

# SUPPLY CHAIN AND LOGISTICS LEADERS BREAKFAST

**W**elcoming participants, the session's chair Johan Devos, Bertschi AG's Group Sales Director, said the aim was to generate both discussion and ideas about how to improve supply chain and logistics performance across the industry. He explained that the session would begin with a brief presentation from

**"WE ALSO NEED A NEUTRAL PLATFORM TO ORGANIZE COLLABORATION"**

Jan Fransoo from DINALOG, focusing on collaboration opportunities, followed by round-table discussions and reports on five specific topics: Shale Gas; Global Trade and HSSE Standards; Collaboration/DINALOG; Global Trade and Intermodal; and Shipping. Workshop output will be used to guide future work planning by EPCA's Supply Chain and Logistics Committee.

Devos reminded the workshop of how much progress has been made through EPCA's Supply Chain and Logistics initiatives. These have produced around 20 important publications and led to the creation of working groups and their reports, all of which continue to push the boundaries of increasingly strategic supply chain and logistics activities. Devos said: "Already in 2014, the Talent & Technology workshop has highlighted the importance of bringing in new, creative people to complement skilled staff in designing and implementing supply chain and logistics innovations, to enhance industry competitiveness and sustainability."

## TACTICAL COLLABORATION IN CHEMICAL SUPPLY CHAINS

Professor Jan Fransoo is Professor of Operations Management & Logistics, School of Industrial Engineering, Technische Universiteit Eindhoven & VP of DINALOG – the Dutch Institute for Advanced Logistics.

Jan Fransoo's main message to the European chemical industry was clear: to achieve competitive advantage and sustainability, pursue tactical collaboration, which requires a redefinition of product flows rather than simply sharing transportation.

To date, collaborative initiatives have focused on operational collaboration, the DINALOG vice president said. This is understandable, because it delivers relatively short-term, quick wins through working together. However, Fransoo feels that a lot of the low-hanging fruit in this area has been picked. And while strategic, structural collaboration is possible – through joint ventures, mergers and acquisitions – it requires major commitments to change.

For this reason, the time is right to pursue the many potential opportunities in the area of tactical collaboration, which involve forward planning and replacing material flows with information flows to add value to the supply chain, Fransoo continued.

DINALOG, the professor explained, is a public-private partnership focused on horizontal collaboration between producers and logistics service providers, and which is currently active in projects involving about 200 companies from several sectors. One of these projects is 4C4Chem, which is a partnership between several organizations – Technische Universiteit Eindhoven, SABIC Petrochemicals, Shell Chemical Europe

BV, Dow Europe GmbH, Den Hartogh Logistics BV, Cargogator BV, and VNCI – and which is aiming for a 5%-10% improvement in the current chemicals transport capacity utilization rates of 60%.

The project identified four key reasons for less than optimal capacity utilization: an imbalance between the location of production and consumption; empty returns; a short-term focus on optimization; and limited flexibility for carriers to plan shipments. While it cannot impact the first issue, 4C4Chem is addressing the others in three stages: Plan, Bundle, and Combine.

Plan involves improved forecasting and planning of transportation needs, and better short-term coordination between on-site and off-site logistics. Put simply, the aim is better alignment between shippers and carriers, by taking into account items such as end-to-end costs and turnaround times, and having transparency so trade-offs can be made in terms of investment costs in extra assets. The project has also developed a tool available to all partners to enable them to evaluate product swaps.

Bundle is focused on bundling barge transportation flows on the Rhine from the upstream chemical cluster to downstream users.

Combine is focused on minimizing flows of commodities by creating a virtual pipeline – based on the ARG ethylene pipeline model – by pooling production and inventories.

Fransoo said that achieving a 10% improvement in capacity utilization is a conservative target, but added that "While achieving this will take real commitment, it is definitely worth getting out of bed for!"

