



25th world gas conference
"Gas: Sustaining Future Global Growth"

"Growing together towards a friendly planet"



WOC 3 - Transmission Triennium Work Program 2012-2015

Sapporo, Japan

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Patron



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WOC 3: TRANSMISSION



To gather information on new projects related to gas transmission and to propose the best construction practices that can be applied by the industry in the future.

Study Group 3.1 NEW TRANSMISSION PROJECTS

To enhance the Integrity Plans and introduce the Asset Management Systems in order to reduce risk of failure and accidents of the gas transmission infrastructure.

Study Group 3.2 INTEGRITY MANAGEMENT SYSTEMS

To analyze the growth of the gas industry (new gas sources and new technologies) in order to create the best public acceptance of the gas transmission systems.

Study Group 3.3 PUBLIC ACCEPTANCE & NEW TECHNOLOGIES

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Suggested Transversal Issues



“Growing together towards a friendly planet”

- ✦ A representative from each WOC will participate in
TF1 (Human Resources) [WOC3 SG3.2]
- ✦ A representative from each WOC + PGC A & D will participate in
PGC F (Research-Development Innovation)
- ✦ A representative from each WOC will participate in
PGC A (Sustainability) [WOC3 SG3.1]
- ✦ **TF2 (Gas Advocacy):** open to all CC members, participation of at least one Authority from PGC E, A, B and WOC 5, + regional coordinators + Secretariat + experts **[WOC3 SG3.3]**.



SG 3.1 : NEW TRANSMISSION PROJECTS



Scope and Purpose

Every new transport project is complex and unique because of special characteristics. In some cases, the new project involves laying high pressure gas pipelines along very long distances, across difficult land, densely populated areas. Some projects have a combination of these difficulties.

The purpose of this group is to gather information on new projects related to gas transport (pipeline and compressor plants), to analyse the solution used in each case and propose the best construction practices that can be applied by the industry in the future.

• TRANSMISSION INFRASTRUCTURE:

- *To report strategic transmission infrastructure projects.*
- *To deal with the problem of acceptance of technology and technical constructions.*
- *To study the feasibility of new pipelines with small distances to areas of densely populated areas.*
- *To study improvements in the compression process, turbo machineries, performance optimization, emissions.*



SG 3.2 : INTEGRITY MANAGEMENT SYSTEMS



Scope and Purpose

It is necessary to enhance the Integrity Plans in order to reduce risk of failure and accidents based on the Asset Management Systems approach.

• INTEGRITY:

- *To enunciate the approach of the Asset Management Systems.*
- *To inform new developments to reduce gaps that exist in terms of integrity threats.*
- *To propose strategies to prolong the life of ageing pipes or to reclassify the ones in use.*
- *To describe what Governments (with the applications of new rules), companies and suppliers are doing to improve “Third party damage prevention”.*
- *To identify critical tasks that affect the integrity management.*
- *Provide appropriate training to personnel who perform qualified tasks.*

*This Study Group will be responsible for building and maintaining a **DATABASE OF THE TRANSMISSION SYSTEMS** of all IGU Member, containing relevant information about transmission network (physical data, performance, projects, new rules, etc).*



SG 3.3 : PUBLIC ACCEPTANCE and NEW TECHNOLOGIES



Scope and Purpose

The time has come to obtain the best public acceptance of gas transmission systems. That is why this Study Group will analyze gas industry growth from two production chain perspectives: firstly, the legal requirements surrounding the provision of new unconventional gas sources (shale and other indigenous sources of gas) such as environmental, economic or other factors; and secondly, the new gas industry technologies used to transport greater quantities of gas, and its components, in a safe and reliable way.

PUBLIC ACCEPTANCE:

- *To ensure effective communication with the public.*
- *To show that the most convenient means of energy transportation is by pipelines.*
- *To report on different actions that the companies are taking for environmental footprint reduction.*

• THE IMPACT OF THE NEW SOURCES ON TRANSMISSION SYSTEMS:

- *To summarize the new gas sources in the world.*
- *To analyze and present possible topics like: cross country tolls, long haul tariffs, environmental regulations, regulations for open access with free flow of gas and hubs.*

• NEW TECHNOLOGIES APPLIED TO TRANSMISSION SYSTEMS

- *To discuss new pipe materials.*
- *To propose alternative uses of the pipeline (e.g. CO2).*



PGC A – WOC3 Transversalities



Carbon capture and storage:

- Cutting the CO₂ emissions from gas industry (PGC A Study Group 1) by improving the compression process during gas transmission – scope of the WOC3 Study Group 3.1.
- CO₂ transport via pipeline system - best construction practices for pipeline infrastructure are in scope of WOC3 Study Group 3.1. The alternative utilization of the pipelines for CO₂ is one of the points of WOC3 Study Group 3.3.

Life cycle assessment:

- Better design / Improving compressor efficiencies for long distance transmission – in line with WOC3 Study Group 3.1 task.
- WOC3 Study Group 3.2 - to propose strategies to prolong the life of ageing pipes or to reclassify the ones in use.

Unconventional gas:

- PGC A Study Group 4 will examine the environmental impact associated with shale gas and collect and document best practices.
- WOC3 Study Group 3.3 will summarize the new gas sources in the world and analyze gas industry growth also from the legal requirements surrounding the provision of new unconventional gas sources.

