

CO LaN

CO-LaN Status Report for 2006

Werner Merk
Bertrand Braunschweig

March 8, 2007



Member Participants (29 out of 60)

- ◆ AixCAPE e.V.
- ◆ AmsterCHEM
- ◆ AspenTech
- ◆ BASF
- ◆ Belsim
- ◆ BP
- ◆ Cosmologic GmbH
- ◆ Dow
- ◆ DTU- IVCSEP
- ◆ Halias Technologies
- ◆ HTRI
- ◆ IFP
- ◆ Infochem
- ◆ INPT-ENSIACET
- ◆ Kongsberg Maritime AS
- ◆ Max-Planck Institute – Magdeburg
- ◆ Process Systems Enterprise
- ◆ ProSim SA
- ◆ Shell Global Solutions
- ◆ SHMA Ltd
- ◆ SimSci-Invensys
- ◆ SINTEF
- ◆ Technical Univ. Hamburg
- ◆ TOTAL
- ◆ TÜV-NEL
- ◆ University of Trieste
- ◆ US EPA
- ◆ Virtual Materials Group

Welcome to non-member organizations

- ◆ Akzo Nobel Chemicals bv
- ◆ SASOL
- ◆ Linde
- ◆ Scandpower Petroleum Technology
- ◆ Michael Wulkow CiT
- ◆ Rhodia



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Outline

- ◆ **Activities in 2006 (Werner Merk)**
 - ⇒ **Membership, BOD, Contracts**
 - ⇒ **Action review per mission**
- ◆ **Approval of Status report**
- ◆ **Financial Report for 2006 (B. Braunschweig)**
- ◆ **Approval of Financial report**
- ◆ **Proposals for 2007 (B. Braunschweig)**
- ◆ **Approval of budget for 2007**
- ◆ **Comments and questions**
- ◆ **Board election**



Activities in 2006

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Membership as of March 2007

- ◆ CO-LaN is 60 members strong (+ 7 compared to Cannes)
 - ⇒ 7 Full Members



- ⇒ 53 Associate Members (2006, 2007)
 - 31 software suppliers
 - MetaHeuristics LLC, Halias Technologies, Anaproc
 - 18 universities
 - Lamar University, IVC-SEP, University of Trieste, Institute of Chemical Technology Prague
 - 2 US Federal agencies
 - 2 individuals

MB Activities in 2006

◆ Management Board (+ SIG leaders invited)

• Dow	W. Merk	President
• IFP	B. Braunschweig	Treasurer
• BP	P. Banks	Secretary
• BASF	R. Klein	Member
• Shell Global Solutions	R. Dickinson	Member
• Total	J. Bousquet / F. Luck	Member
• Dow	K. Irons	Member
• BP	M. Woodman	Member

◆ Monthly conference calls or meetings

- ⇒ Address 5 missions of CO-LaN
- ⇒ Votes for accepting new members
- ⇒ Decision making

SIG Management

- ◆ **Thermodynamic SIG (Werner Drewitz)**
 - ⇒ **Congratulations for releasing v1.1**
- ◆ **Unit SIG (Richard Baur)**
 - ⇒ **Advances on revising dynamic spec and UNIT spec**
- ◆ **Methods&Tools SIG (Bertrand Braunschweig)**
 - ⇒ **.NET guidelines as basis for training session**
- ◆ **Interoperability Support SIG (Peter Banks)**
 - ⇒ **Resources given to advance COLTT**
- ◆ **Refinery Reactors SIG (Ignasi Palou-Rivera)**
 - ⇒ **Launched – First demo announced**

Contracts/Services in 2006

- ◆ **Awarded by CO-LaN**
 - Michel Pons Technologie for CTO activities in 2007
 - SHMA for CO Logging & Testing Tool development
- ◆ **On-going contract**
 - AspenTech consultancy agreement: VB UO Wizard compliant with 1.0
- ◆ **Licenses formally granted to CO-LaN for testing and demo purposes**
 - Aspen Plus, Aspen Hysys, ComTHERMO renewed by AspenTech
 - *VMGThermo by Virtual Materials Group*
 - UniSim Design by Honeywell
 - MultiFlash renewed by Infochem
 - gPROMS by Process Systems Enterprise
 - SIMULIS Thermodynamics and *ProSim Plus* renewed by ProSim SA
 - INDISS by RSI
 - PRO/II renewed by SimSci-Esscor
 - PPDS renewed by TÜV-NEL
 - Xchanger Suite renewed by HTRI
- ◆ **Other software (e.g. COCO, SolidSim, IVCSEP)**

