

**EUROPEAN FEDERATION OF CHEMICAL ENGINEERING
FÉDÉRATION EUROPÉENNE DU GÉNIE CHIMIQUE
EUROPÄISCHE FÖDERATION FÜR CHEMIE-INGENIEUR-WESEN
FEDERACIÓN EUROPEA DE INGENIERÍA QUÍMICA
FEDERAZIONE EUROPEA DELL' INGEGNERIA CHIMICA**

**MINUTES OF THE 77th MEETING (BUSINESS MEETING) OF THE EFCE WORKING PARTY ON
LOSS PREVENTION IN THE PROCESS INDUSTRIES ON NOVEMBER 17TH-18TH 2009,
AT POLITECHNIKA KRAKOWSKA WYDZIAŁ MECHANICZNY, KRAKOW**

Present:

Dr G Suter (Chairman)	Switzerland
Dr M Considine (Secretary)	UK
Mr J van Steen	Netherlands
Professor Dr A Laurent	France
Ir E De Rademaeker	Belgium
Professor Adam Markowski	Poland
Dr Z Novak Pintaric	Slovenia
Dr Ing J Skarka	Czech Republic
Professor Dr. F Babinec	Czech Republic
Professor L Jelemensky	Slovakia
Dr H Lagarrigue	France
Professor A Kolaczowski	Poland
Professor N Jensen	Denmark
Dr Ing S Senni Buratti	Italy
Mr P J Bots	Finland
Professor R Koivisto	Finland
Dr B Fabiano	Italy
Mr L Alford	EPSC
Dr KJ Niemitz	EPSC

Apologies:

R Pastorino	Italy
Mr A Jacobssen	Sweden
Mr P Guterl	Germany
Professor Ir J Clerinx	Belgium
Professor F Rigas	Greece
Mr R D Turney	UK
Professor Dr M Kozuh	Slovenia
Robert de Graaf	Netherlands
Dr Ing P Schmelzer	Germany
Dr R Nomen	Spain
A Bendiksen	Sweden
Professor Y Sharikov	Russia

1. Welcome

Adam Markowski gave a short description of the building layout and the actions to be taken in the event of the fire alarms being sounded or any other form of emergency being announced. The head of Faculty welcomed the Working Party members and gave a brief presentation of activities there.

2. Introductions and Membership

Georg Suter introduced Raija Koivisto, from VTT, who is the new member representing Finland. He also welcomed Klaus Juergen Niemitz and Lee Alford from EPSC who were attending as guests.

3. Planning of the Day

The 18th would be devoted to Final Review of Papers and Organisation of LP2010, whilst the 17th would cover all of the other agenda items.

4. Minutes of the 76th Meeting in Nancy and Action Items

The minutes of the 76th meeting were agreed. Nils Jensen, Peter Guterl, Eddy de Rademaeker and Jacques van Steen agree to form the Website Sub Group and report back at the next meeting.

Action: Website Sub Group to report on progress at next meeting.

All other action items from that meeting (Venue for LP 2013, Plenary Speakers for LP 2010 and Technical Presentation on Process Safety Indicators) were covered in the agenda.

5. News from EFCE

Georg Suter reported on EFCE activities (see Annex 1 for details).

Key Points relating to EFCE were:

- The newsletter was circulated by GS to WP members. They should forward to their engineering community
- EFCE would like to see a broader spread of EFCE press releases across journals
- CHISA 2010 were looking for a chairman + 2 other volunteers to make a contribution. Nils Jensen volunteered.

Action – 2 additional volunteers required - volunteers to contact GS.

- The next EFCE meeting would be in Paris, GS would attend.

6. EFCE Excellence Award in Process Safety.

The LPWP were the second EFCE WP to offer an award for excellence. In contrast to the EFCE award (which was for experience and prolonged service), the EFCE award for process safety was for new entrants to the field (typically researchers eg PhD students).

Three nominations had been received (Sklavounos, Van den Schoor and Di Sarli). There was some discussion on whether there were sufficient nominees to merit offering the award and also on the voting procedure. It was concluded that the award would be made and that electronic voting would be open to all WP members.

