

National Grid process changes for introduction of the Gas Industry Registration Scheme (GIRS) and IGE/TD/101 (UIP/GT Briefing Note 2)

1. Introduction

The Gas Industry Registration Scheme (GIRS) was launched on 1st March 2002 and is operated by Lloyd's Register. The Scheme provides a national process for the accreditation & registration of Utility Infrastructure Providers (UIP's) for specific scopes of new gas infrastructure work. A key aspect of registration is to check the UIP has management processes in place to ensure pipes and equipment which are intended for adoption by Gas Transporters are designed and constructed to meet the required fitness for purpose criteria. National Grid's job specific requirements for GIRS registered organisations have been streamlined to allow an efficient interface whilst maintaining safety.

The GIRS has been developed with an industry group of Gas Transporters and with input from Ofgem and HSE. The Scheme is based on the Gas Industry Guidance 2 (GIG/2) principles which are available as guidance to the scheme through Lloyd's Register. The initial Scheme development and operation is through a contract with National Grid, although a GT management group (representing all GTs) is responsible for ensuring industry alignment.

To support the quality standards for adoption of UIP pipes by Gas Transporters the GIRS is complimented by a new technical framework for the adoption process. This framework is based on the work completed by the Gas Industry Guidance 1&3 industry workgroups defining the technical standards to ensure pipes which are designed and constructed by UIPs are fit for purpose for adoption by Gas Transporters. This work was completed by IGEM and has now been published as a new technical recommendations document IGE/TD/101 (Adoption of pipe systems by a GT – management of UIP activities).

National Grid is revising it's processes to recognise the introduction of GIRS Registered UIPs in the market and also ensure alignment for the introduction of IGE/TD/101 and implementation of a national final connections process. The date for implementation of these changes is 22nd July 2002. Further details of the final connections process can be found in the supporting UIP/GT briefing note 1 – Final connections to National Grid's below 7 barg Network.

2. National Grid process changes

The proposed changes to the UIP/GT process from 22nd July 2002 are as follows:

- UIP/GT process changes
- Design parameters
- Design Submission clarification
- Auditing
- Documentation
- Interim Validation transition

2.1 UIP/GT Process changes

The overall UIP process is similar to the previous structure including initial enquiry, quotation request, quote acceptance & design validation, construction & connection. Process amendments have been made to allow an application for the customer to make the final connection as described in the separate UIP/GT briefing note 1.

2.2 Provision of design parameters

National Grid will confirm the Network Design Parameters for UIP's at the initial enquiry stage in line with Appendix 3.1 IGE/TD/101. An example of the National Grid form is shown in Appendix 2.1.

2.3 Design submission clarification

Clarification of the contents required in the UIP/GT design submission, certification & completion files will be made in line with IGE/TD/101. National Grid will issue a customer checklist of these requirements with the connection and pressure quotation. The checklist will also identify the simplified design submission and certification & completion requirements where a UIP/GT is registered under GIRS – see CONN_FM139. To benefit from the simplified submissions the UIP/GT or their subcontractor will need to be registered for Design, Construction/Commissioning/Connections (Routine) and additionally Connections (Non Routine) for non-routine connections works scopes. Where the GT/UIP organisation wishes to subcontract the Construction/Commissioning/Connections (Routine) and Connections (Non Routine) the GT/UIP would need to be registered for Project Management.

A GT/UIP registered for Construction/Commissioning/Connections (Routine) and Connections (Non Routine) scopes under GIRS would not require to be additionally registered for Project Management in order to subcontract to a registered design house.

Where UIP/GT's intend to carry out the final connection to National Grid's below 7 barg Network the checklist includes the additional final connection design submission requirements.

2.4 Audit charges

The audit process is more onerous for non GIRS UIPs. To ensure cost reflectivity it is proposed to introduce a charge for the additional audit and validation checks for non GIRS UIPs, from January 2003 in line with National Grid's 2002 Connections consultation document.

2.5 Documentation

Minor changes have been made to both the National Grid suite of customer letters to reflect the new process changes and the customer request forms to
UIP/GT briefing note 2 version 5.0

allow inclusion of GIRS registration scope and final connection customer requirements. The new customer quotation request form references are:

GT Form (Ref CONN_FM153) – Request for quotation of an NDM GT Connected System Exit Point –Schedule 1 (Annex B)

UIP Form (Ref CONN_FM138, previously SL F003) – UIP quotation request & design notification form

2.6 Interim Validation Scheme transition

National Grid intends to replace its current Interim Validation process with the GIRS. For an interim period National Grid is allowing a blanket extension of the authorisation period for previously Interim validated organisations until 31st December 2002 at which point the Interim scheme will be withdrawn. This will allow a transition period for those UIP's that wish to join the Lloyd's scheme. All affected organisations were notified in April 2002.

3. Gas Industry Registration Scheme

The Gas Industry Registration Scheme (GIRS) was launched on 1st March, 2002.