CAPE-OPEN in day to day business

◆ BP statement

⇒ "Process engineers across the BP businesses have been alerted to the availability of CAPE-OPEN versions of HTRI models that can be embedded seamlessly into a simulation environment of choice...The use of the CAPE-OPEN interfaces are now included as part of the standard in-house HTRI training courses"

◆ NPT article sept 06

User priorities for CO standards (Mission 1)

- ◆ **Specific Board meetings for strategy setting**
- ◆ **Demand of new SIGs**
 - ⇒ **Refinery Reactors**
 - ⇒ **Hydrodynamic point model**
- ◆ **Vendors' discussion on March 7, 2007**
- ◆ **Interoperability workshops on March 8 and 9, 2007**

Dissemination actions (Mission 2)

- ◆ **CAPE-OPEN Award 2005**
- ◆ **Participation to conferences**
 - **PSE User Meeting: Demo with gO:CAPE-OPEN**
 - **ACHEMA 2006: Hosted by TUHH**
 - **HTRI North American Meeting: Live interoperability demos**
- ◆ **Conference organization**
 - **3rd CAPE-OPEN US Conference (see next slide)**
 - **Topical Conference within AIChE Annual Meeting (San Francisco)**
- ◆ **Visits to**
 - ⇒ **ENSTA, Paris (Research group in Thermodynamics)**
 - ⇒ **OLGA User Group (sponsored by TOTAL)**
 - ⇒ **Purdue University (given by Prof. Puigjaner)**
 - ⇒ **Imagine SA (AMESIM software)**
 - ⇒ **TOTAL Modelling and Simulation Group**

3rd CAPE-OPEN US Conference

- ◆ Rated as #1 Topical event by attendees
- ◆ Size of rooms limited number of participants: 45+
- ◆ Four sessions
 - ⇒ "CAPE-OPEN Current status: Extension and Improvements".
 - ⇒ "CAPE-OPEN Unit Operations: Development and Usage".
 - ⇒ "CAPE-OPEN Compliant Thermodynamic Components".
 - ⇒ "CAPE-OPEN Numerical Components: Development and Usage".
- ◆ Future US events will have a panel discussion after the first session.
- ◆ Next event approved for 2007 Annual AIChE meeting

CAPE-OPEN websites

- ◆ **Expansion of CO-LaN Members area**
 - ⇒ **Pages for each SIG**
 - **Minutes of meetings**
 - **Downloadable interoperability tools**

- ◆ **Updating of CO-LaN public pages**
 - ⇒ **24 News items in 2006**

- ◆ **EPA Portal being tested for hosting CAPE-OPEN discussion groups**
 - ⇒ **Initial access made available to a small group of people**

Other missions

- ◆ **Mission 3: Maintenance of interface specification standards**
 - ⇒ To be discussed during Showcase
 - ⇒ Area of future emphasis
- ◆ **Mission 4: Testing tools**
 - ⇒ To be discussed during Workshop
 - ⇒ Area of future emphasis
- ◆ **Mission 5: Training facilitation**
 - ⇒ Training session delivered by ProSim SA as Short Course within AIChE Annual Meeting'06: 10 participants
 - ⇒ “CAPE-OPEN with .NET”: 20 participants on March 7, 07

Vote on status report for 2006

Approved by all Full Members present or
represented





Financial report for 2006

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2006 Results (in Euros)

