

**OGP Material Standards Workshop 2007-02-07 & 08**  
**Proposed Materials Standards or other related work items:**

Proposal in meeting 2007-02-07	Comments & actions	Proposed & support by
<p>(1a) Develop ISO Material Selection standards based on Norsok M-001, Shell DEP, EEMUA 194 and company specifications and including coatings and cathodic protection issues</p> <p>(1b) Reestablish ISO TC 67/WG8 (Materials, Corrosion Control, Welding and Non-Destructive Examination) to make a home for it in ISO. Ref draft NWIP presented before the meeting.</p>	<p><b>ACTION:</b> OGP to propose to ISO/TC67 a NWIP for an ISO standard on Material selection, including the reestablishment of ISO/TC67/WG8 with Brazil holding the secretariat.</p> <p><b>ACTION:</b> Launch an OGP JIP with e.g. GBP 5.000 tickets to cover the cost of contracting a materials expert to assist convenor and secretariat in putting together a draft standard and further supporting the WG8 with editing text of this standard during its development process.</p>	ALL
<p>(2a) Piping Materials – Options to ASME, ASTM and other frequently used material standards... (Norsok M-601, M-630)</p> <p>(2b)(7f) Make ISO of API RP 14E</p> <p>(2c) Convert API 14E to an ISO Standard.</p> <p>(2d)(7c) Make ISO standard based on ANSI B31.3 Process piping</p>	<p>ISO 13703 based on API RP 14E includes additions to ANSI B31.3 for offshore piping systems.</p> <p><b>ACTION:</b> Hydro, Petrobras, ENI to draft a proposal for revision of ISO 13703 by 1<sup>st</sup> May 2007 to be further discussed and defined by this OGP group.</p>	Hydro Petrobras Eni
<p>(3) Structural Steel Requirements to critical components made from forgings (Norsok M-122) and castings (Norsok M-123)</p>	<p>Support to progress.</p> <p><b>ACTION:</b> All to consider this further and advise OGP of candidate to progress these items (by 8<sup>th</sup> March).</p>	Hydro
<p>(4) Qualification of non-metallic sealing materials (Norsok M-710. MERL (Materials Engineering and Research Lab - Rod Martin) proposal to run JIP to make ISO standard.)</p>	<p>Co-ordinate with work ongoing in ISO/TC67/WG7.</p> <p><b>ACTION:</b> DS to circulate the proposal for comment by group members.</p>	Hydro
<p>(5) Fabrication and installation of GRP piping. Revise ISO 14692 based on Norsok M-622 and other relevant materials.</p> <p>Note: ISO 14692 is due for 5-year ISO systematic review in 2007 to maintain, revise or withdraw.</p>	<p>Supported.</p> <p><b>ACTION:</b> OGP to make a request to ISO for revision of this standard (rather than maintain as is) in its current working place in ISO/TC67/SC6/WG5 with Simon Frost, UK, as the convenor.</p>	Hydro
<p>(6) Companies should provide their in-house company standards to OGP for uploading on a website with OGP access only, for the purpose of information exchange within OGP member companies.</p>	<p>Primarily related to material selection and corrosion protection.</p> <p><b>ACTION:</b> OGP to establish password protected website for this purpose (restricted to this group and nominated individuals).</p>	Petrobras All participants agreed

