value of the documents to users.

Issued on behalf of the BP Group Engineering Standards Forum



T.M. Lazenby,
Chief Engineer, BP

March 1996



1. STANDARDS PROGRAMME AND MANAGEMENT

1.1 The Engineering Standards Programme

The Engineering Standards Programme (ESP) aims to provide the quality of engineering and procurement standards and practices necessary to support BP Business goals. It is an integrated multi-business programme to include production, distribution and maintenance of BP Group engineering standards for use by the Businesses.

It also includes active participation at industry and international level, to influence industry, national and international standards. This is to promote a close relationship and consistency between BP standards and external standards.

The Engineering Standards Programme is directed by the Engineering Standards Forum and managed by Standards Group, BP International Ltd at Sunbury.

1.2 The Engineering Standards Forum

The BP Group Engineering Standards Forum (ESF) is a partnership of the BP Businesses, chaired by the BP Group Chief Engineer. It is the policy-making body for Engineering Standards in BP, its members are senior engineering managers from each BP Business.

The ESF sets the philosophy for engineering standards in BP. It authorises Standards Group to develop, prioritise and manage work on specific activities.



2. RECOMMENDED PRACTICES AND SPECIFICATIONS FOR ENGINEERING

2.1 'Way Forward'

The 'Way Forward' for BP standards in the 1990s has been developed to give renewed energy and focus to the BP Group engineering standards. It includes a much closer link between BP's external standards representation and the development of BP standards, and includes a revision to the style and content of the BP standards themselves. The new style of document is known as the 'Way Forward' document.

The essential elements of the 'Way Forward' are as follows:-

- (a) Use international or industry standards where possible
- (b) Where BP has more to say, the BP standard should be developed as a transparent supplement to the external standard. 'Transparent' means that the BP standard only adds to or qualifies the external standard, and must be read in conjunction with it.
- (c) BP standards to be maintained where no suitable external document exists.
- (d) BP standards to be for world-wide and group-wide application as far as possible.
- (e) BP standards to be maintained where value is added to BP Businesses by having a BP Group document; they are however not mandatory and each Business has the autonomy to define its own engineering standards by adopting, modifying or substituting the BP Group documents.
- (f) BP standards to be kept up-to-date.
- (g) The Requirements' to be identified in the core text of the standard, with a 'Commentary' to explain requirements and advise on options.
- (h) Minimise requirements for 'BP Approval' and documentation requirements, to what is essential.

The name for the document set is the 'BP Group Recommended Practices and Specifications for Engineering' (RPSEs). In engineering circles they are often still referred to simply as 'BP standards'.



2.2 Classification and Categorisation of Documents

Each of the 'Way Forward' BP Group documents is classified and categorised as follows, according to its characteristics:

2.2.1 Recommended Practice (RP)

The Recommended Practices are largely derived from the BP Engineering Codes of Practice. RPs include some of the old-style BP Engineering Standards where these were written more as general guidance, also Procedures and Technical Information.

Recommended Practices may be maintained for engineering design (in particular design of systems), specification, manufacture, construction, installation, inspection, testing, operation or maintenance. Generally they are written for technical professional staff, both BP and contractor; many in particular to designers and specifiers. As such they would not normally be sent to equipment suppliers.

Recommended Practices are to facilitate the broad availability of proven, sound engineering and operating practices. They are not intended to obviate the need for applying sound judgement as to when and where they should be used.

2.2.2 Guidance for Specification (GS)

The Guidance for Specification documents are derived largely from the BP Engineering Standards.

Specifications are to aid the application standardised methods in the procurement of equipment and materials, by providing instructions to manufacturers of equipment or materials. The core text of the GS and the Commentary is to assist the user (BP Business or non-BP Group company) to develop a fit-for-purpose technical specification for enquiry or purchase.

2.2.3 Categorisation by Applicability

Documents are categorised by Regional (geographical) and by Business applicability. The applicabilities are shown on the document data sheet. This does not preclude their being adapted for other applications.

- (a) Regional Applicability: this is 'International' for preference. Otherwise the region or country of applicability is specified. Some 'International' standards include a section that contains regional requirements for particular areas.
- (b) Business Applicability: the BP Business(es) to which the document principally applies.



