

21st Joint Meeting of ISO/TC67/SC4/WG6 and API SC17
Technip Building – 11700 Old Katy Road
Houston, TX

February 7, 2007 – Joint Meeting - 8:30 am

1. Opening of the meeting (*Bednar/Inderberg*)
2. Roll call/Roster Update (*Jordan*)
3. Adoption of the proposed agenda (*Bednar/Inderberg*)
4. Adoption of the minutes from 20th joint meeting (*Bednar/Inderberg*)
5. Status and action plan update (***See Attached Action Items***)
6. Task Group/Project Group Reports (***See Attached Work Program***)
 - A. Subsea Production Systems (*Souza/Dahl*)
 - Update on activity
 - WG for Flowline Connections – New WG Leader needed
 - B. Flexible Pipe (API TG1) (*Doynov*)
 - Initiate Adopt-back for 17J/-2
 - Request to initiate simultaneous Adopt-back for 17B/-11 on FDIS release
 - 17L - Flexible Pipe Ancillary Equipment JIP – report on progress to date
 - ISO 13628-2/API Spec 17J & ISO 13628-11/API RP 17B – report on progress and status of JIP to update standards
 - C. TFL Systems (API TG6) (*Reeves*)
 - ISO 13628-3/API RP 17C – Update on activity
 - D. Subsea Wellheads/Tree (API TG5) (*Frazer/Skeels*)
 - ISO Spec 13628-4 – Discussion/report on DIS ballots
 - Document interface (annexes) with 17A/-1; 17G/-7; 17N; 16A
 - E. Umbilicals (API TG4) (*McManus*)
 - ISO 13628-5/API Spec 17E - report on progress of revision
 - F. Control Systems (API TG 2) (*Neuenkirchen*)
 - ISO 13628-6/API Spec 17F – API 17F published Dec 2006
 - G. Completion/Workover Risers (*Skeels*)
 - ISO 13628-7/API RP 17G – report on activity (17G published July 2006)
 - H. ROV/ROT (API TG3) (*White*)
 - ISO 13628-8 and -9/API RP 17H and RP 17M – report on progress of NWI to combine documents into one standard
 - I. Dynamic Risers (*Stanton*)
 - ISO 13628-12 NWI (16389/API RP 2RD) – report on status of revision
 - J. Subsea Reliability RP (*Allen*)
 - Update on RP17N activity
 - K. HIPPS RP (*Goggans*)
 - Update on RP17O activity
 - L. Templates and Manifolds (*Whipple*)
 - Update on 17P activity
 - M. Subsea System Engineering (*tbd*)
 - Update on 17Q activity
 - N. Materials Study Group (*tbd*)
 - Update on activity/API Chair
7. Summary of Discussions of Prior Meetings
 - Document Interfaces Discussion (*Inderberg*) **See SC17 Website (*Meeting Material*) for Document**
 - Report on Path Forward for Insulation and Buoyancy Spec and RP (*Given*)
8. Other Business
 - 2006/2007/2008 Research Funding Proposals (*Jordan/White/Allen*)
 - OGP International Standards Workshop (Feb 7-8) Discussion
9. Review of Action Items
10. Next meetings – Summer 2007, June 25-29 San Francisco, CA; Winter 2008, TBA

