

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

### **Introduction**

The Gas Industry Registration Scheme (GIRS) was launched on 1<sup>st</sup> 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. Cadent'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 Cadent, 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).

Cadent is revising its 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 22<sup>nd</sup> July 2002. Further details of the final connections process can be found in the supporting UIP/GT briefing note 1 – Final connections to Cadent's below 7 bar Network.

### **2. Cadent process changes**

The proposed changes to the UIP/GT process from 22<sup>nd</sup> 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**

Cadent 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 Cadent 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. Cadent 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 Cadent'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 Cadent's 2002 Connections consultation document.

## **2.5 Documentation**

Minor changes have been made to both the Cadent suite of customer letters to reflect the new process changes and the customer request forms to

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**

Cadent intends to replace its current Interim Validation process with the GIRS. For an interim period Cadent is allowing a blanket extension of the authorisation period for previously Interim validated organisations until 31<sup>st</sup> 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 1<sup>st</sup> 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](mailto: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](http://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

Cadent 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](http://www.igem.org.uk).

## APPENDIX 2.1 - DESIGN PARAMETERS CHECKLIST - EXAMPLE

Design parameters to be used where Cadent is to be requested to adopt the system.			
From	CADENT		
To	UIP		
Site			
Site Ref. No.			
ITEM	NOTE <sup>1</sup>	DETAILS	
<b>Design Assumptions</b>			
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
<b>Pipe Details</b>			
Mains and services.		Reference should be made to the Cadent document "Specification Mains, Services or Risers" – External Version. for defining pipes as	
Nodes	A.2	Nodes should be no greater distance Estates	30m
		apart than the following: Approach mains	50m
velocity	A.3	Gas velocity should be no greater Services	15m/s
		than the following: Mains. <sup>2</sup>	20m/s 40m/s
<b>Demand Details</b>			
Individual demands	A.4	Domestic: Where no other information exists assume -	3sm <sup>3</sup> /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	A.6	Specific details to be discussed with the Cadent Network	
Interruptible demands.	A.7	Specific details to be discussed with the Cadent 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.	
<b>Pressures</b>			
Elevated pressures	A.9	Specific details to be discussed with the Cadent Network	
Design minimum pressure for services.	A.10	Low Pressure <sup>2</sup>	19mbar 20.75mbar
		The design minimum pressures to be used for services are as follows: Medium Pressure <sup>3</sup>	
		Intermediate Pressure <sup>3</sup>	
Minimum mains design pressure.	A.11	Low Pressure <sup>2</sup>	21mbar 22.75mbar
		Minimum mains design pressures to be used are as follows: Medium Pressure <sup>3</sup>	
		Intermediate Pressure <sup>3</sup>	
		Low Pressure <sup>4</sup>	2mbar

Service Pressure Drops	A.12	The following service pressure drops shall be used for design.	Medium Pressure <sup>2</sup>	35mbar	70mbar
			Intermediate Pressure <sup>3</sup>		

**Pressure Regulating Installations**

Compatibility	A.13	PRIs shall be compatible with the following types:	
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Standby capacity	A.14	The following standby capacity should be included: <sup>3</sup>	Consumer Type	Facility required

DATE

PRINT NAME	TITLE	SIGNATURE

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

24 August 2006