2.3 Custodians

2.3.1 Definition

Each document within the set of BP Group RPSEs has a 'Custodian'. The 'Custodian' of a document is responsible for its technical content and currency, on behalf of the BP Group Engineering Standards Forum. The Custodian also has a wider responsibility for setting the context in relation to external standardisation and Business needs. The Custodian is a key element in the Quality System for development, maintenance and withdrawal of a BP document.

2.3.2 Appointment

The Custodian is accepted by the Engineering Standards Forum as a person who is recognised by the network of relevant discipline engineers within the BP Group as a leading practitioner for the principal area of technology embodied in the document. The Custodian may be located in any BP Group business worldwide.

2.3.3 Responsibilities

The Custodian has standardisation responsibilities wider than just maintaining the BP document. Principal among these is to seek active and direct participation in external standardisation work where this adds value for BP and particularly where the incorporation of BP requirements at this wider level would obviate the need for a BP document.

The Custodian is prepared to respond to queries and to guide users in the application of the document. The Custodian has a format for providing technical training to BP Businesses and to non-BP Group companies; the provision of such training is often included in agreements for supply of BP RPSEs. The detailed content and emphasis of training is agreed with the specific client on a case-by-case basis. These individual technical services are normally subject to the technical service or RPSE supply agreement in place between client organisation and a BP Business.

The Custodian maintains awareness of BP Business needs, and of any other developments affecting his document from both within and outside BP, in particular external initiatives for standardisation. Within BP the Custodian identifies users to establish the value of and needs for the document. The Custodian also 'networks' with specialists in other technical areas related to the document, and with Custodians of related BP documents.

The Custodian is responsible for the Status Code of the document, and for proposing revisions and withdrawals, or urgent amendments. BP's preferred goal is to withdraw the document when adequate industry or international standards are available.



2.3.4 Access to Custodians

The Quarterly Status List of BP Group RPSEs, distributed to all registered holders of maintained sets of BP RPSEs, gives the names and telephone numbers of the Custodians. All recipients of BP RPSEs within the BP Group, and non-BP Group companies that receive BP RPSEs under a technical service agreement that includes for direct technical support, are invited to contact the Custodian for any assistance required.

2.3.5 Accountabilities

Wherever located within the BP Group, the Custodian is accountable to Manager, Standards Group for his document meeting the aims of the Engineering Standards Programme. Manager, Standards Group is in turn accountable to the BP Group Engineering Standards Forum.

2.3.6 Document Maintenance

The Custodian is asked to review each BP document's Status Code at intervals not exceeding three years, a task supported by the Engineering Standards Programme.

When a revision is required or when the need for a new BP document is apparent, the Custodian will prepare a Proposal for submission to the Standards Group. In many cases the need for work will arise from a BP Business or perhaps a non-BP Group company, in which case the Custodian will facilitate that proposal.

Standards Group, solicit and collate Proposals in August preparatory to prioritisation for the following year's programme. Proposals submitted at other times or for more rapid progression will be assessed on a case-by-case basis related to urgency of Business need and availability of Business funding.

When work on a BP document is approved, the Custodian may appoint an author with a commitment to deliver the work to the requirements of the Engineering Standards Programme and within an agreed time-scale and budget.

2.4 Engineering Networks/Document Production

2.4.1 Engineering Environment

In the ideal environment, users of RPSEs will be aware of all factors effecting their use of standards and will initiate the generation of the new or revised documents required to meet their needs. In the real environment users do not have the time or desire to acquire and maintain the knowledge necessary and rely on the document Custodians to provide them with the documents they need. Custodians cannot work in isolation and in order to form a view on the requirements for new or revised RPSEs they need to liaise closely with the users of the documents. Engineering networks have always existed in BP. Their value is increasingly apparent in the real environment of a flat



organisation and commercially isolated Assets. The Engineering Standards Forum recognises the value of engineering networks in facilitating discussions and enabling the generation of RPSEs to meet the business need. The Engineering Standards Programme therefore provides direct help to Custodians for the setting up and maintenance of electronic networks. These “Engineering Network Conferences” (ENCs) provide a forum for discussion, sharing of best practice and ultimately the capture of this best practice in the BP Group RPSEs.