		Exp	Income		
All services including:		85 306	Fees	Total	11 960
	MPT,Aspentech, SHMA			IFP	11 960
	Accountant, web hosting			BP	10 000
IT	PC, software,	1 494		Dow	10 000
Taxes	2003-2005	4 754		Air Liq	11 960
				BASF	11 960
Personnel	2005 social charges	3 101	Other	Sofitel	5 700
	Congresses & travel	4 542		Bk interest	3 089
Various	Bank Fees	128			
Total		99 325			88 589
				Balance	-10 736
				Reserves	132 753
				Remain	122 017

Vote on 2006 financial report

- ⇒ Approval of accounts by all Full Members present or represented
- ⇒ Approval of transfer of deficit from accumulated funds by all Full Members present or represented



Proposals for 2007

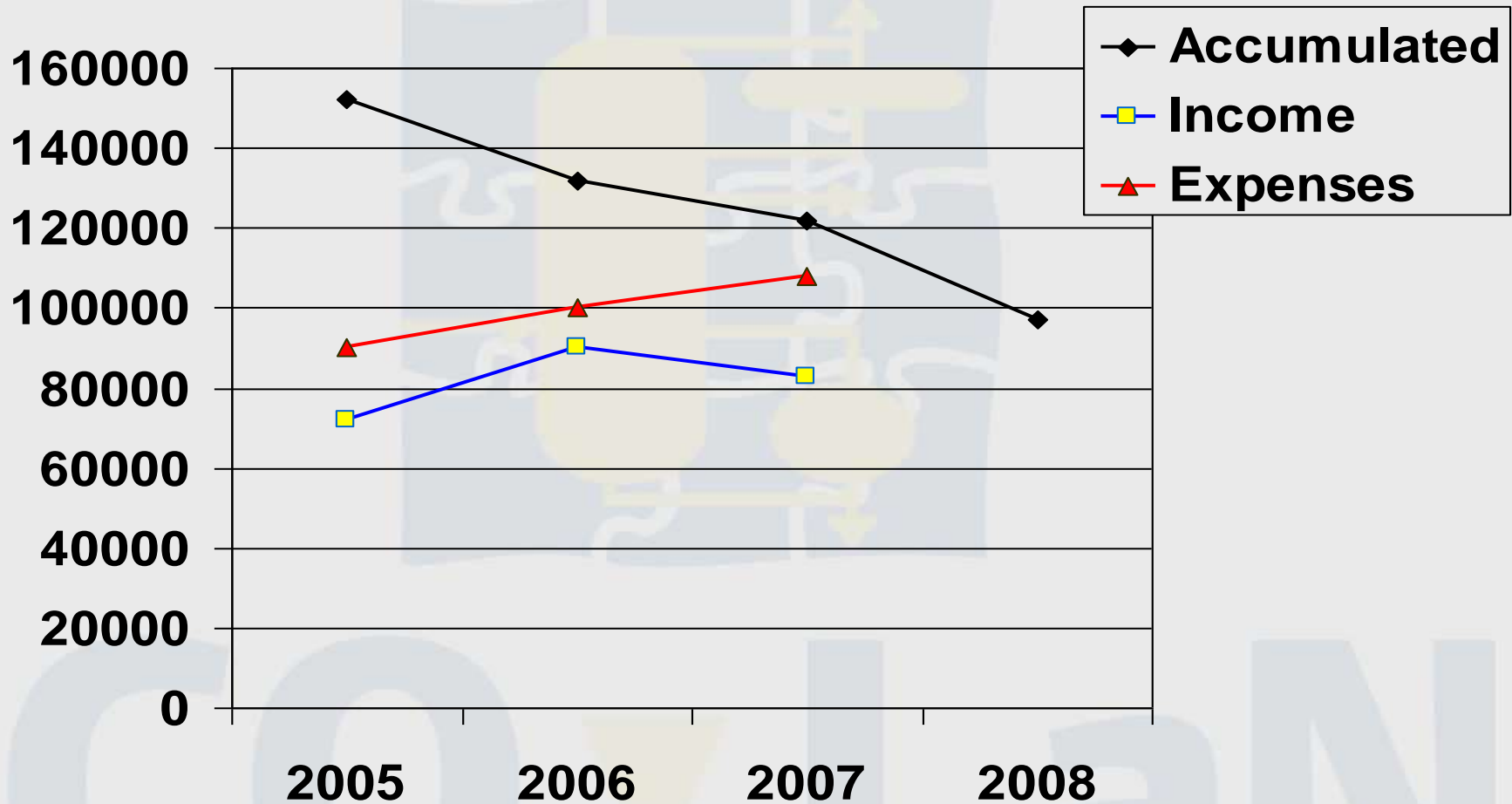
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2007 Budget proposal (in Euros)

