

International Standards
Workshop for
the Global Oil & Gas Industry



Focusing on Mexico

18-19 September 2006



ISO 3183 Petroleum and natural gas industries -
Steel pipe for pipeline transportation systems

Revision process

Agenda



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Background



- ISO 3183 (1-3) & API 5L are the most widely used LP Standards.
- Industry identified the need for a Harmonization process similar to that carried out for API 5CT & ISO 11960 and other Standards.
- Process started around Jan. 2000 and it was jointly undertaken by ISO TC67/SC2/WG16 & API SC5 WG 4183.
- API/ISO WG Periodic Meetings were held along with the Summer/Winter API Exploration & Production Standards Conference on Oilfield Equipment & Materials.
- Several Draft ISO 3183 WG documents plus " in general " support information have been circulated & discussed within the WG before arriving to the first crucial step of the standard so called " DIS" .
- ISO DIS 3183 was published on April 28, 2005 and ballot closed by Sept. 28, 2005.

Background



- Result of Ballot on ISO DIS 3183 (P-Member Countries Voting)
 - Yes: 17 of 21 (81%) required: $\geq 66.7\%$
 - No: 4 of 25 (16%) required: $\leq 25\%$
 - Mexico voted against.
 - A total of 552 technical, editorial & general comments received.

- A parallel API Ballot resulted in:

	Yes	No	Abs	NV
Ballot Totals:	31	8	2	19
- Response Rate:	52%	required $\geq 50\%$		
- Approval Rate:	79%	required $\geq 67\%$		

- A parallel CEN enquiry regarding the possible adoption of ISO 3183 as a prEN ISO 3183 under the Vienna Agreement was held.
- Several discussions regarding differences with existing EN-10208 standard were also held.

Mexican Participation



- Mexico participates in ISO through the DGN & CMISO.
- TenarisTamsa coordinates as a P-member Mexican vote on TC67 SC2 (since 2001) and SC5 (since 1995)
- During the revision & harmonization process of ISO 3183 TenarisTamsa started active participation late 2002.
- Starting from that point on México's representation attended several meetings & workshops contributing from the inside of the WG to the development of the new standard.
- During the recent enquiry on [ISO DIS 3183](#) several meetings with manufacturers, users (PEMEX) and R & D Institutes (IMP) were held in México aiming to have a common position regarding the draft standard.
- Mexican vote was issued on Sept.19, 2005 to DGN with 31 participants voting negative (100%) to became 1 negative Mexican vote sent to ISO.

Mexican Participation



ALTOS HORNOS DE MEXICO



TUBERIA LAGUNA, S.A. DE C.V.

Mittal Steel Lazaro Cardenas

CONFEDERACIÓN DE CÁMARAS INDUSTRIALES
DE LOS ESTADOS UNIDOS MEXICANOS



Vilacero



Mexican Comments issued to ISO DIS 3183



- A total of 33 comments were issued from which:
 - 22 technical
 - 9 editorial
 - 2 general
- Main Concerns that lead Mexico to vote negative were:
 - Annex H (Sour Service) critical requirements that even if not necessary for all applications were specified increasing costs, delivery times and in some cases restricting manufacturers participation due to raw material availability.
 - Annex J (Offshore) Too stringent dimensional tolerances.
 - Inclusion of High Strength Steels (X90, X100 & X120)
 - In general Annexes Classification (Informative vs. Normative) ISO Directives were not correctively followed.
 - Some still not clear definitions and requirements.

