



IADC
BRAZIL
CHAPTER



IADC Technical Committee

July 11, 2017



IADC ANTITRUST POLICY AND GUIDELINES

The International Association of Drilling Contractors (IADC) was established to undertake activities for the benefit of the oil and gas drilling industry, to promote safety, environmental preservation and advances in drilling technology. IADC is committed to compliance with US, EC, and EEA, and other applicable antitrust and competition laws.

All IADC Committee, Chapter, Subcommittee and other activities will be conducted in compliance within the letter and spirit of antitrust laws to avoid even the appearance of impropriety. Each member company is responsible for its own compliance with such laws. Members are encouraged to consult with legal counsel regarding antitrust and competition matters when participating in IADC events and activities.

1. General Antitrust Guidelines for IADC Members

As an IADC member serving on an Association Committee, Chapter, Subcommittee, Task Force, etc., you should acquaint yourself with these guidelines. It is appropriate for IADC and its members to engage in a variety of beneficial activities, including development of proposed standards and collection of industry statistical data. It is prudent for members to exercise caution, however, and refrain from discussion of or joint action in connection with the following topics:

1. Current or future prices, price adjustments, discounts or credit terms.
2. Profit levels sought or attained.
3. Dividing or allocating customers, markets, or territories.
4. Any refusal to deal with or boycott a customer, potential customer, supplier or potential supplier.
5. Activities that would lessen the ability of others to compete or potentially compete with IADC members.
6. Restrictions or limits on the availability of services.
7. Any limits on sales of services or use of equipment.
8. Wages, other compensation and other employment terms.

Any action recommended by IADC to its members is to be voluntary, not mandatory. Each Producer, Drilling Contractor or Associate Member must make its own individual marketplace decision whether to follow any IADC recommendation.

Each IADC member may consult with his/her own counsel or IADC's counsel should they have questions concerning the permissibility of discussing any topic. IADC may seek advice of counsel in determining whether a recommendation or topic may be disseminated.

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2. IADC Guidelines for Meetings

The following general guidelines for IADC meetings should help avoid potential antitrust problems:

1. The Chairperson of the meeting should control the meeting.
2. In advance of a meeting, a notice of the meeting should be sent to each invitee and a copy sent to other interested parties. The notice may contain an agenda or refer to a website location where the agenda can be found.
3. The meeting should be conducted in accordance with the agenda, though items may be discussed in a different order than listed. In general, subjects not included on the agenda should be raised under Other Business and considered for inclusion on the agenda for a future meeting.
4. If a member is uncertain about the legality of a particular topic, he or she should check with legal counsel, the Chairman of the meeting or IADC staff. If an attendee brings up for discussion at a meeting a subject of doubtful legality, he should immediately be informed that the subject is not a proper one for discussion. In the absence of counsel, the Chairperson, IADC staff or any member present who is aware of the legal implications of a discussion of the subject should halt the discussion. Should the discussion continue, despite protest, the Chairperson or IADC staff should declare the meeting closed and all the attendees should leave.
5. General minutes of meetings should be kept and maintained for future reference at the committee specific site on IADC's website for a period of 9-12 months. Upon removal from the web site, they should be archived in the meeting records for a minimum of three years. Matters subject to attorney-client privilege will not be posted on the website, but will be included in the meeting records.
6. Secret or "rump" meetings held at the time of the regular meeting should be strictly avoided. Such meetings seldom have a purpose except to discuss activities of doubtful legality, and can seriously jeopardize legitimate activities, and create a risk that those activities may be investigated.
7. During meetings there should be no recommendations with respect to "sensitive" antitrust subjects. In the less sensitive areas, such as standardization activities, recommendations may be permissible.