The intention of ENCs is not only to facilitate capture of best practice into the RPSEs but also to speed up their generation by placing the onus on the Custodian to generate documents, solicit comments and ultimately publish the documents within the electronic forum. The intention is to enable the “paper” process outlined in sections 2.4.2 to 2.4.9 to be fully implemented but be much quicker where ENCs exist.

2.4.2 Initiation

To initiate a BP Group Recommended Practice or Specification, there must be a recognised BP recurrent technical, operational or safety requirement, where external 'higher level' standards do not provide adequate coverage. The scope and contents will be drawn up for the proposed work, by the Custodian of the document.

2.4.3 Authorisation

The Proposal is approved by Standards Group, under its authority given by the BP Group Engineering Standards Forum (ESF). Standards Group may consult with the ESF regarding individual proposals.

2.4.4 Drafting

The initial technical draft will be produced by a technical specialist, or working group if necessary. They will network with other disciplines and with users in the Businesses to ensure that their needs are included from the start. The draft document will be delivered to Standards Group, when technically complete, and will be turned into a draft Recommended Practice or Guidance for Specification. The objective is to produce a fully-complete document that is 'right first time'.

2.4.5 General Circulation

The draft document will be circulated for comment by the BP Group through the ESF members, and for comment by chosen Associate Companies and appropriate technical specialists in the BP Businesses. Existence of the draft document is noted in the Quarterly Status List and copies can be supplied to users on request.

2.4.6 Review of Comments

If all comments can be resolved by the Custodian at this stage so that no significant technical amendments are necessary, the final draft is completed for approval and issue.



Comments that would extend the scope or require new aspects to be addressed must normally be recorded and await the next revision.

If technical comments are received which the Custodian cannot resolve, (e.g. differences of opinion between engineers in different businesses), then Standards Group will endeavour to resolve outstanding issues, if necessary via the ESF. The intention will always be to have internationally applicable BP Group documents, but compromises regarding regional and business applicability (or the use of specific annexes) are allowed.

2.4.7 Approval

When consensus has been achieved the document is prepared by Standards Group for issue. The Custodian is then required to warrant that the document is technically correct whereupon Standards Group will warrant that due process was followed in its production. The document is then published and its publication noted in the Quarterly Status List.

2.4.8 Withdrawal

Withdrawal of a BP document is treated in the way similar to initiation. A case will be made to the Standards Group that the document is out-of-date and/or no longer needed.

Following the approval for withdrawal, registered holders of BP RPSEs will be notified by a change in the Status Code on the Quarterly Status List, to which attention will be drawn in the 'Bulletin Box'.

The continued use of the withdrawn document will be at local management discretion.

2.4.9 Feedback Notification and Amendments

The Standards Group via [Standardsline](#) is the focal point for general contact for users with queries or comments. Queries, and feedback that require urgent consideration, are notified to the Custodian by Standards Group. If required, the Custodian will prepare a revision of the document which can be rapidly dispatched to all registered holders.

All feedback is kept on the document History File by Standards Group and the Custodian will consult this file when reviewing the Status Code or revising the document. Relevant feedback generated or received by the Custodian is also copied to Standards Group for the File. The History File is the definitive BP Group memory for the document.

2.5 Guidelines For Users

2.5.1 Introduction

This section provides general information to users of BP Group Recommended Practices and Specifications for Engineering. It is to



assist the user in creating an application-specific document from the BP Group document.

It should be noted that the BP Group Recommended Practices and Guidance for Specifications are not written in the same way as the old BP Codes of Practice and Standards. The RPSEs are written as guidance documents taking a risk based approach. They do not fully detail a single solution to a multiple application environment. Rather, they seek to guide the user to make the right decisions which will result in a fit for purpose solution for the given application. To some degree the RPSEs all require interpretation for application in a given environment. The factors to be taken into consideration when making interpretations are generally discussed in the commentary of the document.

2.5.2 Units

All numerical values are expressed in SI metric units based on ISO 31, ISO 370 and ISO 1000. Imperial unit equivalents will also be stated in brackets in those documents where important external reference standards use imperial units.