WG resolution to Mexican Comments



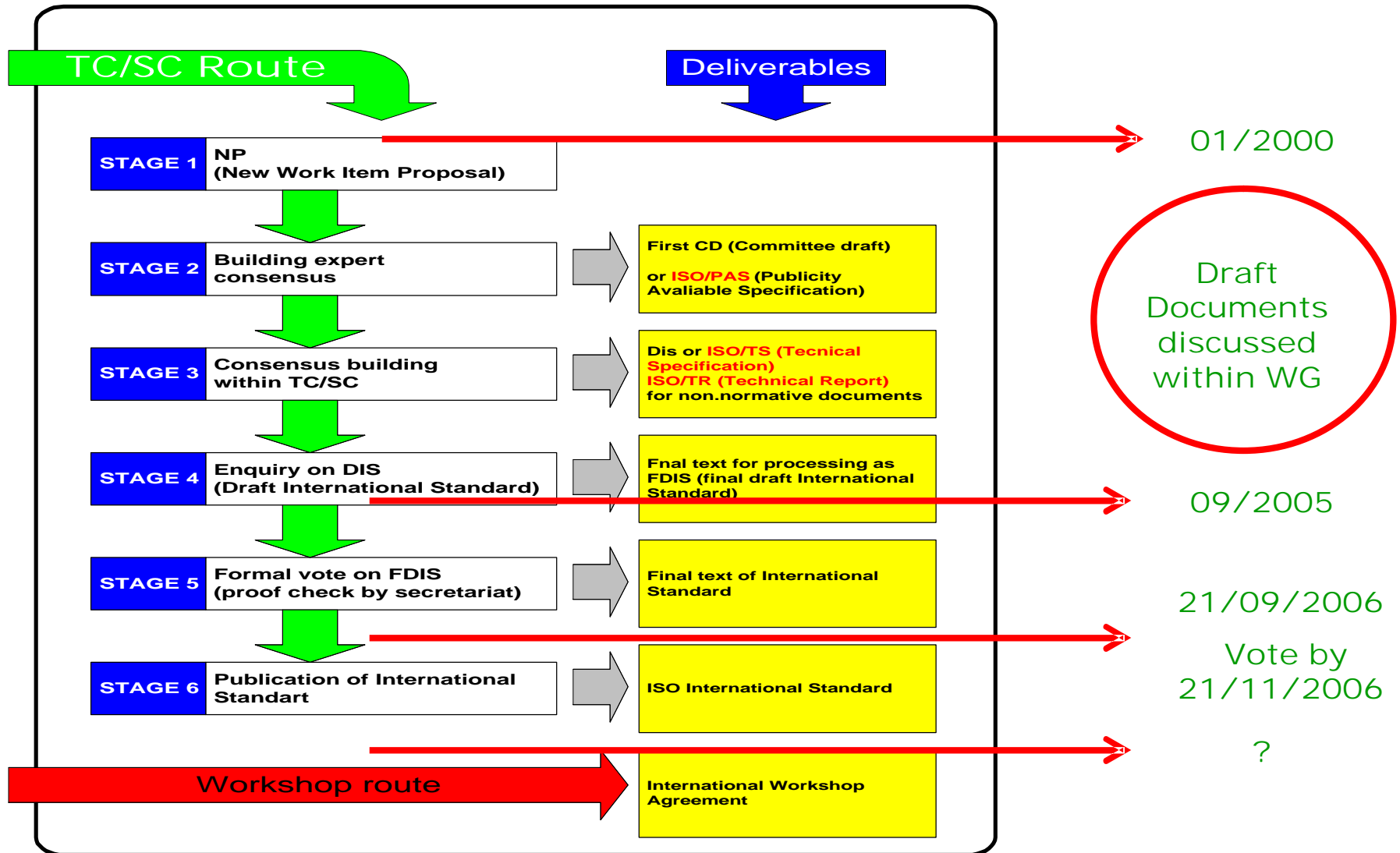
- From the total of 33 comments issued:
 - 20 comments were accepted
 - 7 not accepted
 - 6 partially accepted
- Most relevant resolutions including those on not accepted comments:
 - Annex H (Sour Service) A “ by agreement option” for performing HIC tests with Solution B was included.
 - Annex J (Offshore) Requirements were confirmed based on previous Industry Experience (ISO 3183-3) and the risk of increase cost of laying operations offshore.
 - Inclusion of High Strength Steels (X90, X100 & X120) It was confirmed the inclusion of these grades based on over 10 years of R&D and early field application in Canada.
 - Ca/S ratio requirements were not modified based on A “ by agreement option” already included.
 - To have explicit NDT requirements instead of references was not accepted based on ISO policy.

Recent Progress and Future Activities



- In March 06 a clean copy of the FDIS (which considered resolutions over the 552 comments issued during DIS stage) was distributed within WG members.
- Mexico representation issued comments by March 30/06.
- WG Chairman reported that:
 - The amended FDIS was submitted to ISO Central Secretariat Geneva in late May 06 where general editing and standard checking process started.
 - Document was also submitted to DIN Berlin (under Vienna Agreement for preparing the EN ISO version)
 - Final Document FDIS 3183 should be issued by 21st September 2006.
 - The review and ballot period shall last two months and countries vote shall be issued by 21st November 2006.

Recent Progress and Future Activities



The New Standard !



- Includes 14 clauses plus Annexes (A to M + Bibliography)
- Once approved it shall cancel and replace ISO 3183-1:1996, ISO 3183-2:1996 and ISO 3183-3:1999 & also adopted as the new revision of API 5L.
- It considers two product specification levels: PSL 1 (standard quality level) & Level PSL 2 (additional mandatory requirements)
- Annexes for specific applications (i.e. sour service or offshore) when invoked by the PO become mandatory requirements.

Document	PSL	Service	ISO 3183
ISO 3183-1	not applicable	gas or liquid	PSL 1
ISO 3183-2	not applicable	gas or liquid	PSL 2
		gas, where ductile propagating fracture is a concern	PSL 2 + Annex G, using Approach 1
ISO 3183-3	not applicable	sour service	PSL 2 + Annex H
		offshore service	PSL 2 + Annex J
		arctic service	PSL 2, with an appropriately low temperature specified for CVN and/or DWT testing
API 5L	PSL 1	gas or liquid	PSL 1
	PSL 2		PSL 2
	PSL 2 + SR5A		PSL 2 + option in 7.2 c) 9)
	PSL 2 + SR5B		PSL 2
	PSL 2 + SR6		PSL 2 + option in 7.2 c) 11)
	PSL 1 or 2 + SR7		PSL 1 or 2 + Annex I
	PSL 2 + SR10		PSL 2 + Annex G, using Approach 4

Challenges & Opportunities for Mexico



- Need to increase awareness of ISO standards within Mexican Market.
- Initial challenge for the complete Supply Chain (Manufacturers, Distributors, Engineering Companies, Users, etc) since even PSL 1 products / multi standard (API 5L/ASTM, etc) for low critical applications will be manufactured according the new standard.
- Application of the new ISO 3183 together with the new revision of NRF.
- Increase presence in the Global Market by supplying pipes according to recognize standards.
- To continue participating & supporting International Standardization Bodies.



Thanks



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