
WATER INDUSTRY INFORMATION & GUIDANCE NOTE

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UK Water Industry

INFORMATION AND GUIDANCE FOR THE DEVELOPMENT AND AMENDMENT OF SPECIFICATIONS FOR THE WATER INDUSTRY

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1. GENERAL SCOPE AND OBJECTIVES

This document is intended to provide guidance the water industry and its suppliers in the development and amendment of Water Industry Specifications (WISs) and Information and Guidance Notes (IGNs)..

These guidelines have been prepared on the preparation and amendment route, formal authorisation procedure and editorial requirements. It is intended that, by provision of these guidelines, documents of a consistent quality and standard will be produced.

2. USING EUROPEAN AND NATIONAL STANDARDS

Under the Utilities Directive¹, which came into force on 31 January 2006, where a European Standard (EN) covering the proposed product exists, this must be used in the purchasing and therefore, to meet market demand, in the manufacture of the product.

If an EN does not exist, national standards from EU member states should be sought. European and national Standards will not normally be available in the case of newly developed products, but this is not to be seen as inhibiting the use of such products. To fill this gap, a series of tailor-made Specifications is produced by the Water Industry. It is recognised that **Water Industry Specifications (WISs)** have a valuable role where national or European standards are not yet available. They should not be seen to be in competition with British or other national standards but as a precursor to the development of a national Standard through BSI or a European Standard through CEN.

In addition to the need for technical specifications covering performance, testing and quality control procedures, there are occasions

This document has been prepared by the Water UK Standards Board. Requests for further copies and technical queries should be addressed to the Standards Board via Brian Spark Technical Secretary to the Board., Water UK, 1 Queen Anne's Gate, London, SW1H 9BT or e-mail brian.spark@ntlworld.com telephone +44 (0) 1480 351865 fax +44 (0) 1480 351865.

when the Industry as a whole wishes to provide guidance to the individual Water and sewerage suppliers and their suppliers. **Information and Guidance Notes (IGNs)** have been developed for this purpose.

When introducing a new product to the Industry and/or considering the development or amendment of a new specification, it is important to recognise the requirements of both the European Utilities Directive¹ and the Construction Products Directive². Reference is made to CESWI 6³ Pages 11 and 12 for further guidance on the requirements of these Directives.

3. PRODUCT SPECIFICATIONS

3.1 Proposing a new or amended Specification

The development or amendment of both WISs and IGNs (4-series) is co-ordinated by Water UK's Standards Board and managed on their behalf by a Central Coordination Team.

[Note: 9-series specifications are also produced by the Water Regulations Advisory Scheme.]

As a first step, the proposer of a new or amended specification (this might be a member of the Water Industry, a manufacturer or Trade Association for example) should define as closely as possible the proposed scope of the new or amended specification and the justification for its development or amendment.

The need for a new or amended Water Industry Specification should:

- be justifiable in terms of the potential use of the product in the Industry;
- not be in competition with European or British standards;
- be seen as a precursor to the development of a National Standard through BSi or a European Standard through CEN.

The justification should include:

- document change information detailing changes where the proposal is an amendment.
- the perceived benefits of using the document
- the perceived on-cost of using the document
- the perceived cost saving of using the document

- the perceived market for the product/service in the document
- how the document fits in with any European standard (if there was a European Standard covering the same area it is not allowed to produce a WIS/IGN)
- alignment with the provisions of European Standards (we are obliged to use these provisions)

This should be done through completion of the **Application for Development or Amendment** form (Appendix A).

[Note: Contact the Technical Secretary for the most recent version of this form and help with its completion].

The Chairman of the drafting panel should be a member of the Water UK Technical Network appropriate to the content of the proposed WIS or IGN.

The completed form then constitutes a formal application to Water UK's Standards Board and will be submitted to the Board for approval.

It is the stated policy of the Standards Board that "WISs are inappropriate for unique products, although they continue to be quite appropriate for generic products. Independent assessments should be sought to provide the water industry with the latest knowledge on new products".

The Board will consider the application with regard to such things as the technical need for, and merit of, the proposed or amended specification; the importance of the product to the Water Industry; the number of manufacturing companies producing that product, and the funding available from manufacturers of the product or other sources.

To save wasting effort, drafting should not commence until approval to proceed has been received.

3.2 Drafting

The progress of the document will be entirely dependent upon its complexity, the progress of any associated research work and the number of parties involved in the drafting.

To help in achieving the estimated target for public comment, it is strongly recommended that:

- at this stage, the document **remains confidential** to the members of the panel and any co-operating parties who may be providing information for the document e.g. manufacturers, research laboratories etc. and not circulated more widely to the organisations that they represent;
- the **scope** of the document is agreed at the first meeting and all future work strictly adheres to this scope;
- a **record** is kept of all meetings and changes to the document and drafts of the document are numbered for future reference;
- all hand-written amendments are clearly marked with the date of addition and the source of the comment.