Agenda

1. Introductions
2. Technical Presentations
3. Review of main topics for 2017
 - (Washpipe failures in Brazil)
4. Next meetings - update
5. Other topics
 - Volunteers
 - Open Forum

Introductions

- Name
- Company
- Areas of interest

2 - Technical Presentations

- BOP reliability. JIP updates from IADC Corporate – this has been presented on the GM on the 30/March.
- Critical Bolting – inspection on BOP & Risers – Glaysson Castro / Petrustech – 11/April Ops Tech
- CBM – Condition Based Maintenance on risers. “Swin, Subsea Wellhead Integrity Monitoring”. Melqui Santos / 4Subsea – 29/Jun IADC GM
- Hoses and Fittings (New technologies) – Parker / Fabio Scivoletto - 29/Jun GM
- Waste Water Treatment. Company: RENA - 29/Jun GM
- Team Building and Maintenance – BOS - 29/Jun IADC GM
- ESD – New Electrical BOP – (ESD, John Dale / Pedro Freitas)
- Class and Industry Standards for WCE Overhauls at non-OEM facility – DnV GL / Odebrestch – When?
- BOP-RDT Retrieval Decision Tool – to be confirmed - 4/July Ops Tech
- BOP Fluid Quality and Sampling methodology – Houghton
- Petrobras Decision Matrix for critical maintenance. (Matriz de decisão), need to get feedback from Drilling Contractors. (Emmanuel Issac)
- New Technologies and solutions to monitor and record deck crane operation – (Marcio Santos)
- RFID Technology being applied on drilling string. (NOV – Wedson Carneiro)
- Top drive HPS 10.000 Gear Box failure mode analysis. (NOV – Diego Nascimento)

3 - 2017 Main Topics

1. DROPS Prevention Initiative (Petrobras, Manutenção e Integridade)
 - Focal Point: (Pedro Freitas / Pedro Franco / Wedson Carneiro / Carlos Gandolpho)
 - Deliverables / target date: Sept/17 – IADC Ops/Tech

2. Well Control Equipment Requirements – Industry development
 - Focal Point: Marcio Motta
 - Deliverables/ target date: Full bore tools passing through BOP annulars Sept/17 – IADC GM

3. Equipment Reliability - Common challenges in Brazil
 - Focal Point: (Pedro Freitas / Thiago Amato)
 - Deliverables / target date: Washpipe issues in Brazil.

4. Equipment Reliability - Common challenges in Brazil
 - Focal Point: Name (Antonio Lameira / Pedro Franco / Andre Madaleno)
 - Deliverables / target date: Drill String vibration and failures due to excessive downhole stress (TBD).

3 - Topic for Discussion (Washpipe Issues in Brazil)

Focal Point: Pedro Freitas / Sebastião Hipólito

Deliverables/ target date:

Suggested approach:

- 1) Problem Definition
- 2) Data Gathering from all IADC members
- 3) Possible Causes Definition
- 4) Test Plan
- 6) Solution Validation (if practical)
- 7) **Develop an IADC advisory / Improve the maintenance & operations in Brazil.**

Work group: Pedro Freitas (TOI) and Thiago Amato (QGOG)

Target date: Sept/17



4 – Schedule next Committe Meetings

- 16/Feb/2017 – Tech Committe Meeting
 - 11/April/2017 - Tech Committe Meeting
 - 11/July/2017 - Tech Committe Meeting
 - 15/Aug/2017 – Washpipe meeting – data review / follow up
 - 03/Oct/2017 - Tech Committe Meeting
 - 28/Nov/2017 - Tech Committe Meeting
 - When / as needed...
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- Place: Transocean Macaé / Video Conference to Rio Office
 - Time: 03:00 – 05:00pm (TBC)

5 - Other topics & Open Forum

- Contact list of all Drilling Contractors and IADC Members
 - Companies to send email to IADC Adm
 - IADC will share this list after updates
- Tech Committe Members
 - Volunteers to contact IADC Adm. with contacts.
- Open forum...
- Extra topics discussed to be considered on this committee:
 - (Seadrill) Reocurrent issues with Mud Pumps while fighting losses on the well.
 - (Odebrecht) WSOG implementation onboard the rigs
 - (Odebrecht) Suggested each drilling contractor to list the equipment with the biggest NPT impact and share with the IADC members.
 - (Oceanrig) NR12 implementation and challenges to meet the requirement. Note: this has discussed and suggested to be added to the HSE Committee.
- Closeout