

SGN Third Party Connections Briefing Note 20

(Guidance on PS/5)

1 Introduction

This Briefing Note provides third parties with limited guidance on SGN's Management Procedure PS/5 procedure for new works, modifications and repairs to SGN gas asset, in line with the requirements under IGEM Standard GL/5.

Third parties should not solely use this Briefing Note for use with PS/5 but use it as a guide for the overall process whilst adhering to and having a robust knowledge of applicable legislation and associated procedures.

2 PS/5

Where third party works are proposed to connect onto SGN's Intermediate pressure system ($>2 - \leq 7\text{bar}$), SGN PM/PS/5 must be adhered to.

This Briefing Note provide guidance for new pipeline installations or CSEPs connection under a Mechanical PS/5 design, although other design disciplines like Civil design or Cathodic Protection might be required as part of the installation, as outline below.

- **Mechanical** – Required for all work types which include a Connection, Pipeline Lay or PRI Installation
- **Civil** – Required for all work types which include the requirement of a Concrete works, such as a Concrete base for a PRI or large, non-standard Gas Meter Housing
- **Cathodic Protection** – Required for all work types which include the requirement for new Cathodic Protection systems for new buried metallic asset (*Pipeline, Connection fittings and Valves*) or the confirmation of suitability of existing embedded Cathodic Protection systems where a metallic-bodied connection is made onto an existing metallic main.

The purpose of PS5 is to provide a framework to ensure compliance with the SGN Safety Case Major Accident Prevention Document (*MAPD*) and relevant Legislation, including but not limited to:

- Pressure System Safety Regulations (*PSSR*)
- Construction (Design & Management) Regulations (*CDM*)
- Pipelines Safety Regulations (*PSR*)
- Gas Safety (Installation and Use) Regulations (*GSi&UR*)
- Dangerous Substances and Explosive Atmosphere Regulations (*DSEAR*)
- Control of Major Accident Hazards (*COMAH*) Regulations

PS/5 encompasses two subcategories of Work Instructions for application on different work types:

- PS/6 for New Works, Modifications and Repairs,
- PS/8 for the Creation and Application of Model Designs

New third party installations required a PS/6 for 'New works' and are broken down into three further categories dependent on associated risk, as outlined in the Design Assessment Risk Table (DART) in PS5, Appendix D:

- High Risk = Level 1
- Medium Risk = Level 2
- Low Risk = Level 3

Under PS5, Appendix D, third party Intermediate pressure works are classed as Medium, level 2 risk and are therefore suffixed with a '2' (I.E. 'PS/6-2') and apply to:

- New Intermediate pressure Mains and Service installations of any diameter
- IP service disconnections or alterations of any diameter
- New Grid Entry Units (GEU) installed as part of a Biomethane injection project (*This does not apply to the pipeline installation unless Intermediate Pressure*)
- New Intermediate pressure IGT CSEP connections

3 PS/7

PS/7 is the SGN Management procedure for the Registration of Design Approvers and Appraisers onto SGN's PS/7 Register.

PS/7 details the processes to be followed for the assessment and registration of the following roles as defined in PS/5:

- Design Approvers for High Risk work
- Appraisers for High Risk work
- Design Approvers for Medium Risk work
- Appraisers for Medium Risk work
- Appraisers for Low Risk work

When third party works classified as Medium risk (PS/6-2), PS/7 section 4 should be followed.

Where required, Design Approvers and Appraisers should be registered with the Competent Design Authority Register (CDAR), as per section 3 of this Briefing Note.

Further technical advice and guidance on the PS/7 registration process can be acquired from SGN, upon request.

4 Competent Design Authority Register (CDAR)

When third party works require appraisal and approval under PS/5, the individuals undertaking the different elements of third party design approval, appraisal, construction and commissioning must be on the 'Competent Design Register', which is maintained by a 'Competent Design Authority', currently DNVGL (*Det Norske Veritas / Germanischer Lloyd*).

5 PS/6 Process

The PS/6 process consists of 6 stages, logged within a single document, which SGN produce and complete the relevant sections for and then provide to the third party for completion of their relevant sections.

SGN Third Party Connections will usually be in receipt of a Design submission before issuing PS/6 paperwork to the third party, however there are instances where certain elements of PS/6 documentation are required before issuing design approval, which SGN will honour.

Upon acceptance of a quotation, and where applicable, SGN Third Party Connections will identify third party works as being required to adhere to PS/5 and instruct SGN Asset Management to produce the relevant documentation to track new PS/5-applicable works from initiation to completion.

