

Track Session Subject Backgrounds

Each Technical Track Session should anticipate presentation and discussion within the subject areas shown and their impact on all relevant pipeline types during the forum.

1. Threat Prevention

Damage prevention via underground, above ground, airborne and satellite based systems; risk assessments; and prevention of excavation damage through improved design, materials or process.

2. Leak Detection

Detecting leaks via underground, above ground and or airborne systems.

3. Anomaly Detection/Characterization

Detecting anomalies in metallic/non-metallic line pipe or from the welding/joining process. Detection is possible from either the pipe's interior or exterior. Characterization or screening the severity of anomalies found in line pipe or in welds.

4. Anomaly Remediation/Repair

Remediation of anomalies requiring immediate action to include the use of composites. The process for and apparatus used with repairing pipes are included.

5. Pipelining in Challenging Areas

Arctic, offshore or areas where the design, materials selection, installation and operation of pipelines are significantly challenged. Any areas where geotechnical, ice mechanics or wind/water currents challenge long-term integrity.

6. Alternative Fuels/Climate Change

New economic, integrity or quality challenges seen from ethanol, biodiesel, biogas or hydrogen transportation in pipelines. The impact on climate change from all aspects of pipelining.

Track Session Phases 1, 2 & 3

Technical Track Session Objectives (High Level):

To develop a consensus agenda of technical gaps & challenges for future R&D. Identify both short and long term research objectives for liquid/gas and transmission and distribution pipelines. Conduct basic road mapping on identified technical gaps so identified research are addressing the need effectively. Provide details of the ultimate research goals so appropriate end users are factored into project scopes.

Wednesday, June 24, 2009 1:00 PM – 5:00 PM

Technical Track Session (Phase I):

Convey session objectives to audience. Identify/clarify any related high level gaps or challenges presented from the morning session. Review existing research efforts via invited presentations or

discussions. Eliminate any challenges due to existing research efforts and identify remaining challenges requiring new research projects.

Thursday, June 25, 2009 9:00 AM – 12:00 AM Technical Track Session (Phase II):

Restate the list of remaining challenges identified during Phase I session. Identify the top three challenges, identifying if it addresses technology development, consensus standards strengthening or general knowledge. Identify if the challenge is short term (1-5 years) or long term (more than 5 years) in nature. Identify the impacted pipeline type (identify all that apply: liquid transmission, gas transmission, gas distribution metallic, gas distribution non-metallic) and operation area (identify all that apply: offshore or onshore).

Road Mapping Guidance: Categorize at least the top three remaining gaps and challenges into one of these areas and work out the following details:

1. New or Improved Technology

- a. What pipeline type(s) does the technology target?
- b. What operating environment(s) would the technology operate?
- c. What are any functionality and or performance requirements?
- d. What road blocks or barriers prevent the technology deployment?
- e. What are anticipated targets or timeframes to complete this research?

2. New or Revised Consensus Standards (standards, guidelines or recommend practices)

- a. Does the need address safety or specification related consensus standards?
- b. Which standard developing organization and which consensus standard name and number is affected?
- c. What pipeline type(s) does the consensus standard target?
- d. What operating environment(s) does the consensus standard target?
- e. What technical details are necessary and recommended?
- f. Can any targets or timeframes be identified to complete this research?

3. Creation and Dissemination of General Knowledge

- a. What pipeline type(s) does the new knowledge target?
- b. What operating environment(s) does the new knowledge target?
- c. What technical details are necessary and recommended?
- d. Can any targets or timeframes be identified to complete this research?

Thursday, June 25, 2009 1:00 PM – 3:00 PM Technical Track Session (Phase III):

Continue and wrap up discussions on the road mapping details for the top three gaps and challenges. Begin to use the remaining time and audience members to assist you on the report out for your session. (See report out guidance and template report-out presentation)

Thursday, June 25, 2009 3:15 PM – 4:15 PM Technical Track Session Report-Outs:

Each session chair may select/elect a reporter for the report outs. Your session has 10 minutes to make this presentation. Each presentation reports on the subject(s) discussed, who/how many (ballpark number) attended and an itemization of the top three gaps and challenges illustrating the consensus answers to the road mapping details.