7. EPSC.

a) Collaboration between EPSC and EFCE LPWP

Georg Suter and Klaus Juergen Niemitz both made presentations on improving collaboration between EFCE LPWP and EPSC (See Appendix 2 and Separate PDF attachment "Niemitz"). The presentations covered what EPSC does and how it is organised along with opportunities for closer collaboration with the WP.

b) EPSC presentation on Process Safety Indicators

Klaus Juergen Niemitz gave a presentation on Process Safety Indicators (see separate PDF attachment "Niemitz"). He reviewed a range of topics including;

- The process safety accident pyramid
- Leading and lagging indicators
- US and European initiatives and steps towards a global approach

This was followed by a lively debate. Points raised were:

- What measures existed to promote Inherent Safety?
- Measures are dependant on full and accurate reporting
- Sites should identify the range of metrics most suited to their needs
- Metrics were needed at all levels of the organisation (industry wide, company wide, site wide).

c) EPSC Current Activities

Lee Alford described EPSC current activities (see separate PDF attachment "Alford").

EPSC were planning to set up a half workshop on process safety competencies on 26th April at Dechema. The background setting up the workshop is described in the attachment. They were looking for 6 to 8 speakers either to provide strategic overviews or detailed implementation guidance. It would be an opportunity to showcase what was happening in the EFCE communities and WP members were strongly encouraged to participate.

EPSC were also progressing the "Fostering Senior Management" project. The objective was to produce a template slide set and high quality DVD. It was 90% complete and expected to be finished by end 2009. The plan was to launch the package at LP 2010 but against the background of some experience of it being used.

8. Project "Fostering Senior Management Engagement for Safety"

This was covered under the previous agenda item 7c)

9. Election of the Chairman for 2010-2013

There was only one nominee for the post of chairman (Eddy de Rademaeker nominated by Jacques Clerinx). On this basis Eddy de Rademaeker was elected unopposed. He offered his thanks to the current chairman for his leadership and hard work over the last 6 years.

10. Selection of the venue for LPS 2013

Simberto Senni Burrati and Jaromir Skarka both made bids to host the 2013 Symposium on behalf of Italy and the Czech Republic respectively.

The Italian venue would be Florence. The target fee would be ca. 700 Euro per participant (including printed conference proceedings and social event), with a target attendance of 600-700. The conference would run Monday to Wednesday with 4 parallel sessions.

The Czech venue would be the Clarion Congress Hotel in Prague. Estimated fee would be 600-700 Euros (also including printed proceedings). Various financial issues (eg exchange rates, VAT etc) still had to be studied in terms of risk.

The attendees of the WP were invited to vote and Florence was selected.

11 Incident Reports

Mike Considine presented the slides prepared by Robin Turney on the Buncefield Explosion (see separate PDF attachment "Buncefield"). He described the findings of the Explosion Mechanism Advisory Group (EMAG). This group had concluded that the vapour cloud had undergone a detonation. The blast damage indicators radiated out from the centre of the cloud whereas indicators due to wind drag all pointed towards the centre of the cloud. Overpressure fell off very sharply beyond the immediate cloud as was evidenced by the different damage levels to cars just inside and just outside the cloud. EMAG had concluded that bushes and undergrowth led to the cloud accelerating to detonation. Further work was planned to confirm this mechanism.

12 Any other business

Papers would need to be reviewed a second time only where there was a significant difference of opinion amongst the original reviewers.

13. Any other business

Jacques van Steen informed the WP that the Educational WP was reviewing common educational requirements for process safety. Martin Pitt (UK) was planning a workshop on teaching process safety (See Appendix 3). Georg Suter noted that a model curriculum has been issued by EFCE. Peter Jan Bots told the WP that a group had been established in Finland to deliver seminars on process safety. They held seminars about twice a year.

14. Future Meetings of the Working Party

The next formal meetings of the WP would be immediately before and after the 2010 Symposium (6/6/10 with GS as chair and 9/6/10 with E de R as chair).

WP members were also encouraged to participate in the proposed joint meeting with EPSC on competencies at Dechema, Frankfurt, 26th April 2010 (see Agenda Item 7c)).

15. Paper Selection Process for LPS 2010

The paper review process was completed in the morning of the 18th. The WP divided into 4 teams:

1. Risk Assessment and Control
2. Human Factors and Safety Management Systems
3. Learning from accidents and knowledge management
4. Inherent safety, chemical reactivity and designing for safety

The papers had all been subject to review prior to the meeting. Papers were subject to further review where:

- They had been subject to only a single review, or,
- There was significant disagreement between reviewers

16. Administrative Aspects for LPS 2010

All arrangements were on track. So far 1 sponsor and 4 exhibitors had signed up. A technical visit on day 3 to the LNG terminal at Zeebrugge was under consideration.