API SC17 (ISO TC67/SC4/WG6), SUBCOMMITTEE ON SUBSEA PRODUCTION SYSTEMS

2007 WORK PROGRAM

Revised January 2007

BRIEF DESCRIPTION OF WORK/SCOPE	API Standard	ISO Standard	API Chair	ISO Project Leader	SC17 Leadership Team Champion	STATUS
Design and operation of subsea systems	RP 17A	13628-1	Luiz Souza, Petrobras America (TG7)	Per Dahl, Norsk Hydro	TBD (Wilkinson)	Published (Jan 2006). Amendment ballot in progress. API closed Jan 26, ISO closes Feb 20.
Flexible pipe	RP 17B	13628-11 (was 10420)	Krassimir Doynov, ExxonMobil (TG1)	Krassimir Doynov, ExxonMobil	TBD (Wilkinson)	FDIS anticipated in 2-3 months. Simultaneous API adopt-back requested.
TFL systems	RP 17C	13628-3	Harold Reeves, BP (TG6)	TBD	Hurta	No action needed at this time.
Subsea wellhead and tree equipment	Spec 17D	13628-4	Ross Frazer, ATP Vice Chair: Brian Skeels, FMC (TG5)	Ross Frazer, ATP Vice Chair: Brian Skeels, FMC	Hurta	Work ongoing. DIS ballot in progress. API closes Feb 14, ISO Feb 28.
Production control umbilicals	Spec 17E	13628-5	John McManus, Gibson Tube (TG4)	Ron Dee, Shell	TBD	Currently undergoing editorial checks, expect ISO DIS in 3 rd quarter '06.
Subsea controls	Spec 17F	13628-6	John Bodine, Chevron (TG2)	Jens Neuenkirchen, Statoil	Bednar	Published December 2006 (with errata). Possible revisions forwarded to ISO.
Design & operation of completion/workover risers	RP 17G	13628-7	Brian Skeels, FMC	Anthony Muff, FMC	Hurta	Published July 2006.
ROV interfaces	RP 17H	13628-8	Charles White, DORIS, Inc (TG3)	Eric Luszi, Statoil	Hurta	ISO 13628-8/API 17H published. NWI passed to combine with 13628-9 to become 13628-13.
Unbonded flexible pipe	Spec 17J	13628-2	Krassimir Doynov, Exxon Mobil (TG1)	Krassimir Doynov, Exxon Mobil	TBD (Wilkinson)	ISO -2 published July 2006. API adopt-back needed.
Bonded flexible pipe	Spec 17K	13628-10	Krassimir Doynov, ExxonMobil (TG1)	Krassimir Doynov, Exxon Mobil	TBD (Wilkinson)	Second Ed Published Nov 2005.

BRIEF DESCRIPTION OF WORK/SCOPE	API Standard	ISO Standard	API Chair	ISO Project Leader	SC17 Leadership Team Champion	STATUS
Flexible Pipe Ancillary Equipment (Spec)	Spec 17L1	TBD	Krassimir Doynov, ExxonMobil (TG1)	Krassimir Doynov, Exxon Mobil	TBD (Wilkinson)	Incorporating comments in working draft.
Flexible Pipe Ancillary Equipment (RP)	RP 17L2	TBD	Krassimir Doynov, ExxonMobil (TG1)	Krassimir Doynov, Exxon Mobil	TBD (Wilkinson)	Incorporating comments in working draft.
ROT Intervention System	RP 17M	13628-9	Charley White, DORIS Inc.	Eric Luszi, Statoil	TBD	NWI passed to combine with 13628-8 to become 13628-13.
Dynamic Risers	RP2RD	13628-12	Paul Stanton, Technip	Paul Stanton, Technip	Bednar	Working draft being prepared.
Subsea Reliability	RP 17N	TBD	John Allen, Vetco-Grey	Olav Inderberg, FMC	TBD	Working draft being prepared. API contract in progress.
HIPPS	17O	TBD	Tim Goggans, FMC	Tim Goggans, FMC	Bednar	Document ready for TG review.
Templates and Manifolds	17P	13628-15 (proposed)	Jeff Whipple, Intec	Borge Brubaek, Statoil	TBD (Wilkinson)	Working draft being prepared. API contract in progress.
Systems Engineering	17Q	TBD	(-TBD-)	Olav Inderberg, FMC	TBD (Wilkinson)	Decision on continuing this project is pending discussion at next meeting.
Materials Study Group	n/a	annexes to existing	(-TBD-)	Ragnar Mollan, Norsk Hydro	Inderberg	Generating annex materials for 17A (-1) and 17P

