

Report on CO-LaN Activities, 2011/2012

CAPE-OPEN Annual Meeting 2012
Lyon

In Memoriam – Peter Banks



- ◆ Originator of concept of interoperability via standard interfaces
 - ⇒ With Hans-Horst Mayer
- ◆ BP representative on OO-CAPE & OS-CAPE
- ◆ CAPE-OPEN Project
 - ⇒ Leader, Unit Operation WP
 - ⇒ Project Steering Committee
- ◆ Global CAPE-OPEN
 - ⇒ Leader, WP4. Integration with work processes
 - ⇒ Interoperability Task Force
 - ⇒ Project Management Committee
- ◆ CO-LaN
 - ⇒ BP Representative
 - ⇒ Secretary
- ◆ CAPE-OPEN Award 2007

Membership

- ◆ **September 2012**
 - ⇒ **7 Full Members**
 - ⇒ **48 Suppliers**
 - ⇒ **24 Academics**
 - ⇒ **3 Public & Federal Agencies**
 - ⇒ **10 Individuals**
- ◆ **Total is unchanged from last year**
- ◆ **Management Board is promoting the benefits of full membership to a number of operating companies**

Management Board

◆ Management Board

⇒ BP	Malcolm Woodman	President
⇒ Total	Francis Luck	Treasurer
⇒ Shell Global Solutions	Richard Baur	Secretary
⇒ Air Liquide	Philippe Arpentinier	
⇒ AkzoNobel	Bert van Uitert	
⇒ BASF	Peter Mauer	
⇒ Dow	Thomas Koehler	

◆ Monthly conference calls, plus twice yearly physical meetings

SIG Management

- ◆ **Thermodynamics** **Sergej Blagov, BASF**
- ◆ **Unit** **Richard Baur, Shell**
- ◆ **Methods & Tools** **Bill Barrett, USA EPA**
- ◆ **Hydrodynamics** **Martin Gainville, IFPEN**
- ◆ **Refinery Reactors**
 - ⇒ **Development & approval of standard is on-hold**
 - ⇒ **But first implementation based on draft (see SIG report)**
- ◆ **Interoperability Support & CO-LaN Tools**
 - ⇒ **Co-ordinated by CTO & Malcolm Woodman**

Contracts & Licenses

- ◆ **On-going contracts awarded by CO-LaN**
 - ⇒ **Michel Pons Technologie**
 - CTO activities
 - ⇒ **Michael Halloran**
 - COLTT development & CO-LaN software
- ◆ **Licenses**
 - ⇒ **All major vendors have continued to provide licenses to CO-LaN**
 - For testing & demonstration purposes
 - Any defects found in packages are kept confidential to the vendor, the CO-LaN contractors and the individual members of the Management Board
 - CO-LaN participates in Beta testing programmes where appropriate

User Priorities for CO Standards (Mission 1)

- ◆ **Prototypes & examples**
 - ⇒ Current focus is on helping the developers of thermo components
- ◆ **CO-LaN initiated component development**
 - ⇒ **GAP (Petroleum Experts)**
 - CO-LaN funded developments complete
 - Discussions with Petex are on-going (slowly)
 - ⇒ **PHAST (DNV)**
 - No progress made
- ◆ **Future Directions**
 - ⇒ Session held in Lyon, 19th September 2012
 - ⇒ Management Board will use information from sessions to formulate strategy

Dissemination Actions (Mission 2)

◆ Conferences

⇒ CAPE-OPEN session at ECCE8

- Good attendance and papers

⇒ InMoTher 2012

- Presentation by CTO and discussions

⇒ All Russian Permanent Scientific Seminar

- See next slide

⇒ AIChE Annual meeting

- Pittsburgh, 30th October 2012
- CAPE-OPEN session
- Flowsheet monitoring & Object model discussion

All Russian Permanent Scientific Seminar

- ◆ **Mathematical Models and Analysis and Optimal Synthesis Methods for Growing Pipe and Hydraulic Systems**
- ◆ **Elena Yudovina**
 - ⇒ **Piping Systems Research & Engineering Co**
- ◆ **Very positive response from attendees**
- ◆ **Management Board need to consider translating material into Russian!**



Dissemination Actions (Mission 2) (cont.)

- ◆ **Technical journals**
 - ⇒ 3 papers published in **Computers & Chemical Engineering**
- ◆ **Forum**
 - ⇒ Still active
- ◆ **Newsletters**
 - ⇒ 3 published in last year
- ◆ **Website**

Maintenance of Interface Specification Standards (Mission 3)

- ◆ **On-going**
 - ⇒ Led by SIGs
 - ⇒ Does not end!
- ◆ **SIGs are responsible for Errata & Clarification documents, with approval for publication by the Management Board**

Testing & Interoperability Facilitation (Mission 4)

- ◆ On-going interoperability testing by CTO
 - ⇒ Prioritisation by Management Board
- ◆ CO-LaN Tools
 - ⇒ COLTT
 - V2.1 release, August 2012
 - Open Source
 - Actively used in identifying issues in interfaces
 - ⇒ Other software tools
 - Testers & wizards
 - No progress made in identifying a strategy for maintenance

Training Facilitation (Mission 5)

- ◆ “Developing CAPE-OPEN thermodynamic software components”
 - ⇒ Lyon, 19th September 2012
 - ⇒ Led by Jasper van Baten

Conclusions & Perspectives

- ◆ Significant work by SIGs to develop Errata & Clarification documents
- ◆ Interoperability testing is a major deliverable by the CTO
- ◆ Many individual examples of interoperability have been demonstrated at this meeting
- ◆ End-user understanding of benefits of use of components via CAPE-OPEN is essential for further uptake
- ◆ User priorities for the future were discussed in a session at this meeting
 - ⇒ Management Board will analyse the feedback and propose the forward strategy

Comments, Questions?

Vote on status report for 2011

**Approval by all Full Members present or
represented**