BP documents, when referring to external standards, use the exact description of the equipment or material as stated in the external standard. This means that since many U.S. reference standards still refer to sizes in imperial units (e.g. inch sizes for piping in API 5L), these are the descriptions used, not a hypothetical metric size having a doubtful meaning outside BP. When the external standard is metricated, the new designation may be used for reference.

2.5.3 Adapting The BP Group RPSEs

For a particular application, the BP Group RPSEs will require to be adapted or supplemented with particular requirements that may, for example, arise from:-

- (a) Specific process requirements.
- (b) Local factors, including relevant regulations and standards.
- (c) Technical/commercial factors, e.g. nominated suppliers.
- (d) Technical requirements that are specific, and possibly unique, to the particular project.
- (e) Technical requirements that are becoming BP standard practice but, have not yet been incorporated into issued the BP Group documents.

The User should consider what if any documentation or other requirements to place on the supplier/contractor. The Commentary may give guidance.



If necessary the user is therefore expected to 'edit' the BP document in order to create a job-specific document. This might include selecting any standard clauses from the this 'Introductory Volume'. Guidance on, for example, quality assurance, is usually given in the Commentary of each document for which this is relevant.

It is strongly recommended that users of BP Recommended Practices and Specifications for Engineering are registered either directly with [STANDARDSLINE](#), or indirectly through a Business or Project centre in order to ensure that new issues and revisions of BP documents are received promptly and consistently.

2.5.4 Alternative Referenced Standards

Referenced standards may be replaced by equivalent standards that are recognised at the point of application provided that it can be shown to the satisfaction of the purchaser's professional engineer that they meet or exceed the requirements of the referenced standards.

Standards from differing sources, even if covering the same scope, are rarely fully equivalent or identical in application. This is seen particularly in engineering material specifications. A useful concept is to list 'acceptable alternative' standards which may be regarded as equivalent for a particular set of stated service conditions; however, differing supplementary conditions may be needed for each alternative standard.

2.5.5 Use Of External Documents

BP RPSEs are sometimes written as a 'transparent' supplement to an external document. In these cases the structure of the BP document and its numbering system match the lead document. The BP text is be identified as 'addition', 'substitution', 'qualification' or 'modification' to the relevant paragraph of the lead document.

As the titles and numbering of the BP text follow those of the external document, gaps in the numbering of the BP document may occur. Where clauses are added, the text numbering of the external standard is extended accordingly. The BP document makes sense only when read side-by-side with the external document.

2.5.6 Feedback Of Information

Any need for the updating of existing documents or for the development of new documents, is dependant upon the feedback of information from users. This feedback can take several forms:-

- (a) Asset or project experience (Electronic Mail or FAXes to [STANDARDSLINE](#))
- (b) Technical reports.
- (c) 'Incident' reports.
- (d) Project Safety Reviews.



(e) Network discussions.

Suggestions from centres and individual engineers are welcome at all times.

2.5.7 Structure And Format

Whilst a rigid format to the BP Group RPSEs is not required, the following basic composition is usually followed:-

DATA SHEET

Document Title and Date

- | | | |
|-------------------|---|--|
| Applicabilities | - | Regional and Business applicability; does not preclude adaptation for other applications. |
| Scope and Purpose | - | A quick reference for the user to determine the relevance |
| Amendment History | | |
| Custodian | - | The Quarterly Status List gives the contact numbers for Custodians. users are invited to contact the Custodian for clarification and assistance if required. |

- | | | |
|----------|---|-------------------|
| CONTENTS | - | Table of Contents |
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FOREWORD

- | | | |
|---------------------------------------|---|---|
| Value of document | - | This should describe the reasons for the document and any information which will help the reader understand its purpose or application. |
| Principal changes from previous issue | - | For a reissued document, the principal changes from the previous issue should be listed. |

- | | | |
|------------------|---|---|
| BODY OF DOCUMENT | - | General requirements followed by detailed technical requirements are split into sections from DESIGN through to DELIVERY (or alternative appropriate headings). The core text is interleaved with Commentary. |
|------------------|---|---|



Large sections of Commentary may be removed to a special Appendix entitled 'Supplementary Commentary'.