ISO SC4/WG6 / API SC17 Action Items

June 14, 2006 Joint Meeting

Standard/ Subject	Action Item	Last Update	Current Status <i>(items in bold are complete)</i>
General Requirements 13628-1 (17A)	2004-14: Form a team to look at the scope of 17A/13628-1 with regard to these items and other new work topics as they relate to the composite suite of subsea standards. Some of the topics to be covered include: <ul style="list-style-type: none"> • Systems Engineering • Subsea processing • Multiphase pumping • Intelligent wells interfacing • Interaction between flowlines and subsea structures • Integrated Production Umbilical (IPUs) • Spec breaks • Existing flowline specifications and their relationship/applications to SC17 	3/3/06 – Work session for Tuesday in Atlanta planned. Jonathan Jordan to send notice on Atlanta meeting and request input to L Souza on -1 content May 23-24 ISO Meeting planned for Paris. Olav Inderberg to send notice on Paris meeting. Olav Inderberg to follow-up on possible NWI for an RPIW interfacing	Complete. Will be removed following next meeting
	2006- 7 Working group for flowline connections/ connection systems proposed to make recommendation of what and where this should go.	New Action Item	6/14/06 – Jonathan Jordan will put out an e-mail soliciting support. Craig Redding, SW Research, volunteered to lead the work group.
	2006- 8 Working group for metering system requirements and needs to be identified to ascertain who is working on metering systems and what should SC17 do with regards to metering systems.	New Action Item	6/14/06 – SC17 Leadership Team with assistance of John Allen to get working group started.
	2006- 9 Question as to whether 17A should continue its existence as a Recommended Practice or if it should be written as a specification.	New Action Item	6/14/06 – SC17 Leadership Team to give guidance.
	2006- 10 17D work group to compare wording on lifting that is currently in 17A and only provide additional information in 17D which is not adequately supplied in 17A.	New Action Item	6/14/06 – Ongoing
	2006- 11 Motion passed for SC17 to recommend that Clause 6 and Annex L go out for ballot to be included in 17A.	New Action Item	6/14/06 – Ongoing
	2006- 12 Work Group to be formed to come up with recommendations for one definition of pressure rating for general use	New Action Item	6/14/06 – Glen Cuiper with AKS volunteered to chair the WG.

Standard/ Subject	Action Item	Last Update	Current Status <i>(items in bold are complete)</i>
Flexible Pipe 13628-2 (17J), 13628-10 (17K), 13628-11 (17B) 17L1, 17L2 (Ancillary Equipment)	2004-6: Olav Inderberg to prepare an ISO NWI based on the 17Ls work for consideration at the June meeting.	6/29/05 - Ongoing	9/30/05 – Ongoing 3/03/06 – Waiting on draft 6/14/06 – Waiting on draft
	2004-18: Krassimir Doynov to forward a draft of 17Ls (when draft is deemed ready for widespread release) to be used in the ISO new work item and this should include a proposed title and how it could also include umbilicals.	9/30/05 - Ongoing	3/3/06 – Incorporating comments into draft documents 3/03/06 – Waiting on draft 6/14/06 – Waiting on draft
	2006- 13 Motion passed to initiate adopt back immediately for 13628-11/17B in parallel with ISO when FDIS is completed.	New Action Item	6/14/06 – SC17 to initiate adopt back.
TFL 13628-3 (17C)	No outstanding action items		
Subsea Wellheads and Trees 13628-4 (17D)	2006- 1 Resolve horizontal tree patent issue.	6/14/06 – All tree manufacturers have agreed that the examples are acceptable from a patent stand point	Complete. Will be removed following next meeting
	2006- 14 SC leadership team to address the new Normative Annex L document.	New Action Item	6/14/06 – Ongoing.
	2006- 15 Motion passed to delete Annex M as part of 17D and be given to 17N.	New Action Item	6/14/06 – 17D chairman to transfer information to 17N.
Umbilicals 13628-5 (17E)	No outstanding action items		
Control Systems 13628-6 (17F)	No outstanding action items		
Comp./Work-over Risers 13628-7 (17G)	2005-5: Brian Skeels will prepare New Work Item to form a new API task group related IWOCs with ISO participation. This will then be submitted to Olav Inderberg to prepare an ISO New Work Item request before the June API meeting.	9/30/05 - Ongoing	3/3/06 - Brian Skeels to propose an approach on what systems (including IWOCs?) the TG will address and how the documents will be structured by June '06 meeting 6/14/06 – Ongoing.