The format and style of these document follows “The BSI guide to standardization – Section 2: Rules for the structure, drafting and presentation of British Standards”⁴ as closely as possible.

To avoid confusion and the use of draft documents for purchasing, authors are asked not to use the layout of a final WIS/IGN for their drafts.

3.3 Circulation for public comment

Once the drafting panel is happy with the content of the draft document, it is necessary to issue it for public comment.

This is a key stage in the development or amendment of an Industry-wide specification.

This should done through completion of the **Approval to Publish** form (Appendix B).

[Note: Contact the Technical Secretary for the most recent version of this form].

The Chairmen of both the drafting panel and Water UK’s Standards Board should sign the form before proceeding further.

A copy of the appropriate **Application for Development or Amendment** form (Appendix A) should be attached to the completed form.

The primary author is charged with the task of ensuring that the current draft meets the format and style requirements given in the BSI guide to standardization – Section 2: Rules for the structure, drafting and presentation of British Standards and any additional requirements used for WISs.

In addition, the primary author should check that the draft is complete (e.g. all diagrams are included); the draft has been proof read; and is clearly marked “Draft for Comment”.

A copy of the draft Standard should be sent to the Central Coordination Team who will issue it for public comment using the WIS-IGN website (www.wis-ign.org) and the Water UK Standards Programme e-mail bulletin.

Generally a 3 month deadline is given for submission of comments after which date no further comments are taken.

3.4 Dealing with comments

All comments will be sent through the Chairman of the drafting panel.

All comments are referred to the appointed drafting panel. It is usual to collate all comments into a single document marked against the relevant clause numbers. In the case of a large number of comments, it might be useful to separate these into General/Technical/Editorial. Comments in the collated document are not attributed.

All comments should be noted and reasons given for exclusion, where this occurs. These decisions are the responsibility of the nominated Working Group/drafting panel and not that of the author(s).

3.5 Editing and final approval

The final editing of the document is carried out by the Chairman of the drafting panel prior to signing off by Water UK’s Standards Board.

Once edited and formatted, the final document will be sent to the Chairmen of the drafting panel and Water UK’s Standards Board for approval. This should be done through the final part of the **Approval to Publish** form (Appendix B).

A copy of the appropriate **Application for Development or Amendment** form (Appendix A) should be attached to the completed form.

4. FORMAT OF SPECIFICATIONS

In order to maintain a high quality of output and to reduce the amount of final editing, it is recommended that the following format is followed.

4.1 Foreword

The objective of the Foreword is to:

- provide ownership and background to the document;
- to draw attention to the legal obligations and safety requirements associated with the document;
- to provide a basic description of the contents.

The general outline for the Foreword of a Specification is given below. Text which must be included in the foreword is given in italics and quotation marks (“...”).

4.1.1 Ownership

“This specification has been prepared by < drafting panel or network> under the direction of the Water UK Standards Board in consultation with **..”

** Reference to co-operating parties, the drafting panel etc. may be made here. Individual companies should not be listed.

The general scope of the documents and the properties defined within should be briefly described.

Attention might be drawn to associated standards or publicly available documentation (e.g. manuals).

4.1.2 Legal immunity

The drafting panel have a responsibility to provide technically correct information and methods of test which safely and accurately the fitness for purpose of the product. However, this does not remove responsibility from the user of the specification under the Health and Safety at Work Act and other current legislation.

Similarly, the responsibility for defining contract terms and conditions are not removed by the presence of a specification.

Under European Law, all national technical specifications are deemed equivalent (Dundalk Case) and this must be recognised in the text.

To address these points, the following is to be included:

“Compliance with this specification does not itself confer immunity from legal obligations.”

“This specification does not purport to include all the necessary provisions of a contract. Users of this specification are responsible for its correct application. Reference to a British Standard, Water Industry Specification or any other specification applies equally to any specification

4.1.3 Certification

It is Water Industry policy for individual purchasers to decide where third party certification is required.

However, the use of third party certification is recommended as a cost-effective means of ensuring compliance with Standards.

4.1.4 Health and Safety

“This specification calls for the use of substances and/or procedures that may be injurious to health if adequate precautions are not taken. It refers only to technical suitability and does not absolve the user from legal obligations relating to health and safety at any stage.

It has been assumed in the drafting of this specification that the execution of its provision is entrusted to appropriately qualified and experienced people.”

4.1.5 Responsibility

“Information contained in this specification is given in good faith but neither <insert drafting company>, nor Water UK can accept responsibility for actions taken as a result.”

4.2 Contents listings

The contents of the specifications and therefore the contents listing are entirely dependent upon the technical requirements of the specification.

