IGU WOC3 - Gas Transmission



Progress report Study Group 3.2

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Scope and Purpose

It is necessary to enhance the Integrity Plans in order to reduce risk of failure and accidents based on the Pipeline Integrity Management System approach:

- To define a Pipeline Integrity Management System approach.
- To provide information on new development to reduce the gaps in integrity threat management.
- To propose strategies to prolong the life of ageing pipelines or to reclassify the ones in use.
- To describe what Governments, companies and suppliers are doing to improve "Third party damage prevention" (including the application of new rules)
- To identify the critical tasks that affect integrity management.
- -To provide appropriate competency for personnel performing special tasks.

This Study Group will also:

- take over the work to build on strategies that support effective IMS HR issues.
- be responsible for building and maintaining a Database of IGU Member Transmission Systems, containing information on transmission network Stu(physical datapperformance) projects; new rules, etc.)



Results of the 1st meeting of Mar del Plata

- I To attain the target, the frame of the work will be developed as follow:
- 1-The first part of the assigned work will be the database of the transmission systems:
- 2- To enunciate the approach of Pipeline integrity Management Systems (PIMS). : PIMS, has already been studied by previous WOC Transmission's study groups, during the last years (as an example SG. 4.2/WOC 4 2000-2003), so the challenge is to make the final work original.
- **3-To** inform new developments to reduce gaps that exist in terms of integrity threats + critical tasks that affect the integrity management: This part has been studied by previous SG 3.2's, the work is to update about investigation into threats affecting the integrity of gas pipelines and effectiveness of mitigation measures to reduce the risk related to these threats.



Results of the 1st meeting of Mar del Plata

- 4-To propose strategies to prolong the life of ageing pipes or to reclassify the ones in use.
- 5- Describe what Governments (with the applications of new rules), companies and suppliers are doing to improve "Third party damage prevention".
- 6-Provide appropriate competence to personnel who perform qualified tasks

For each of the 06th points of the frame work, a questionnaire has to be elaborated. :

The Points 1, 3, 4, 5 and 6: all the SG 3.2 members





Results of the 1st meeting of Mar del Plata

II deliverables of the study-group 3.2

Database of IGU Member Transmission Systems

Analysis of the questionnaires

Actions to satisfy the expected targets listed in the scope and purpose

Enhancement of existing PIMS architecture/elements



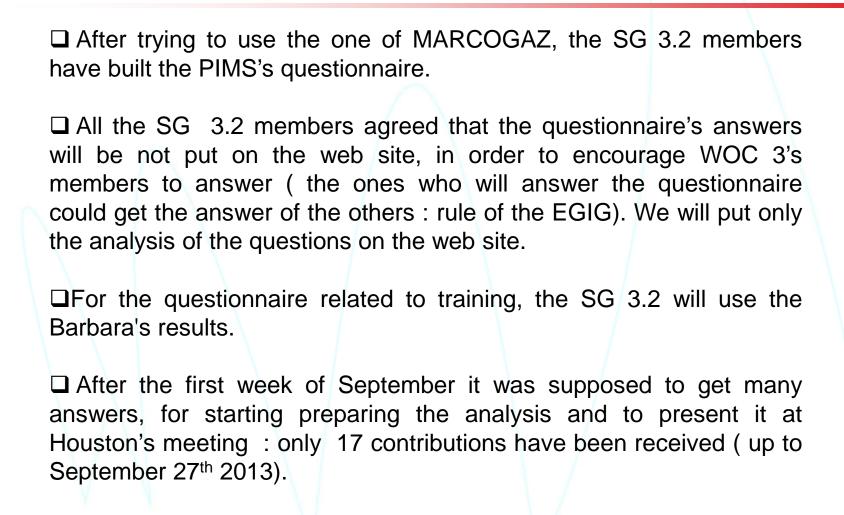


Results of the 2nd meeting of Copenhagen

☐ Participation to the meeting of Mr. Ronald Kenter the secretary of the EGIG
☐ The questionnaires worked points during the Copenhagen's meeting are :
 a- To inform new developments to reduce gaps that exist in terms of integrity threats + critical tasks that affect the integrity management.
b- To propose strategies to prolong the life of ageing pipes or to reclassify the ones in use.
c- Describe what Governments (with the applications of new rules), companies and suppliers are doing to improve "Third party damage prevention".
☐ For building the gas transmission database, the questionnaire of the EGIG will be used (sent to us by Ronald in Excel's format).
□ 05 excellent presentations dealing with PIMS have been given by the members of the SG 3.2



Results of the 3rd meeting of Paris





Results of the 4rd meeting of Houston

- ☐ Reading the 4 questionnaires.
- ☐ First analysis of the 17th received answers
- Define owners for each questionnaire
 - Ageing Pipelines
 - Third Party Damage
 - Gaps Threats
 - PIMS
- ☐ Define structure of SG3.2 Report
- But we need more contribution from the WOC 3 members (answering the questionnaires): new deadline suggested is November 2013.





Thank you for your attention









Year	2012		2013				2014				2015	
Quarter	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
WOC 3 Meetings			/									
Milestones/tasks			1									
Database of IGU WOC 3												
Establishing the questionnaire												1
Sending the questionnaire					July							
Reply of the questionnaire					By 01.11							
Analysis of the questionnaire					Р							
Progress report												
Intermediate meeting			20- 21.03	25- 26.06								
<u> </u>							1					
IGU WGC report	1											
Presentation WGC	1 7											





The PIMS' architecture given by the SG. 4.2/WOC 4 2000-2003 NTERNAL THE PIMS' architecture given by the SG. 4.2/WOC 4 2000-2003

PIMS consists in all the resources (organisation, equipment, know how, etc.) and activities provided by the natural gas pipeline operator to ensure the integrity of pipelines (see boundary of PIMS below). <u>Objectives of PIMS</u>: To manage the risks related to natural gas pipelines in order to guarantee the <u>safety</u> of employees, the public, the environment and <u>durability</u> of industrial equipment taking into account the technical and economical imperatives

Team N°1

System management process

Management commitment
Organisation and responsibilities
Hazard identification and control
Planning and performance monitoring
Information management
Audit

Team N°2

The equipment process

The design management

Design principles

. The Standards

The design supervision

. Design overview

The design review

The construction management

- . Construction principles
- . The construction supervision
- . The Construction overview
- . The construction review

Team N°3

The Operation – Maintenance Process

Operation - maintenance principles

Monitoring and "routine" maintenance of structures

Planning and scheduling
Implementation and operation
Inspection and corrective actions

Preventive and corrective maintenance

Planning and scheduling Implementation and functioning Inspection and corrective actions

Management of emergency situations

Planning and scheduling Implementation and functioning Inspection and corrective actions

Element of process review

Team N°4 C

Horizontal processes

Training Safety and Environmen

Purchasing Quality

Communication Standards, Technology and Regulation watch