The conference opening session would be performed by M. Joubert (Total). Plenary speakers so S Mannam (Mary Kay O Connor) and Hans Pasman. It was agreed that Georg Suter would contact O Salvi re a plenary on EPTIS. Mike Considine and Robin Turney also agreed to identify a potential plenary speaker on Buncefield.

Action G Suter, R Turney, M Considine to contact potential plenary speakers.

M Considine,
24/12/09

APPENDIX 1 – NEWS FROM EFCE

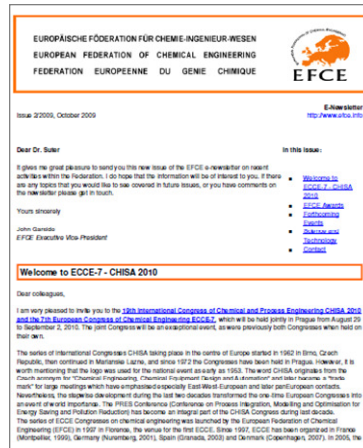


Europäische Föderation für Chemie-Ingenieur-Wesen
European Federation of Chemical Engineering
Federation Européenne du Génie Chimique

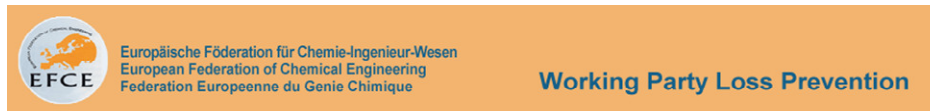
Working Party Loss Prevention

News from EFCE

- Newsletter is regularly circulated
- Initiative to spread press releases broader (Circular to WP members asked for names of journals)
- CHISA 2010: Symposium on Process Safety (1/2 day)
- 7th European Congress of Chemical Engineering ECCE-7, Prague, 29.8-2.9.2010



APPENDIX 2 – COLLABORATION WITH EPSC

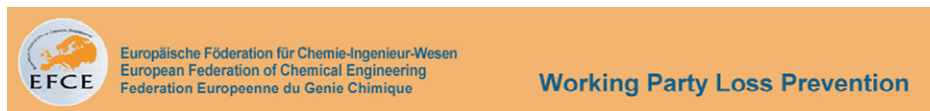


Collaboration EFCE – EPSC

LP Working Party



Technical Steering Committee



Status

- EPSC has its roots in the WP Loss Prevention.
- WP members are according to EPSC's statutes invited to attend the TSC.
- EPSC is more industry oriented.
- WP LP has more members from academia.
- Both bodies suffer from lack of time for doing project work and too much administration as compared to technical work.



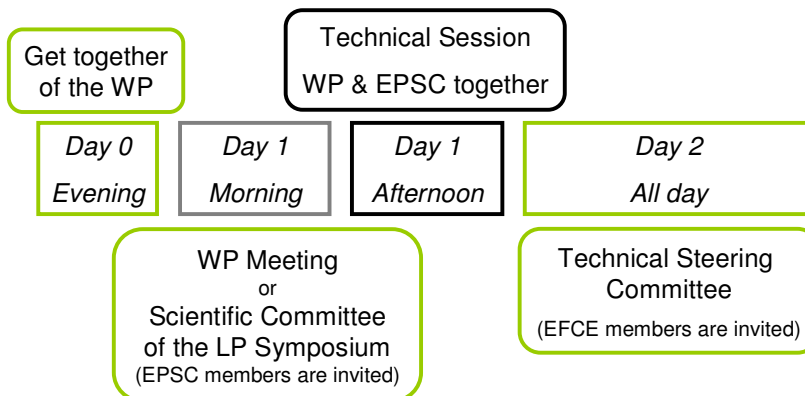


Proposal

- Establish closer collaboration without changing the legal status of the partners
- Organize WP meetings and TSC „back-to-back“
- Open the Scientific Committee of the LP for TSC members
- Carry out common projects (like DVD)



WP & TSC - Meetings





Start-up

- DVD Project is already running.
- 1st combined Meeting:
November 17th - 19th 2009
- 1st **TSC 2009** linked to **LP Symposium** in
Brügge - TSC members are invited as
additional jury members for the „premium
selection“ of conference papers.

European Workshop on Teaching Process Safety

- Dr Martin Pitt, Sheffield University, is planning a workshop to share experience in teaching Process Safety.
- Venue: Manchester.
- Dates: 18-19 January 2010
- Support from the EFCE Safety & Loss Prevention Working Party would be appreciated.