However, it is recommended that the following basic format is followed.

FOREWORD

CONTENTS

1. SCOPE

2. DEFINITIONS

3. MATERIALS

4. DIMENSIONS

5. TYPE TEST REQUIREMENTS

6. QUALITY CONTROL TESTS

7. CONTROL OF TEST CONDITIONS

8. MARKING

9. REFERENCES

APPENDICES - to include test methods, information for guidance/ background.

The technical content of a document may be split into parts to reflect different technical options (e.g. Electrofusion, Butt fusion etc.) under the same specification. In this case, the title will be given in Upper case, bold text and reflect both the number and content

e.g. **PART ONE - ELECTROFUSION**

Sections shall be numbered consecutively throughout the document, even where the document is split into parts.

Only first and second head titles are incorporated in the listing

e.g. **5. DIMENSIONS**

5.1 Ovality

4.3 Water quality requirements

For products which are intended to be used in potable water applications, the following shall be included:

All chemicals and construction products used by water undertakers, from the source of the water, up to the point of delivery to the consumer's pipework shall be introduced in accordance with the requirements of Regulation 31 of the Water Supply (Water Quality) Regulations 2000, Regulation 27 of the Water Supply (Water Quality)(Scotland) Regulations 2001, or Regulation 30 of the Water Supply (Water Quality) Regulations (Northern Ireland) 2007 as appropriate.

Materials complying with the Water Supply (Water Quality) Regulations 2000 are listed on the Approved list published by the Drinking Water Inspectorate See <http://www.dwi.gov.uk/31/approvedProducts.shtm>

The various Water Supply (Water Quality) Regulations apply only to products used by water companies in the collection, treatment and distribution of public water supplies: they do not apply to use of fixtures and fittings on consumer's own premises. However, water fittings installed in premises which receive a water supply from a public water undertaker must comply with the requirements of the Water Supply (Water Fittings) Regulations In England and Wales, the Scottish Water Byelaws and the Northern Ireland Regulations. One acceptable form of approval is WRAS Approval, administered by the Water Regulations Advisory Scheme. See www.wras.co.uk/directory

4.4 Technical content

The technical content is entirely dependent upon the nature of the product or service covered by the document. Guidance can be sought by referring to current specifications.

Where test methods are included, the use of and reference to existing standards should be maximised (e.g. British Standards, ASTM Standards etc.) The development of new methods should only be considered where nothing suitable exists. In drafting test methods, the aim is to state clearly and completely how to perform the test and how the conclusions are reached. Test details, including apparatus, test specimens and tolerances must be adequately defined such that the test can accurately be replicated.

4.5 Marking

A specification for a product should include a marking clause. Marking or labelling should include, at least, the number and year of the Water Industry Standard and means of identifying the manufacturer.

Additional requirements such as grade, size, class or other characteristics should also be specified as appropriate and practical.

4.6 References

4.6.1 References to other parts of the text

When reference is made to other parts of the Standard, the following style should be used:

“see Section 3”, “see Clause 3” - for first head
 “see 3.3”, “see 4.1.4” - for second head and further divisions.

4.6.2 Reference to other specifications

To ensure that the latest version of any standard is referred to by the reader and in any resulting contract, the following text should be used.

“This Specification <or Information & Guidance Note> makes reference to the latest edition of the following publication (except where otherwise stated) including all addenda and revisions, which should also be consulted.”

Where individual parts, clauses, figures, tables or grades of material are referred to, the reference in the text shall specify the date of publication.

e.g. in accordance with Clause 6 of BS 1234: 1909
 e.g. Type W to BS 2494: 1991.

The reference section shall list all references quoted in the specification in the following order:

“British Standards”

e.g. BS 2494 Specification for elastomeric joint rings for pipework and pipelines

BS 8010 Pipelines

Part 1 Pipelines on land:

General.

“European Standards “

e.g. BS EN 512 Fibre Cement products - pressure pipes and joints.

“International Standards “

e.g. ISO 9001 Quality Systems: Specification for design, development, production, installation and servicing.

“Water Industry Specifications “

e.g. WIS 4-32-08 Site Fusion jointing of PE80 and PE100 pipe and fittings

“Information and Guidance Notes “

e.g. IGN 4-01-02 The determination of end-loads to be applied in the performance testing of end-load resistance pipeline fittings.

“Other”

e.g. Water Fittings and Materials Directory. WRc. ISBN 1 872699 27 8.

5. TEXT STYLE AND LAYOUT OF SPECIFICATIONS

Headings and titles

The following shall be used:

FIRST HEAD (X.)	UPPER CASE, BOLD
Second head (x.x)	Lower case, bold
Third head (x.x.x)	Lower case
Fourth head (x.x.x.x)	<i>Italics</i>

Further division of the text is not numbered, either letters ((a), (b) etc.) or bullet points may be used, The approach must be consistent throughout the document.