APPENDIX A

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DEFINITIONS AND ABBREVIATIONS

Definitions of organisations used in the document are given e.g. manufacturer, purchaser, supplier, together with any necessary technical definitions. In RPs and GSs, reference is made to the Introductory Volume for Standard Definitions, however a document may include variations if appropriate.

APPENDIX B

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List of Referenced Documents

2.5.8

Requirements and Commentary

The Requirements are the minimum conditions of satisfaction, recommended for general application, usually world-wide. However, they may need to be supplemented in order to meet minimum local requirements. The Requirements are intended to promote simplicity and standardisation.

The Commentary is based on what used to be 'Yellow Pages', but including much 'White Page' material where this is advisory or optional. The User should examine the Commentary which will assist in making a decision to determine what if any further requirements to specify for the application. Commentary is shown in an italicised type-face, and is interleaved with the Requirements for ease of comprehension.



The Commentary may be used for various purposes, as follows:-

- (a) to explain the BP Requirements where the reasoning for the requirement is not immediately obvious to a competent professional engineer;
- (b) to specify such further BP requirements as may sometimes be applied to advantage, and to state the circumstances in which they should be applied;
- (c) to advise on when to select which option when alternatives are offered by the base external standard;
- (d) to specify and explain any further options that may be appropriate in particular circumstances, to allow the user to select what is fit for purpose;
- (e) to be the BP Group 'memory';
- (f) to be transmitted to contractors, suppliers and Third Parties along with the Requirements;
- (g) to include procedural aspects, in particular related to occupational health, safety and environment as and if relevant and essential to the subject;
- (h) The Commentary may be omitted, for example for documents that are procedures such as Inspection Procedures.

2.5.9

Use Of Language

Throughout the Requirements of both the Recommended Practices and the Guidance for Specification, the words 'will', 'may', 'should', 'shall' and 'must', when used in the context of actions by BP or others, have specific meanings as follows:-

- (a) 'Will' is used normally in connection with an action by BP, rather than by a contractor or supplier.
- (b) 'May' is used where alternatives are equally acceptable.
- (c) 'Should' is used where a provision is preferred.
- (d) 'Shall' is used where a provision is mandatory.
- (e) 'Must' is used only where a provision is a statutory requirement.

The meanings above do not apply to the Commentary, where the language is flexible as in normal English usage except where clauses suitable for inclusion in the Requirements may be given.

The strict adherence to the use of language was a fundamental feature of the old BP Group Codes of Practice and Standards. During the migration into Recommended Practices and Guidance for Specifications this strict adherence has been waived as the documents themselves are more interpretative in nature. In general the use of language guidelines still apply but Requirements are more likely to be specified as a “should” rather than any other degree of necessity.

2.5.10 Quality Assurance

Verification of the vendor's quality system is normally part of the pre-qualification procedure. In general, therefore, quality assurance requirements are not specified in the core text of the RPSEs. If this is not the case, many of the documents refer, in their commentary, to the Introductory Volume.

Below are suggested model clauses that can be inserted to require a contractor or vendor to operate and be prepared to demonstrate the quality system to the purchaser.

- (a) The supplier's management and organisation shall meet the requirements of a recognised national or international standard for quality systems. This may require confirmation before tender or placement of orders.
- (b) The supplier's quality system shall be documented and such documentation may be subject to review and agreement.
- (c) The supplier's quality management system may be subject to audit, by BP or its agents, before and during manufacture.
- (d) The supply of any product or service may be subject to the application of a criticality rating to determine actions required by BP to reduce risks associated with health, safety, environment and consequential costs due to failure on the part of the Supplier to meet specification.
- (e) The Supplier shall ensure that all services and materials are controlled in accordance with the intent of the main contract or purchasing documents. This shall include all items provided under sub contracts.

Note: Supplier is a business first party capable of providing a service or product - sometimes referred to as a contractor, manufacturer, stockist or fabricator. The Supplier is the recipient of the main contract or order. A simple standard definition may be found in the next section.

2.5.11 Standard Definitions

The 'Recommended Practice' and 'Guidance for Specification' documents generally make reference to the Introductory Volume for standardised definitions, usually from Appendix A. This is done to maximise consistency in the definitions applicable, however where a variation of a standard definition is applicable, this will be included explicitly in the document.