(7) Transform, as a priority, the following standards into ISO:		Petrobras
(7a) API Std 650 Welded Steel Tanks for Oil Storage.	Proposal also by Shell in other relations. No action in this group.	Petrobras
(7b) API Std 620 Design and Construction of Large, Welded, Low-pressure Storage Tanks	No action.	Petrobras
(7d) ANSI B31.4 Liquid pipelines (7e) ANSI B31.8 Gas pipelines (7g) DNV OS-F101 Submarine pipelines	ISO 13623 Pipeline transportation systems and the other ISO standards in this SC covers the same subjects as standards in left column. ISO 13623 is under revision with DIS planned Nov 07.  <b>ACTION:</b> OGP to check WG participation with a view to assure proper material coverage and report back.  DNV OS-F101 Material and welding part under revision based on ISO 3183, 13847, 15589, 15590, etc. Hydro and Statoil is involved in the revision work.	Petrobras
(7g) API RP 1111 Design, Construction, Operation, and Maintenance of Off-shore Hydrocarbon Pipeline and Risers	ISO 13628-12 Dynamic production risers (including catenary risers) is in development in joint API/ISO task group, chaired by Paul Stanton, Technip, Houston.  <b>ACTION:</b> OGP to check WG participation with a view to assure proper material coverage and report back.	Petrobras
(7h) API RP 2A WSD Planning, Designing and Constructing Fixed Offshore Platforms—Working Stress Design. (7i) API RP 2A LRFD. Planning, Designing and Constructing Fixed Offshore Platforms—Load and Resistance Factor Design. (7j) AWS D1.1 Structural welding code.	ISO 19902 for Fixed Offshore steel structures basically cover the subjects of the standards in left column. ISO 19902 will be issued as a FDIS for final ballot in a couple of months. Recommend all members to cast a positive ballot. The material and fabrication part of this standard may be split out as a separate standard in next revision.	Petrobras
(8) Develop an ISO standard to recognise the existing standards for Boilers and Pressure Vessels  <i>Post meeting note: ISO/TC11 has the following standard under revision <a href="#">ISO/FDIS 16528-1</a> Boilers and pressure vessels -- Part 1: Performance requirements</i>	We have several globally relevant and adequate standards like: <ul style="list-style-type: none"> <li>• ASME VIII, Div 1&amp;2,</li> <li>• EN 13445,</li> <li>• PD (ex BS) 5500.</li> </ul>	Petrobras

<p>(9) Develop acceptable international purchase specifications for pipe commodity acceptable to all OGP. Ensure that all commodity suppliers comply with the new purchase specifications. Identify resources and mechanisms to maintain the new OGP pipe standards.</p>	<p>ISO 3183 has just been revised, is due for publication 2007-02-15 and will be adopted as the next revision of API Spec 5L. Ref also ISO 15156. NORSOK M-630 "Materials for piping systems" is under revision and will be considered in relation to proposal (2a).</p> <p><b>ACTION:</b> Saudi Aramco to provide purchase specs for consideration by the group.</p>	<p>Saudi Aramco</p>
<p>(10) Establish pipe plant survey procedures for each commodity</p>	<p><b>ACTION:</b> Saudi Aramco to provide checklist for consideration by the group</p>	<p>Saudi Aramco</p>
<p>(11) Develop engineering pipe standards to meet all OGP requirements</p>	<p>Taken care of via other actions.</p>	<p>Saudi Aramco</p>
<p>(12) Establish a mechanism to approve pipe mills and 3<sup>rd</sup> party HIC testing labs</p>	<p>Informal network.</p>	<p>Saudi Aramco</p>
<p>(13) Check involvement of E&amp;P organisations (users) in relevant international standards groups where Materials issues are being discussed.</p>	<p>Sharing of information within group.</p> <p><b>ACTION:</b> Members to identify gaps.</p>	
<p>(14) Definition of material related terms to use in international standards. Collate table of definitions from a selected number of standards and seek to harmonize these.</p>	<p><b>ACTION:</b> OGP to develop tabulation of definitions from the following selected standards:</p> <ul style="list-style-type: none"> <li>• API 5L / ISO 3183</li> <li>• API 6A / ISO 10423</li> <li>• NACE MR 0175/ ISO 15156</li> <li>• ISO 15589 CP pipelines</li> <li>• ISO 15590 Fittings</li> <li>• EFC 16/17</li> </ul>	
<p>(15) Do we need a means of discussion materials related issues within the industry/OGP?</p>	<p>Agreed to maintain the representatives of this meeting as a new OGP Material Standards Group, reporting to OGP Standards Committee (tbc by OGP).</p> <p><b>ACTION:</b> ARJ to consider the objectives for this group.</p>	<p>All</p>
<p>(16) Should we develop a long/short term strategy related to materials selection?</p>	<p><b>ACTION:</b> Saudi Aramco to draft a note.</p>	