

Standards Spotlight

# PD 8010 Series

How BSOL can help you to ensure compliance and high standards for steel pipelines on land and subsea



**British Standards Online (BSOL)** is a comprehensive database of over 90,000 internationally recognized standards. BSOL contains all BS, EN and ISO standards for the Oil & Gas industry including the PD 8010 Series.

The PD 8010 series, revised and used since 2004, sets standards for steel pipelines on land and subsea at every stage from conception to decommissioning. The standard has been revised to bring it into line with the latest version of ISO 13623 'Petroleum and Natural Gas Industries - Pipeline transportation systems'.

ISO 13623 has been amended and adopted as the European standard EN 14161:2011. As that European standard does not include natural gas or oxygen, the PD 8010 series fills the gap and ensures support for HSE regulation in the UK.



## Key Standards

The failure of a pipeline containing a flammable substance has the potential to cause serious damage. Effects can be detrimental to the surrounding population, property and environment. This may occur due to a range of potential causes, including accidental damage, corrosion, fatigue and ground movement. The PD 8010 series address this.

### **PD 8010-1:2015 Pipeline systems. Steel pipelines on land. Code of practice**

PD 8010 part 1 provides up-to-date guidance and recommendations for land-based steel pipelines carrying oil, gas, carbon dioxide and other hazardous substances. It covers design, selection, specification and use of materials, routing, land acquisition, construction, installation, testing, operation, maintenance and abandonment. Its principles apply to both new pipelines and major modifications to existing pipelines.

The standard will be of interest to pipeline designers, manufacturers, operators and owners, especially anyone concerned with issues of health, safety and assurance.

### **PD 8010-2:2015 Pipeline systems. Subsea pipelines. Code of practice**

As with part 1 the standard provides up-to-date guidance and recommendations for subsea pipelines. It will also be of interest to pipeline designers, manufacturers, operators and owners, especially anyone concerned with issues of health, safety and assurance.

### **PD 8010-3:2009+A1:2013 Pipeline systems. Steel pipelines on land. Guide to the application of pipeline risk assessment to proposed developments in the vicinity of major accident hazard pipelines containing flammables. Supplement to PD 8010-1:2004**

This part of PD 8010 provides a recommended framework for carrying out an assessment of the acute safety risks associated with a major accident hazard pipeline (MAHP) containing flammable substances defined in the Pipelines Safety Regulations. It provides guidance on the selection of pipeline failure frequencies and the modelling of failure consequences for the prediction of individual and societal risks.

This part of PD 8010 is intended to support the application of expert judgement. The final responsibility for the risk assessment lies with the assessor. It is essential that the assessor is able to justify every key assumption made in the assessment, that these assumptions are documented as part of that assessment.

### **PD 8010-4:2012 Pipeline systems. Steel pipelines on land and subsea pipelines. Code of practice for integrity management**

PD 8010-4:2012 gives recommendations and guidance on integrity management of steel pipelines on land and subsea pipelines, as defined in PD 8010-1 and PD 8010-2 respectively.

In any pipeline system, it is not sufficient solely to ensure that there are no leaks of hydrocarbons or other chemicals to the environment. The system needs to be able to transport fluids throughout its operating life without blockages, unacceptable reductions in flow rate, or de-rating required due to excessive corrosion or erosion. The management of reliability and maintainability in operations is closely related to integrity management.

This part of PD 8010 provides all those with an involvement in pipeline systems – designers, equipment manufacturers, fabricators, constructors, installers, executive operators, site operators, control room operators, integrity and maintenance engineers, safety and associated pipeline personnel – with guidance on how to ensure that any pipeline system retains its integrity.

### **PD 8010-5:2013 Pipeline systems. Subsea pipelines. Guide to operational practice**

As an industry develops, the practices and procedures it adopts improve so that the way business is conducted can improve also. In the oil and gas offshore industry, some subsea assets have been in operation in the North Sea for several decades, during which lessons have been learned and operational practice improved. This part of PD 8010 presents a number of operational practices that have been established as a result of these developments.

The document can be used by operational pipeline engineers on a regular basis; pipeline design engineers can take cognisance of it in the design of pipeline systems; and third-party providers of equipment and services will be able to align the products and services they provide with the guidance and recommendations given.

BSOL can help you manage these standards as well as keeping you up to date with revisions and access to historic standards

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