For further guidance on PS/5 roles and responsibilities, see SGN/PM/PS/5 section 3.

PS/6 is split into 6 stages of progression, with different parties responsible for each part:

A – SGN PS6 Coordinator (*Initiation*) and **Third Party** (*Design Approval*)

B – Third Party (*Design Appraisal*)

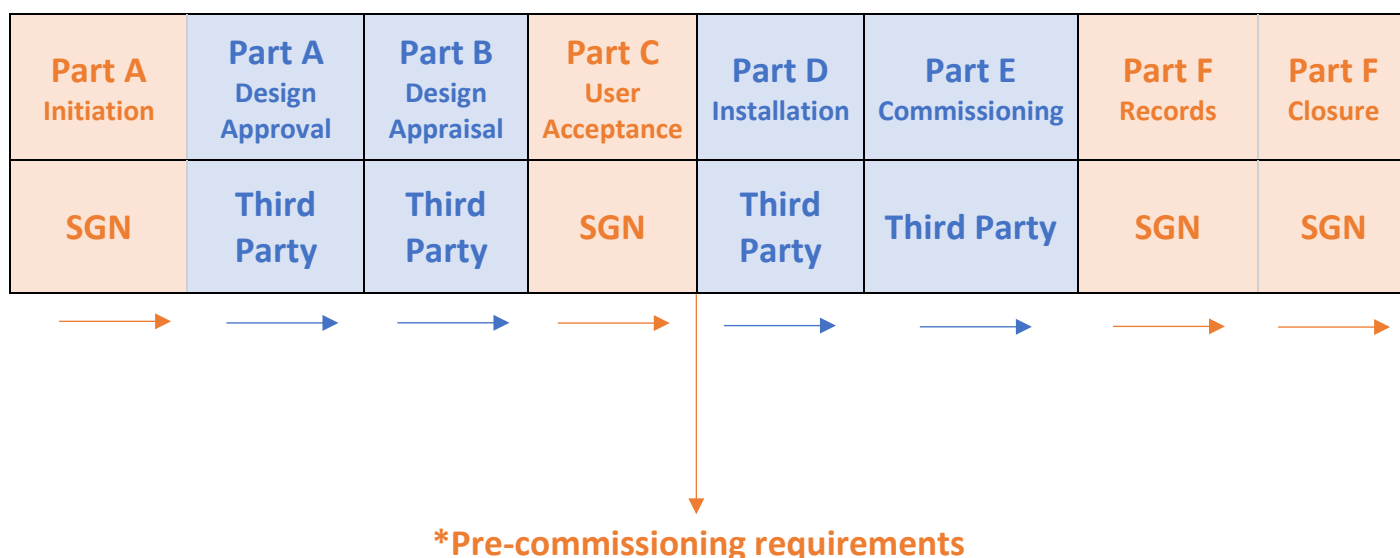
C – SGN Asset Manager/Network Director (*User Acceptance*)

D – Third Party (*Installation*)

E – Third Party (*Commissioning*)

F – SGN, PS6 Coordinator / Asset Manager/Network Director (*Records and Closure*)

Only when one stage is complete can the subsequent stage be completed requiring two-way communication between SGN and the Project Managing customer (*Third Party UIP or iGT*):



**Commissioning Certificate and Certification File, See Section 6 of this document for further info.*

Part A - Initiation

The Initiation section of Part A will be completed by the SGN PS/6 coordinator in Third Party Connections.

A copy of the signed Part A 'Initiation' and the entire blank PS/6 document, sections A to F will then be passed to the third party.

Part A - Design Approval *

The Third party will in the first instance, produce a Design drawing applicable to GIRS.

The Design Approval section of Part A will be completed by the third party appointed Design Approver.

In the context of PS/6, a 'Design Approver' is an Engineer with the relevant competencies to approve High and Medium Risk designs to ensure they meet the requirements of the design brief, relevant Legislation and safety standards. Design Approvers who are nominated at Part A stage must be on the 'Competent Design Register' and SGN's PS/7 register.

See sections 3 and 4 of this Briefing Note for further guidance on CDA and PS/7.

Once completed by the third party, a copy of the signed Part A 'Design Approval' will be returned to SGN Third Party Connections.

Part B – Design Appraisal *

Under SGN Management Procedure PS/7, A third party cannot appraise their own design and must have it independently appraised by a competent third party Design Appraiser who is on the SGN PS/7 'Competent Design Register'.

PS/7 Appendix B.1 states:

'The Appraiser must be demonstrably independent of the work to be appraised.'