The following standard definitions are recommended for general use. But note that any specific application of the terms and responsibilities for the parties defined is a matter for the relevant Conditions of Contract.

BP	The British Petroleum Company p.l.c., an associate or subsidiary, or other organisation as defined in the Conditions of Contract on a project.
contractor	a main contractor responsible to BP for the design and/or supply of goods or services, for a complete project or installation.
inspector	the person appointed by the supplier or the purchaser to carry out engineering inspection in the supplier's works
project	a specific task to be completed to a specification within an agreed time and to an agreed budget.
purchaser	a contractor acting on behalf of BP, or BP itself in the case of a direct purchase.
Quality assurance (QA)	all those planned and systematic actions necessary to provide adequate confidence that a product or service will satisfy given requirements for quality.
quality manual	a document setting out the general quality policies, procedures and practices of an organisation.
quality plan	a document setting out the specific quality practices, resources and sequence of activities relevant to a particular product, service, contract or order.
quality system	the organisation structure, responsibilities, activities, resources and events that together provide organised procedures and methods of

	implementation to ensure the capability of the organisation to meet quality requirements.
supplier	the organisation, company or agency that is contracted to provide goods or services to BP.
third party inspectorate	an impartial body, possessing the necessary competence to verify that designs and/or manufacture satisfy the specification and purchase order requirements.
vendor	the main body responsible for supply and/or manufacture.

2.6 Paper Delivery

2.6.1 General

Delivery of documents in paper form continues to be a significant aspect of the work of the Standards Group. Complete sets of documents in binders are available as well as copies of individual documents. Requests for sets or individual documents can be made via the [STANDARDLINE](#).

Recipients of complete sets are usually registered to receive updated and new documents as they are issued.

2.6.2 Document Control

Individual RPSEs are not subject to document control. It is up to the holder of the document to ascertain the currency of any document held. This is done via the Quarterly Status List (QSL). The QSL is issued quarterly and records the status of each document in the RPSE set as of the first day of each quarter year. As documents are issued throughout the year, users may have documents of a later issue than that stated in the current QSL. The use documents which the QSL indicates have been replaced or withdrawn is at the holders discretion but is not recommended.

2.6.3 Quarterly Status List

In addition to recording the status of each RPSE the Quarterly Status List also contains useful ancillary information:

- (a) List of Document Custodians
- (b) Cross reference list of "old style" Codes and Standards to RPSE documents
- (c) List of Withdrawn documents
- (d) List of old BP Standard Drawings"



2.7 Electronic Delivery

2.7.1 General

The advent of the RPSEs saw the launch of the original CODEX electronic delivery system. CODEX was supplied to users via a multitude of 3.5 inch floppy disks. As we move further along the Way Forward, the need for improved electronic delivery is apparent and the means to make it happen is available. As with the use of electronic Engineering Network Conferences (ENCs - see 2.4.1), the electronic delivery of the BP Group RPSEs now utilises the latest Common Operating Environment IT systems.

The new electronic document delivery features full graphics and is delivered via standard software.

2.7.2 Intranet delivery

Delivery of the RPSEs to the users desktop via the BP Group Intranet forms the primary method of electronic delivery. The delivery forms a part of the Standards Group Intranet service (<http://info.bpweb.bp.com/standards/default.htm>).

The documents are provided in PDF (Portable Document Format) which features full text searching and “hyperlinking” between documents. The documents are also available in “WORD 7” format which facilitates downloading and edit to become application specific. The WORD versions are formatted as such to enable printing onto any size paper while retaining their readability.

Ancillary documentation also available via the Intranet includes the Quarterly Status List (although in its electronic format it actually records the status of each document in real time), and Standards Group Newsletters.

2.7.3 Compact Disc Delivery

The system outlined in 2.7.2 above is also available on 1 Compact Disc for standalone use. In this form the delivery is termed “New CODEX”, as it supersedes the existing CODEX. New CODEX is available as a “one off” or as a maintained system wherein updates will be issued quarterly.



3. EXTERNAL STANDARDS REPRESENTATION

3.1 Guide For BP Representatives

3.1.1 Introduction

BP's policy for Engineering Standards is to rely where possible on international and industry standards. Should these require qualification, a BP Standard (Recommended Practice or Guidance for Specification) may be developed as a transparent supplement to the external standard.

