

ISO/TC 67/SC 7 Offshore structures

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N 764 8 6 WG7 report to SC7 2015-03-11

Document type: Meeting report

Date of document: 2015-03-05

Expected action: MEET

Action due date: 2015-03-11

No. of pages: 13

Background:

Committee URL: http://isotc.iso.org/livelink/livelink/open/tc67sc7

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OIL & GAS

ISO TC 67/SC 7/WG 7

Progress report to SC7 meeting of 11th/12th March 2015

Mike Hoyle, Noble Denton Marine Assurance & Advisory 2015-03-11

WG7 is responsible for:

- 19905-1 Site Specific Assessment (SSA) of mobile jack-up units.
- 19905-2 Technical Report, including a Go-By (or "detailed example calculation").
- 19905-3 SSA for Mobile floaters. (P53: Leader John Stiff)



Recent WG7 meetings

Since last SC7 meeting:

- 35th WG7 meeting, November 2014, London, with all Panels meeting (some combined)
- Previous meeting: 34th WG7 meeting, May 2013 in Houston, with all Panels meeting (some combined).

Next meetings planned for:

- May 2015 in Houston.
- September 2015 in London -Round City Univ Jack-Up Conference which is on 15th & 16th September



Status of ISO 19905-1 SSA for mobile Jack-Ups

• 1st August 2012: Published (in July 2012)

Sept 2012 - 2014: P4 identified some technical glitches.

Documented fixes received in Jan 2013 from P4 and then revised

in May 2013, September 2013 and May 2014.

Ongoing receipt of typos – most minor, but some significant.

The first Corrigenda was submitted to ISO on 4th June 2014. In August 2014, we were told that we might have to do a minor amendment – this was confirmed in September. Had hoped to additionally resolve arctic wording, but reached an impass with WG8 – so on hold for Rev 1.

Ready to submit ... BUT ... we are now told that we have to have all the bibliographic references updated to exclude clause numbers. ISO have arranged that BSI will undertake this activity. BUT WE DON'T WANT IT THIS WAY - AND NEITHER SHOULD THE REST OF WG7

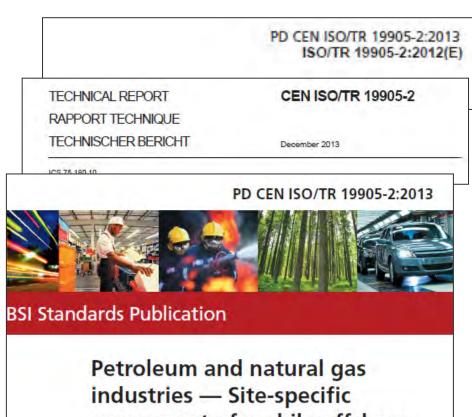
Ongoing Panel and technical development work for Rev 1 – some dependent on funding. Aiming as WD + NWIP for SC7 meeting in fall of 2016.

Status of ISO/TR 19905-2 Jack-Ups, Commentary and Example Calculation

Published December 2013 after lengthy saga to get parallel ISO/CEN approval.

Why did we have to "restart" with 19905-2 when 19901-8 had separate ISO & CEN votes?

- The ISO is dated 2012, to match references in 19905-1, but CEN & BSI have dated their wrappers December 2013.
- Limited feedback so far:
 - WG7 Convenor identified a figure with incorrect axis label (carried through from SNAME).
 - User (Hugo, GustoMSC) queried some foundation stiffnesses in the "Go-By" these should have been updated; correct values used in calcs.
 - Query re simplified calculation id leg-hull connection stiffness



assessment of mobile offshore units

Part 2: Jack-ups commentary and detailed sample calculation

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Status of ISO/TR 19905-3 SSA for Mobile floaters - Panel 53 - John Stiff

See separate report

Topics from WG7's November (and May) 2014 meetings

- We have a list of 19905-1 carry-forwards and a growing list of new/update topics for Rev 1.
- Plan is to push on with work for 19905-1 Rev 1 for issue before the 5-year review. Full set of meetings planned for November 2014 in UK and Houston during OTC2015, with an editorial (ERP) meeting between (funding will be needed for some ERP members).
- BUT ... Some of the action items will not progress without funding/corporate prioritisation:
 - Updates on radiation damping for earthquakes. Awaiting input from Adel Younan of ExxonMobil.
 - Review adequacy of additional load cases near resonance. Stock/Perry have proposal in with IADC Jack-Up Committee (IJUC).

Topics from WG7's November 2014 meetings

Earthquake

- Present provisions in 19905-1 seem overly-conservative. Need to absorb Global Maritime's benchmarking study (funded by ExxonMobil & Shell) & find a way forward.
- Awaiting ExxonMobil's inputs on frequency dependent damping from Adel Younan.
- Potential for updates to Wave spreading and kinematic reduction factor based on project work for Statoil by GustoMSC/DNV GL (should this be published).
- Awaiting IJUC funding for further study of additional dynamics loadcases near resonance (scope adjusted by November P3 meeting).
- P4 Task groups formed to review/resolve differences between info from UWA and SAGE on a number of issues. Further task group to look at "virtual" foundation capacity.
- The interface between 19905-1 and 19906 for ice loads/management needs clarification/resolution. Lots of "good words" have been shared recently, but these have been of limited practical value. Plan to meet WG8 when SC7 goes to Canada.
- Initiate P54 addressing going on- and off-location.

Status of ISO/TR 19905-4 (?) Going on and off location

- Concerns there is too little proper coverage of the non-elevated phases.
- Previous consensus that these cannot be covered in 19905-1, and prefer to keep separate from 19901-6.
- Present aim: "Capture the topics to be addressed and the technology to address them with the objective of providing inputs to the design process – and the ability to assess the capabilities of rigs against a common benchmark."
- Initiative by IADC to address/support the issue.
- Initial membership:

Julian Bowes	Marc Dial	Mike Dowdy
Mark Hayward	Hugo Hofstede	Mike Hoyle
Rupert Hunt	Harold Keys	Mike Koenig
Micha van der Kraan	Dave Lewis	Colin Nelson
Michael Perry / KFELS	Linda Stacey	John Stiff
Doug Stock		

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Status of ISO/TR 19905-4(?) - Cont Going on and off location

Potential Scope / Topics

- Communications (low hanging fruit)
- Hull in water pinned
- Spudcan engagement and impact
- Hull inclination due to punch-through (hull in and out of water?)
- Leg by leg preloading and practicalities when tidal range is significant
- Hull going back into water with environmental loads
- Hull inclination due to leg pulling (with different numbers of legs free) perhaps for inclinations of 5 degrees.
- Footprints
- Seabed remediation
- Marine operations anchors / moorings / use of vessels / planning and timing wrt tides
 / infrastructure avoidance / etc..

The initial objective of the Panel will be to define the framework and areas to be addressed. Where possible, follow the 19905-3 approach of referencing existing documents.

Looking Forward

- Continue to progress the 19905-1 carryforwards and new topics for Rev 1.
- Aim for 19905-1 Rev 1 for issue before the 5-year review.
- We are regaining the Technical Panel momentum that was lost as a result of the sanctions and other issues.
- We desperately need new blood in the WG & TP's, and a succession plan at all levels.
- A date for the diary:
 15th & 16th September
 City University Jack-Up Conference, London



And last, but not least

Thanks to all who have contributed to 19905-1 and 19905-2 over all the years

...

and those who are working on 19905-3

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and those about to work on 19905-4



The End

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