Standard/ Subject	Action Item	Last Update	Current Status <i>(items in bold are complete)</i>
	2006-2: TG to provide a proposal with reference to barrier philosophy for well bore interventions systems.	New Action Item	3/3/06 - Brian Skeels to provide update on barrier discussion at June '06 meeting 6/14/06 – Ongoing.
	2006- 16 John McManus and Brian Skeels to propose how and where the IWOC umbilical goes.	New Action Item	6/14/06 – Ongoing.
ROVs 13628-8 (17H) ROTs 13628-9 (17M)	2006- 17 API to assign API letter for the merged 17H and 17M..	New Action Item	6/14/06 – API to assign letter.
17N (Subsea Reliability)	2006-3: Determine path forward on publication status	3/6/06 – John Allen to confirm API and Deepstar are aligned on issue of API document. Decide on timing for initiation of ISO NWI. John Allen to provide information to Olav Inderberg for SC4/WG6 meeting in May.	Complete. Will be removed following next meeting
	2006- 18 Olav Inderberg will review the 17N document and the existing ISO 20815 document to make judgment if new ISO NWI should be raised.	New Action Item	6/14/06 – Ongoing.
	2006- 19 Motion passed for 17N work group to present request for NWI to raise a 13628 number.	New Action Item	6/14/06 – 17N WG to make request to ISO.
	2006- 20 Motion passed that following the raising of the ISO NWI, the SC17 leadership committee to request ISO to issue the document as a working draft for comment.	New Action Item	6/14/06 – Ongoing.
HIPPS 17O	No outstanding action items		
Templates and Manifolds 17P	2004-23: Olav Inderberg to initiate an ISO NWI on this subject.	3/3/06 – Waiting on working draft prior to NWI	Complete. Will be removed following next meeting.

Standard/ Subject	Action Item	Last Update	Current Status <i>(items in bold are complete)</i>
	2005-7: Jeff Whipple to circulate an electronic draft to 17P members for review. Olav Inderberg will send this draft to interested ISO members. Jonathan Jordan to post on API SC 17 website.	3/3/06 - FTP site created to facilitate TG input	Complete. Will be removed following next meeting.
	2006-4: Jeff Whipple and Dave Wilkinson to develop proposal requesting API funding for technical writing of draft	3/3/06 – Jonathan Jordan to send RFP form to TG Chairs	Complete. Will be removed following next meeting.
	2006- 21 SC17 Leadership Team to ensure Annex L and 17P are not in conflict	New Action Item	6/14/06 – Ongoing.
System Engineering 17Q	2005-8: Revisit Systems Engineering in June 2005 and determine if there is a champion. All SC17 members are requested to consider who might be involved with this effort.	3/3/06 – Ongoing	6/14/06 – Systems Engineering will be worked further as part of 17A. 17Q is to be withdrawn. Complete. Will be removed following next meeting.
	2006-5: Olav Inderberg to make presentation in Atlanta Meeting on Systems Engineering	3/3/06-Olav to prepare presentation	Complete. Will be removed following next meeting.
13628-12 (API RP 2RD) Dynamic Risers	No outstanding action items		
General/ Admin.	2004-25: Leadership team to explore ways to get information out to industry in a more timely manner.	3/3/06 – Verify document status sheet on API website and/or develop dedicated page. Review System Poster in Atlanta	6/14/06 – Jonathan Jordan to see if existing “poster” or new “flyer” recommendation can be made to the leadership team.
	2006- 22 The current SC17 Sunset Team listing is outdated. List needs to be updated with current member’s names.	New Action Item	6/14/06 – Jonathan Jordan to update the list.
Permanent Discussion Items	2001-18: John Bednar, Gary Hurta, and Olav Inderberg are to look at the direction that SC17 should be pursuing relative to the composite suite of API 17 Series general and specific documents that address the broad spectrum of subsea hardware.	3/3/06 – To be discussed at Atlanta meeting during -1 and -7 sessions.	6/14/06 – Ongoing.
	2003-21: Maintenance of N172.	3/3/06 - Olav Inderberg to provide update on ISO progress on developing hierarchal definition structure at June '06 Meeting.	Complete. Will be removed following next meeting.

Standard/ Subject	Action Item	Last Update	Current Status <i>(items in bold are complete)</i>
New Work	2003-22: Brian Skeels to develop a plan for dealing with HPHT issues for subsea production system standards, addressing: - what areas should be covered in terms of equipment and procedures; - how this would best be integrated into the SC17 documents e.g. stand alone document versus HPHT Annexes in each existing document; - what else is going on in the industry in this regard e.g. API sponsorship of testing of effects of HT on material properties.	3/3/06: Maintain continued SC17 awareness of issue and provide input relevant to SC17	6/14/06 – Ongoing.
	2004-13: Dave Wilkinson, John Bednar, and Andy Radford to determine path forward for Insulation and Buoyancy standards prior to the June meeting.	3/3/06 – Mike Given to provide update/recommendation at June '06 Meeting.	6/14/06 – Dave Wilkinson to follow up with Mike Given to determine way forward.
	2006-6: David Wilkinson to contact Andrew Wainright regarding his proposal for NWI on standardized installation reels for coiled subsea products	3/3/06 - Ongoing	6/14/06 – Ongoing