BP therefore encourages and supports active participation in external standardisation where this adds value for BP. This applies to key technologies critical to BP's success and where essential requirements of BP Standards can be promoted externally so that the BP Standards can be reduced or withdrawn.

The purpose of this guide is to establish a simple framework to maximise the value of individual contributions to BP's needs both for consistent standards and for simple specifications, where possible to be for world-wide application.

3.1.2 The Objectives Of Standardisation

The focused objective of a BP representative participating in external standardisation must be to ensure that BP's standard requirements are totally specified by one or another of the rational minimum range of options offered in the external standards. If this objective is achieved then all that the user needs to do is to select the option which best suits his requirement, without recourse to company supplements.

The broader objective is to promote a more efficient industry world-wide, that can invest in appropriate facilities to regularly produce to fit-for-purpose designs and specifications which are familiar to all concerned. Greater commonality enhances safety and reduces costs.

It must be recognised that external standards work is not only a technical activity. It can be, and often is in essence, commercial in aim, with strong political overtones. It is concerned with markets and exports, with free trade internationally and, in Europe, with the 'Single' or 'Internal' Market Directives. BP representatives must be aware of these dimensions and in particular must be competent to take commercial issues into account. The worth of including a specific feature requires a balance of cost and genuine need.

BP representatives on external committees and work groups must be clear about, and if necessary critical of, both the objectives of their committees or work groups and their programmes towards meeting such objectives. Programmes must be realistic given the resources available, and must be planned to deliver useable standards in a reasonable time-scale. Steady progress on a narrow front which



achieves a series of limited objectives is often preferable to an uncertain or negligible advance in too wide a field.

3.1.3 Representation

For BP representatives sponsored by the BP Group Engineering Standards Programme it is self-evident that they represent the BP Businesses collectively and on a world-wide basis, focused on the scope of the particular standards organisation. BP representatives sponsored by specific Businesses or Business Units represent firstly that sponsoring unit but also the BP Group world-wide.

In many cases the BP representative will participate in a standards body as the representative of an industry organisation or as a national representative. It is therefore necessary to represent a consensus view from that wider constituency. Every effort should be made to ensure that there is commonalty with BP's needs but in the event of irreconcilable differences, company support can not be assumed and the responsibility for representation must be passed to others. In this way there is no conflict between representing BP and representing industry and national organisations.

In all cases, systematic networking is required both internal to BP and externally, to ensure that BP Group needs are understood and represented.

3.2 Addresses Of External Organisations

Note; The following addresses are current on the date of issue of this Introductory Volume. For a more up to date listing you are advised to visit [Standards Group Intranet Site](http://info.bpweb.bp.com/standards/default.htm) (<http://info.bpweb.bp.com/standards/default.htm>).

<u>Abbreviation</u>	<u>Organisation</u>
ACI	American Concrete Institute 22400 W. Seven Mile Road P.O. Box 19150 Redford Station Detroit, Michigan 48219 U.S.A. +1 (313) 532-2600
ACTIVE	Achieving Competitiveness Through Innovation and Value Engineering c/o Mobile Court 3 Clements Inn London WC2A 2EB +44 171 412 4447



AFNOR	Association Francaise de Normalization Tour Europe CEDEX 7 92080 Paris La Defense Paris, France +33 (1) 788 1111
AGMA	American Gear Manufacturers Association 1500 King Street Alexandria, Virginia 22314 U.S.A. +1 (703) 684-0211
AISC	American Institute of Steel Construction 400 North Michigan Avenue - 8th Floor Chicago, Illinois 60611 U.S.A. +1 (312) 670 2400
ANSI	American National Standards Institute, Inc. 1430 Broadway New York, New York 10018 U.S.A. +1 (212) 354-3300
API	American Petroleum Institute Publications and Distribution Section 1200 L Street Northwest Washington, D.C. 20005 U.S.A. +1 (202) 682-8000
ASHRAE	American Society of Heating, Refrigeration and Air Conditioning Engineers 1791 Tullie Circle, NE Atlanta, Georgia 30329 U.S.A. +1 (404) 636-8400
ASME	American Society of Mechanical Engineers 345 East 47th Street New York, New York 10017 U.S.A. +1 (212) 705-7745