Under the Scheme, Lloyd's Register, the Scheme operator, will perform assessments of UIP's in the following scopes:

- Design
- Construction/Commissioning/Connections (Routine) (connections not covered by IGE/GL/6).
- Connections (Non Routine) (connections covered by IGE/GL/6)
- Project Management
- Audit

The assessment will include prequalification, Management systems validation, on site verification and surveillance audits.

NOTE: Each registration scope can be obtained by the UIP/GT or sub contract organisation. To register for Project Management UIPs must use organisations registered for Design & Construction/Commissioning/Connections (Routine) (where applicable) or be registered for these scopes themselves.

Registration under the Scheme will provide UIPs with the following benefits:

- Standardised set of requirements
- Single point of contact
- National accreditation recognised by all UK Gas Transporters
- National Register publicly available to potential customers including web site
- Represents the achievement of a high technical, quality and safety standard
- Allows display of the national accreditation logo
- Simplified interface with GTs - minimum job specific information

To apply for registration UIP's should contact the GIRS operator Lloyd's Register at the following address:

Jo Shepherd – The Scheme Co-Coordinator
Lloyd's Register of Shipping
Hiramford
Middlemarch Office Village
Siskin Drive
Coventry
CV3 4FJ
TEL: 02476 518603
FAX: 02476 305854
e-mail; Jo.Shepherd@lr.org

For access to the national register of GIRS accredited UIPs, Lloyd's Register information and related Internet sites a separate GIRS site is available at the following website www.girs.co.uk

Guidance to the scheme is also available through the Gas Industry Guidance GIG/2 document which is also available through the GIRS website.

4. IGE/TD/101

IGE/TD/101 (Adoption of pipe systems by a GT – management of UIP activities) has been published by IGEM and sets out the minimum requirements for the design and construction of pipes and equipment below 7barg for adoption by Gas Transporters. The key requirements detailed in IGE/TD/101 are as follows:

- Pre design requirements to be specified to GT – enables provision of point & pressure
- Detailed design & construction requirements for validation by GT
- Fitness for purpose of materials & equipment
- Certification & completion requirements
- Deviation & variation procedures

National Grid has aligned it's adoption/taking ownership process to meet the IGE/TD/101 requirements.

Copies of IGE/TD/101 are available from IGEM – application details can be found on the IGEM website www.igem.org.uk.

APPENDIX 2.1 - DESIGN PARAMETERS CHECKLIST - EXAMPLE

Design parameters to be used where National Grid is to be requested to adopt the system.					
From	NATIONAL GRID NETWORK				
To	UIP				
Site					
Site Ref. No.					
ITEM	NOTE ¹	DETAILS			
Design Assumptions					
Gas Constants	A.1	The following gas constants shall be assumed in any design calculation:	Dynamic Viscosity	1.038E-05 PaS	
			Specific Gravity	0.6	
			Gas Temperature	5°C	
Pipe Details					
Mains and services.		Reference should be made to the National Grid document "Specification for defining pipes as Mains, Services or Risers" – External Version.			
Nodes	A.2	Nodes should be no greater distance apart than the following:	Estates	30m	
			Approach mains	50m	
Velocity	A.3	Gas velocity should be no greater than the following:	Services	15m/s	
			Mains. ²	20m/s 40m/s	
Demand Details					
Individual demands	A.4	Domestic: Where no other information exists assume -	3sm ³ /h		
		Non-domestic	Consumers estimate of Peak Instantaneous Demand.		
Multi-premises sites.	A.5	Domestic	Developers estimate of AQ		
		Non-domestic	No diversity to be assumed - use instantaneous demand.		
Non-standard consumption patterns.	A.6	Specific details to be discussed with the National Grid Network			
Interruptible demands.	A.7	Specific details to be discussed with the National Grid Network			
Demand assignment	A.8	Demands greater than 40scmh shall be allocated an individual node.			
		All other demands shall be allocated to the nearest node.			
Pressures					
Elevated pressures	A.9	Specific details to be discussed with the National Grid Network			
Design minimum pressure for services.	A.10	The design minimum pressures to be used for services are as follows:	Low Pressure ²	19mbar 20.75mbar	
			Medium Pressure ³		
			Intermediate Pressure ³		
Minimum mains design pressure.	A.11	The minimum mains design pressures to be used are as follows:	Low Pressure ²	21mbar 22.75mbar	
			Medium Pressure ³		
			Intermediate Pressure ³		
Service Pressure Drops	A.12	The following service pressure drops shall be used for design.	Low Pressure ⁴	2mbar	
			Medium Pressure ²	35mbar 70mbar	
			Intermediate Pressure ³		
Pressure Regulating Installations					
Compatibility	A.13	PRIs shall be compatible with the following types: ³			
Standby capacity	A.14	The following standby capacity should be included: ³	Consumer Type	Facility required	
DATE					
PRINT NAME		TITLE		SIGNATURE	

Note: 1. Notes on following page are for National Grid Networks reference only. 2. National Grid Networks delete as appropriate 3. National Grid Networks to complete. 4. Where initial design =>150mm additional pressure drop may be available - Contact National Grid Networks.