		Exp	Income	
Services		100 000		
including	MPT,SHMA		Fees	Total
	Accountant, web hosting			11 960
	AGM expenses			11 960
				10 000
				10 000
IT	PC, software,	2 000		Air Liq
				11 960
Taxes		1 000		BASF
				11 960
				Shell
				11 960
Personnel			Other	
	Congresses & travel	5 000		Bk interest
				3 000
Various	Bank Fees	200		
Total		108 200		82 800
AGM	5000		Balance	-25 400
MPT	63000			
Software dev.	25000		Reserves	122 017
Accountant & Web	2000			
Provision	5000		Remain	96 617
	100000			

The trend



Conclusion

- ◆ There is no immediate cash flow problem thanks to our accumulated funds
- ◆ We planned to spend more and we did it
- ◆ But we shall need more mid-term funding in order to cover planned increasing expenditures due to the increasing CAPE-OPEN activity worldwide
 - ⇒ More paying Full Members to ensure long-term success

Vote of 2007 budget proposal

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





Comments, questions? Election

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Elected Management Board 2007

- ◆ **Shell:**
 - ⇒ Ray Dickinson (President)
- ◆ **TOTAL:**
 - ⇒ Francis Luck (Treasurer)
- ◆ **BP:**
 - ⇒ Peter Banks (Secretary)
 - ⇒ Malcolm Woodman (Member)
- ◆ **IFP:**
 - ⇒ Claude Mabile (Member)
- ◆ **Dow:**
 - ⇒ Werner Merk (Member)
- ◆ **BASF:**
 - ⇒ Ronald Klein (Member)

CO-LaN Status Report for 2006

Werner Merk

Bertrand Braunschweig

March 8, 2007



4th CAPE-OPEN European Conference

- ◆ **This meeting!**
- ◆ **Annual meetings have continuously grown in attendance**
 - ⇒ 17 participants in Schkopau, Germany, February 2004
 - ⇒ 37 participants in Como, Italy, February 2005
 - ⇒ 50 participants in Cannes, France , March 2006
 - ⇒ 62 participants in Heidelberg, Germany, March 2007
- ◆ **Conference structure evolving with experience gained**
- ◆ **A few participants not from CO-LaN**
- ◆ **European counterpart to US Annual Conference**

4th CAPE-OPEN US Conference



- ◆ **Within AIChE Annual Meeting, Salt Lake City, US**
 - ⇒ November 4 -9, 2007
 - ⇒ Topical Conference D (4 sessions)
 - **Consider sending Proposals to Present till May 14**
 - ⇒ Training session “CAPE-OPEN with .NET”?
- ◆ **Session #1: General Information**
 - ⇒ Where are the standards going, level of support within business and academia, high level usages of multiple compliant tools in a single simulation.
- ◆ **Session #2: Unit Operation Models**
 - ⇒ Mainly providers and users of CO-LaN compliant Unit Op models giving presentations.
- ◆ **Session #3: Thermodynamic Models**
 - ⇒ Mainly providers and users of CO-LaN compliant Thermo Packages giving presentations.
- ◆ **Session #4: Poster session**
 - ⇒ To give opportunity to talk to providers of CAPE-OPEN compliant tools.



Other 2007 dissemination events

- ◆ **ESCAPE-17, May 27-30, Bucarest, Romania**
 - ⇒ papers on COLTT and .NET + others
- ◆ **ICheaP-8, June 24-27, Ischia, Italy**
 - ⇒ CAPE-OPEN session
- ◆ **ECCE-6, Sep 16-21, Copenhagen, Denmark**
 - ⇒ CAPE-OPEN session