Water UK Standards Board Strategy: Water Network Maintenance

1. Purpose of this document

This document has been developed by the Water UK Standards Board (WSB) to ensure that the appropriate international (ISO), European (EN), and British (BS) standards – and, if necessary, Water Industry Standards (WIS) or Industry Guidance Notes (IGN) - are in place to ensure continuing improvement in customer service and environmental protection.

2. Key Standards

The key outcomes within this area are the provision of great customer service and environmental protection by ensuring that standards are in place and available to the UK water industry to enable the effective and efficient management of (1) leakage; (2) mains repairs and (3) customer supply interruptions. This is an extremely active area for the WSB, supporting a large number of relevant standards and WIS/IGNs. The WSB will continue to support these standards as a priority, given the critical importance of this area for the UK water industry.

There are several BSI Mirror Committees, CEN & ISO Technical Committees (TC), Sub-Committees (SC) and SC or TC Working Groups (WG) whose scope and activities embrace standards impacting water network maintenance. These include:

CEN/TC	**UK Mirror Committee**
CEN/TC 69 WG4 & *WG5 Industrial valves (Butterfly; Plug & ball)*	PSE/18/3 Part turn valves (Ball, plug and butterfly)
CEN/TC 155 *Plastics piping systems and ducting systems*	PRI/88: *Plastics piping systems*
CEN/TC 164 *Water Supply*	B/504 *Water Supply*
CEN/TC 164 WG1 *External systems and components*	B/504/-/1: *Water Supply – External systems and components*
CEN/TC 164 WG2 Internal *systems and components*	B/504/2: *Water Supply – Internal systems and components*
CEN/TC 203 *Cast iron pipes, fittings and their joints*	PSE/10 *Iron pipes and fittings*
ISO/TC	**UK Mirror Committee**
ISO/TC 5/SC2 *Cast iron pipes, fittings and their joints*	PSE/10 *Iron pipes and fittings*
ISO/TC 138/SC 8 WG3 *Rehabilitation of pipeline systems – Plastics piping systems for rehabilitation of underground water supply networks*	PRI/88: *Plastics piping systems*
	PRI/88/3: *Rehabilitation of pipeline systems using plastics piping materials and components*
	PRI/88/4: *Test Methods – Plastic Piping*
ISO/TC 153 *Valves*	PSE/18/3 *Part turn valves (Ball, plug and butterfly)*
ISO/TC 224 *Drinking water, wastewater and stormwater systems and services*	CB/503 *Drinking water and wastewater service levels*
ISO/TC 224/WG6 *Drinking water, wastewater and stormwater systems and services – Asset Management*	

	BSI Committee
	PSE/4 – *Identification of piping systems*
	EH/3/-/2: *Revision of BS 8551 Provision and management of temporary water supplies and distribution networks (not including provisions for statutory emergencies) Code of practice*

In addition, the following current WIS and IGNs are supported by the Water Standards Board: -

- **WIS 4-02-01:** Operational requirements: in situ resin lining of watermains
- **WIS 4-02-03:** Operational requirements: in situ polymeric lining of service pipes
- **WIS 4-21-02:** Specification for mechanical couplings and repair clamps for iron pipes for the conveyance of cold potable water (underground use) for the size range 40 to 1600mm / 1.5 to 48" inclusive
- **WIS 4-22-02:** Specification for ferrules (tapping tees) and ferrule straps for underground use
- **WIS 4-23-04:** Specification for underground stop valves, including spherical valves, for potable water services for nominal sizes up to and including 63 and nominal pressures of 10 bar minimum and made principally of metal or thermoplastics
- **WIS 4-32-08:** Specification for the fusion jointing of polyethylene pressure pipeline systems using pe80 and pe100 materials
- **WIS 4-32-11:** Specification for mechanical and compression fittings made principally from thermoplastics for polyethylene pressure pipes with or without an aluminium barrier layer of nominal size <= 63
- **WIS 4-52-01A:** Amendment to: Specification for Polymeric Anti-Corrosion (Barrier) Coatings
- **WIS 4-52-03:** Specification for Anti-corrosion Coatings on Threaded Fasteners
- **WIS 4-52-03A:** Amendment to: Specification for Anti-corrosion Coatings on Threaded Fasteners
- **IGN 4-01-02:** The determination of end-loads for the performance testing of fittings for polyethylene pipe
- **IGN 4-01-03:** Guide to pressure testing of pressure pipes and fittings for use by public water suppliers
- **IGN 4-02-02:** Code of practice: in situ resin lining of watermains
- IGN 4-02-05: Code of practice: in situ polymeric lining of service pipes
- **IGN 4-32-18:** The choice of pressure ratings for polyethylene pipe systems for water supply and sewerage duties
- **IGN 4-50-03:** Operating guidelines for the use of site applied, factory applied, and reinforced factory applied polyethylene sleeving on ductile iron pipeline systems
- **IGN 4-51-01:** External zinc coating of ductile iron pipe
- **IGN 4-52-02:** The use of Polymeric Anti-Corrosion (Barrier) Coatings

3. Key Areas of Activity for the Standards Board

In order to support the Water Industry, the WSB will undertake the following activities: -

Action	Detail	Owner	Completion Date
Support the use of novel and efficient techniques	• Work to refresh WIS 4-02-01 to enable the use of in situ polymeric lining to be re-introduced within the UK water industry • Provide confidence to the UK water industry of the long-term use and asset life of in situ polymeric lining by appointment of an accredited UK body to certify the use of the technique in accordance with the WIS	John Haley/Martin Padley	April 2022
Horizon scan	Seek feedback from Water UK Committees whether there are any standards gaps for the detection of leakage. If gaps are identified work with the relevant bodies to resolve them	Martin Padley	November 2022
Support	Continue to treat support for the above standards as a priority	Martin Padley	Ongoing
	Support the refresh and review of all WIS an IGNs as a priority, see separate strategy document	Martin Padley	March 2024

4. Outcomes and Further Action

To be completed as the above actions are completed.