Once this has been appraised and any variations to the design have been approved, this is passed back to SGN as a completed Part B of the PS/6.

If yet to be submitted, the design submission will be approved by SGN Third Party Connections and subsequent paperwork issued. This is a separate process to the PS/6, but still a requirement for Third Party Connections.

* NOTE!

- When the connection is onto a metallic main, 'Q10 Scrapings' are required before being able to request a design to the relevant third party Design Approver and Appraiser. This is normally completed shortly after acceptance of the quote and SCO approval is required for the UIP to complete Q10 Scrapings.
- Part A Design Approval and Part B Design Appraisal must be submitted for each design discipline that is required as part of a PS6. The initial page of the PS6 Tracking form (Part A Initiation) has a

list of different designs and those selected as 'YES' (excluding Safety as this aspect is included by default) must be submitted along with signed Part A and B for all the relevant design disciplines.

Part C – User Acceptance

Once both Part A “Design Approval” and Part B “Design Appraisal” have been completed and returned to SGN Third Party Connections, the scope must be approved by the SGN Asset Engineering Manager.

Once approved, SGN Asset Management will pass the approved PS/6 Part C back to Third Party Connections which will be sent onto the third party.

Part C indicates SGN’s acceptance of the proposed works and associated appraisal of the design, but does not warrant final authorisation to connect, which will be granted by SGN Network Control (SCO) following completion of the Commissioning Certificate and Certification File, see section 6 of this document for further information.

Parts D and E – Installation and Commissioning

Part D is completed by the third party to demonstrate that the works have been installed as per the agreed Design Approval and Appraisal under Parts A and B.

Works cannot be commissioned under Part E until Part D is complete.

Part E is completed by the third party to verify:

- All engineering disciplines have been completed and the installation is compliant with the approved design and other appropriate SGN and IGEM standards
- Safe Operating Limits (SOL) have been established
- All relevant ‘as installed’ status drawings, calculations, test data, documentation and commissioning reports will be available for the User following commissioning
- A written commissioning procedure has been agreed

SGN Network Control will only give clearance to proceed if a Mechanical Commissioning Certificate has been completed as part of the NRO submission and the PS6 Coordinator has signed onto the NRO.

The Commissioning Certificate must be signed by the PS/6 coordinator or their representative, based on the information provided up to this stage.

Part F – Records Produced/Signed off as complete

Once the proposed pipeline is installed, connected and commissioned, a Completion file must be submitted to SGN Third Party Connections, including any documentation relating to PS/6 parts D and E.

Once SGN Third Party Connections have appraised and approved the completion file, Part F of the PS/6 will be completed by the SGN PS6 coordinator and passed to SGN Asset Management for closure.

Further technical advice and copies of SGN Management Procedure PS/5 can be acquired from SGN, upon request.

6 Pre-Commissioning requirements

6.1 Commissioning Certificate

A Commissioning Certificate is an internal document that must be approved and signed by an SGN Asset Manager for the relevant LDZ before the Third Party is permitted to undertake final connection and commissioning. SGN Third Party Connections will collate the relevant information to be passed to Asset Management for Commissioning Certificate signoff.

This additional step is required by SGN Asset Management and acts as a final checklist to ensure all relevant information is present and correct to allow final commissioning.


As soon as the Third Party has a confirmed plan date, they should inform Third Party Connections so the Commissioning Certificate can be issued for signature.

An SGN Asset Manager is allowed to request further information, like records of materials and testing certificates before signing onto the Commissioning Certificate. Failing to provide the ad-hoc additional information will result in final connection not being permitted.

6.2 Certification File

As per SGN Management procedure SCO/1, Third Parties are required to submit an NRO to be approved by SGN Network Control before final connection and commissioning can be undertaken. The PS6 Initiator will be required to sign the NRO, when the Commissioning Certificate has been signed by an SGN Asset Manager.

Before the NRO is approved and signed by the PS6 Initiator, the Third Party is required to submit a Certification File for all IP projects.

A Certification File for an IP project should include the following, where applicable: 

- Records of materials certification
 - This is a full list of all materials; pipework, valves, fittings, bolts etc, including standards and specifications
 - Welding and Electrofusion records
- Approved Design Drawing or Aslaid, if available, to scale showing pipe size, material and depth
- Confirmation of completed Easement or Servitude Agreement or Form of Consent
- Confirmation of PS6 approved to Part C
- Any Minor Variations to the scope of works that are not captured as part of SGN's Variation process and will not impede the commissioning of works
- Notification of any third party damage to Apparatus
- Confirmation of planned date of Works and Substantial Completion

5 – Process flow