ASNT	American Society for Non-destructive Testing 1711 Arlingate Ln. P.O. Box 28518 Columbus, Ohio 43228-0518 U.S.A. +1 (614) 274-6003
ASTM	American Society for Testing and Materials 1916 Race Street Philadelphia, Pennsylvania 19103 U.S.A. +1 (215) 299-5400
AWS	American Welding Society 550 Lejeune Road Miami, Florida 33135 U.S.A. +1 (305) 443-9353
BSI (Head Office)	British Standards Institution 389 Chiswick High Road London W4 4AL + 44 181 996 9000
BSI (Admin.)	British Standards Institution 389 Chiswick High Road London W4 4AL + 44 181 996 9000
CEN	Comité Européen de Normalisation Rue de Stassart, 35 1050 Bruxelles, Belgium +32 (2) 519 6811
CENELEC	Committee Européen de Normalisation Electro-technique Standardisation Rue de Stassart, 35 1050 Bruxelles Belgium +32 (2) 519 6871

CICIND	International Committee on Industrial Chimneys Talacker 50, CH-8101 Zurich Switzerland
CRINE	Cost Reduction Initiative for the New Era c/o Mobil Court 3 Clements Inn London WC2A 2EB Tel +44 171 412 4447
DIN	Deutsches Institut für Normung Beuth Verlag GmbH Burggrafenstrasse 4-7 1 Berlin 30 Germany
EEMUA	Engineering Equipment and Materials Users Association 45 Beech Street London EC2Y 8AD + 44 171 628 7878
ECISS	European Committee for Iron & Steel Standardisation
E&P Forum	Oil Industry International Exploration & Production Forum 25/28 Old Burlington Street London W1X 1LB U.K. +44 (71) 437 6291
ETSI	European Telecommunications Standards Institute Route des Lucioles Sophia Antipolis - BP 152 06561 Valbonne Cedex France +33 (92) 94 42 00



IEC	International Electrotechnical Commission 3 Rue de Varembe 1211 Geneva 20 Switzerland +41 (22) 3401 50
IP	Institute of Petroleum 61, New Cavendish Street London W1M 8AL U.K. +44 (71) 636 1004
IMO	International Maritime Organisation 4 Albert Embankment London SE1 7SB U.K. +44 (71) 735 7611
ISO	International Organization for Standardization 1 Rue de Varembe Case Postale 56 CH 1121 Geneva 20 Switzerland +41 (22) 341240
JIS	Japanese Industrial Standards 1-24 Akasaka 4 Minato-Ku Tokyo 107 Japan +81 (3) 583 8001
MSS	Manufacturers Standardization Society of the Valve and Fittings Industry 127 Park Street N.E. Vienna, Virginia 22180 U.S.A. +1 (703) 281-6613
NACE	National Association of Corrosion Engineers Publications Dept 1440 South Creek Drive Houston, Texas 77084 U.S.A. +1 (713) 492-0535



NFPA	National Fire Protection Association Batterymarch Park Quincy, Massachusetts 02269 U.S.A. +1 (617) 770 3000
NSF	Norwegian Standardisation Organisation PO Box 130140 Ann Arbor MI 48113-0140 Norway +313 769 8010
OCIMF	The Oil Companies International Marine Forum Portland House, 6th Floor Stag Place London, SW1E 5BH U.K. +44 (71) 828 7696
SIS	Sveriges Standardiseringskommission Box 3295 Stockholm 3 Sweden +46 (8) 613 5200
TEMA	Tubular Exchanger Manufacturers Association 25 North Broadway Tarrytown, New York 10591 U.S.A. +1 (914) 332-0040



3.3

BP Representation

BP has representatives on some 300 committees worldwide. These range from participants in national, regional and international standards writing bodies to representatives throughout industry and related external organisations. The breadth and fluidity of BPs representation is as such to invalidate its reproduction in this document. However, an up to date list of all BPs representations is available via the Standards Group Intranet Site (<http://info.bpweb.bp.com/standards/default.htm>).

