

SOCIETY OF PETROLEUM ENGINEERS

Drilling Systems Automation Technical Section

Date: Thursday 21st June 2012

Time: 08:30 to 09:30 am. (Houston Time)

Teleconference

Agenda:

1. DSATS Europe (Fionn) – posted below
 - Graz recap
 - Memorandum of Understanding
 - University - AIFAD
2. IFAC (Geoff/Fionn) – neither were present today, post from Geoff below.
3. Interoperability (Moray)
4. Standards (Clinton)
5. Events (John dW) – not present, see post from John below
 - Vail Workshop
 - San Antonio ATCE
 - Amsterdam Drilling Conference
 - Other?
6. Website (Josh/Fred)
7. Membership
 - SPE prepared Email Announcement for DSATS
 - Newsletter
8. Other business

- **DSAT Europe (posted by Fionn)**

- Summary DSATS Europe Subcommittee meeting, June 13th 2012**

- IEEE I2MTC (Gerhard, Fred, Fionn)

Tutorials: Went very well. Conference Chair Prof. Georg Brasseur attended. Attendance 20-30 people. Good discussion and well received. Fred felt that the attendance was very low. Most were from DSATS of Mining University of Leoben. Few industry personnel, if any were in attendance.

Keynote: Highly relevant material from the US DOE which generated significant interest. Replacement speaker, who did not know the material well, so could not answer questions.

Special sessions: As part of industrial track on Sustainable Energy. 2 sessions held with DSATS reps as chairs. IEEE IMS are very happy with the industrial tracks. However little focus on drilling / drilling automation. We need to evaluate how to do this in the future if we should

Good dialogue with conference Chair Brasseur during conference. Suggested further cooperation (by IEEE): Workshop, co-organizing special sessions, cooperation in Distinguished Lecture programs. Interesting for us, but need to sort out how to cooperate further.

Further cooperation approved by IEEE IMS board. Generate MoU suggested. DSATS group decided to contact Georg via Fionn to see what he proposes as MoU. Otherwise, just have them join our group.

Iversen has inquired with SPE (Shasta) regarding formalities of cooperation. Is a waiting full response to the query?

Suggested to hold meeting between IEEE organizers and DSATS people involved to evaluate how to improve on co-organizing such events.

Thonhauser is holding meeting with Brasseur on July 11th to follow up.

- **IFAC 2012 Trondheim (Geoff)**

Feedback Downton:

It was a well-attended two day workshop with excellent and content-full paper sessions. Plenty of support from Statoil was forthcoming, definite interest in the topic. Automation of all aspects of the life cycle of a well is clearly a hot topic. The audience was predominately experts in the field of control but I was pleasantly surprised by the attendance and participation of high level managers.

My keynote address on the challenges of modeling for automation and control was well received with many follow up questions.

I was given a slot to advertise DSATS; very few had heard of us so it was a worthwhile opportunity to improve things.

I joined the panel session at the end and again it was clear automation was on a lot of people's minds.

- **AIFAD (Fionn, Gerhard)**

Suggest stick to Europe for time being.

- Contacts and champions status
List updated. Still needs some work on generating champions /contacts.
- Conference call
 - o Suggested set up mid-September

Suggested first congregation during SPE Drilling in Amsterdam 2013.

- **Meetings in Europe next year**

- Suggested SPE Forum
 - o Await feedback from DSATS after Vail workshop to decide on how to proceed - abstract / involvement.
- SPE Drilling conference
 - o Iversen involved in organizing DSATS session

- **Any other business**

- **Interoperability (Moray)**

In order to develop intelligent automation solutions for drilling we need standards for

1. Data Interoperability between bus systems, control systems, measurement systems and down hole equipment
2. Ontologies are required to define the process and equipment involved in automation in order to facilitate the creation of intelligent systems

Imagine modifying pump speeds in a tight margin well with no knowledge of the geo-mechanical properties and current down hole pressures in the well.

There are various groups working on these challenges from many aspects the largest gap clearly exists between the Energetics team (WITSML) and the Rig operators and sensor manufacturers.

DSATS is proposing to the SLC meeting next week that we need a single collaborative effort on defining Items 1 and 2 above.

- **Standards (Clinton)**

- o Goal for Comms Team not clear, but a clear deficiency regardless of Comms Team goal is in information modeling and data usage for Automation.
- o Moray is leading data definition work (he covered this). This is the important item at the moment.
- o NOV has created NOVOS which does not use OPC UA – Is OPC UA important and Comms Team work still relevant?
- o Fred:
 - NOV is building an OPC UA interface into NOVOS and it is important.

- Offered Kent Hulick as contact in NOV who may be familiar with implementation for NOVOS.
- Jeff Bailey from XOM would like to participate with Comms Team

- **Posted by John de Wardt**

Vail Workshop:

- 92 signed up; some speakers and committee members till to sign up so will get close to 120 max mark.
- Struggle to get some sessions filled with speakers - Session II: Experiences from Robotics and Automation Applied in Related Industries and Session III: Latest Developments in Industrial Automation. We really wanted some mining automation for session II but session chairs unable to secure speakers. Any leads last minute very welcome.

San Antonio – Oct 7:

- Announcement in ATCE literature
- Room and reception area arranged
- Team in place to organize
- One keynote speaker.
- One robot (subject to confirmation).
- Developing guidelines for presentations on products and show & tell tables for sponsorship fee.

Amsterdam:

- Location booked (same as last year)
- Still to formulate plans – want to make an exciting event like San Diego was. Europe represented on team by Fionn.

- **Membership**

The marketing group within SPE will broadcast an announcement for DSAT, directed towards the internal SPE site. Plan to get all the links corrected for internal and external site. A Newsletter will be published from the Chairman, covering activities and events, photographs from workshops etc...

- **Web site**

Action to get someone at NOV to work on a database of members, any one registering for a DSAT related event would be added. It will be mounted on an external website to the SPE site.

- **Miscellaneous**

FF suggested writing a paper on the history of automated rigs, with particular focus on why the technology did not gain traction. Any such information should be forwarded to Fred Florence.

IADC International conference spent considerable amount of time on rig automation, trying to get a copy of the Maersk presentation. FF getting invitation to speak on rig automation across the hinter land in North America, the topic is gaining visibility and interest.

Fred will contact the chairman of the Digital Energy section, looking for joint opportunities.
Paul to forward contact info to Fred.