Table titles	lower case, bold.
Table column headings	(1st head) lower case, bold
(2nd head)	lower case
Figure titles	lower case, bold

APPENDICES

HEADINGS **UPPER CASE LETTERS, BOLD (e.g. A, B ...)**

Numbered heads Preceded by letter designating appendix. Type as numbered heads.

Layout

General

The text of specifications is set on A4 size pages in double columns, except where the nature of the content makes double column layout impracticable e.g. wide tables, figures.

All titles, headings and main text shall be aligned to the left.

Indentation of text is only accepted for unnumbered paragraphs.

Page layout

The page numbers are placed at the bottom centre of each page, excepting the first. In addition, the page number is given against the total number of pages on the front page, right-hand corner of each sheet.

The date of copyright shall be placed at the bottom left-hand corner of every page, excepting the first.

Water UK will be stated as the copyright owner for all new WISs and IGNS

The date of issue, together with the issue number, must appear on the front page and on the bottom right-hand corner of each sheet.

Figures and drawings

All diagrams should be monochrome. Consideration might be given to coloured

diagrams in some cases, provided they do not detract from the information provide if printed in black and white. The diagrams may be reduced for printing purposes and therefore, should have sufficient resolution to retain clarity as the reduced size.

Photographs can be accommodated, but should be avoided if possible.

Figures and tables should be placed as close to the referring text as possible. However, overall presentation and space should also be considered.

Figures shall be numbered and have concise titles which shall be placed below them.

Tables shall be numbered and have concise titles which shall be placed above them.

6. REFERENCES

1. Council Directive on the procurement procedures of entities in the water, energy, transport and postal services sectors (2004/17/EC).
2. Council Directive on the approximation of laws, regulations and administrative provisions of the Member States relating to construction products (89/106/EEC)
3. Civil engineering specification for the water industry. 6th Edition. UKWIR, June 2004.
4. The BSI guide to standardization – Section 2: Rules for the structure, drafting and presentation of British Standards. British Standards Institution (available from the BSI website).

APPENDIX A

**WATER INDUSTRY SPECIFICATIONS AND INFORMATION AND GUIDANCE NOTES
APPLICATION FOR DEVELOPMENT OR AMENDMENT OF 4-SERIES (MATERIALS) WIS OR IGN**

Provisional title:

Scope and summary of content proposed (please describe as briefly as possible):

Assessment of the risk to the industry that the document will address:
Type of Risk:

Risk Matrix				
Probability	H			
	M			
	L			
		L	M	H
Impact				

The Risk Matrix should indicate the level of any significant risk to Water UK members of developing/amending or not developing/amending the WIS or IGN. An assessment of high (H), medium (M) or low (L) probability and impact should be based on a demonstrable process. The assessment should be indicated with an X in the appropriate box of the matrix and a description of the likely impact and the likely probability to justify the position entered below.

Description (to justify matrix position):
Impact of Risk:
.....
Probability of Risk:
.....

Repeat for any other significant risks the document addresses.

Justification and explanation:
Document change information detailing changes where the proposal is an amendment.
.....
.....
The perceived benefits of using the document:
.....
.....
Any perceived on-cost of using the document:
.....
.....

Any perceived cost saving of using the document:
.....
.....

The perceived market for the product/service in the document:
.....
.....

How the document fits in with any European standard (if there is a European Standard covering the same area, a WIS/IGN is not appropriate):
.....
.....

Alignment with the provisions of European Standards (we are obliged to use such provisions):
.....
.....

Initiator:

Group responsible for drafting or amending:
(Standards Board to confirm)

Technical Secretary of Drafting Group:

Primary Author:

Funding route:

Estimated date for Public Comment:

Recommendation from Drafting Group to go to the Water UK Standards Board

Chairman Date.....

Water UK Standards Board Approval for drafting

Chairman Date

Please Note that drafting should not commence until this approval has been received.

Original copy of form signed by the Chairman of the Drafting Group is to be sent to the Water UK Standards Board via the Technical Secretary.

WATER INDUSTRY SPECIFICATIONS AND INFORMATION AND GUIDANCE NOTES

APPROVAL TO PUBLISH (4-SERIES MATERIALS) WIS OR IGN

Title

WIS or IGN No.
Issue No.

APPROVAL TO CIRCULATE FOR PUBLIC COMMENT

Steering Group:
Signature of Chairman:
Date:
Signature of Chairman of Standards Board:
Date:.....
Circulation date:

APPROVAL TO PUBLISH

Signature of Chairman (Drafting Group):
Date:.....

Signature of Chairman of Standards Board:
Date:.....
Original copy of the form signed by the Chairman of the Drafting Group is to be sent to the Water UK Standards Board via the Technical Secretary.