**JOHAN DEVOS**

*EPCA Supply Chain Program Committee Chairman,*  
SALES MANAGER BERTSCHI AG

**PROFESSOR JAN FRANSSO**

*Professor of Operations Management & Logistics,*  
SCHOOL OF INDUSTRIAL ENGINEERING,  
TECHNISCHE UNIVERSITEIT EINDHOVEN

## ROUND-TABLE DISCUSSIONS

### REPORTS:

#### TOPIC: COLLABORATION AND DINALOG

Do we agree that tactical collaboration is key for survival and that most other collaboration “low hanging fruit” has been picked up?

How do we see the redefinition of information flows? How is this to be implemented? What are the required set of tools and skills? Are we prepared? If not, what is the time frame to get ready?

What are the barriers against tactical collaboration, if any? How strong are these barriers and can they be overcome?

#### TABLE 4 | PATRICK MEERSMANS:

We had a lively discussion, as our table included procurement staff from the shippers and people from the Logistics Service Providers (LSPs). Our thoughts are that collaboration is not rocket science, but more about common sense. However, there

is an issue about information sharing and trust. We will always require some kind of intermediate organization or layer to start facilitating this, both in terms of IT systems and in terms of trust and transparency.

#### TABLE 7 | FRANK ANDREESEN:

Our table’s consensus was that having talked about collaboration for 15 years, there are still not many really great examples – DINALOG being an exception. We feel there is still resistance to collaboration. The further you go upstream in the chemical supply chain the more collaboration you have. The further you go downstream, and as you interface with many customers, the more difficult it gets. We also feel that while vertical collaboration is relatively simple, horizontal collaboration is much more challenging. So, it’s very important to implement the best practices we’ve mapped at so many conferences, and to make sure that we have the right levels of change management and leadership for collaboration, which relies so much on information sharing.

#### TABLE 9 | JEAN-CHRISTOPHE HERMAND:

Collaboration is not new, but we feel there is still a lot of low-hanging fruit that can be harvested and this is a good time to do it because we are greatly helped by new technologies and new thinking –

particularly the smart phone and related technology for organizing communications. But implementing new technology and new ideas requires management of change and a new culture. We also need a neutral platform to organize collaboration.

#### TOPIC: SHALE GAS

- What is the likely impact of shale gas in terms of logistics and existing supply chains?
- Do the regions which import shale gas have sufficient infrastructure to receive it?
- How will this intercontinental/land transport be organized?
- Are there specific HSSE items to take into account?
- Are we ready for imports/transport of shale gas? If not, what is the time frame?

#### TABLE 1 | PAUL GOOCH:

They say 10 days is a long time in politics. Well, two days is a long time in shale gas! Our table decided that products will flow, but this is not a simple picture: it’s not going to be all LNG(\*) or all polyethylene. It’s not going to happen overnight as there are a lot of serious issues about infrastructure in the US: \$140bn of announced investment is not going to happen overnight, and there will be serious engineering capacity restraints. Who will be the enablers – the players that will make this product flow happen? That’s

“IS SHALE GAS A SHORT-, MEDIUM- OR LONG-TERM PROPOSITION?”



**PAUL GOOCH**  
Managing Director,  
THE LOGICAL GROUP

## ROUND-TABLE DISCUSSIONS

**a critical question.** There are two players who have already announced they have the scale and muscle to deliver and build the capacity and receiving facilities. But they may be subject to the implementation restraints that we’ll see in the US. Looking at the demographics and the economics of Europe, we see a stable, ageing population, which is unlikely to increase demand, and we also have low or no growth and recession, which make life difficult. However, shale could be the trigger for some new capacity in downstream units in the future. There is also a view that shale gas may even save some European crackers and refineries because they are flexible, and have a wider slate of products being generated.

(\*) Liquefied natural gas

### TABLE 2 | ANTHONY ELWINE:

Our feeling is that there’s a lot of confidentiality about what’s going to happen with shale, and a lot of questions to be answered. We really need to have more information about tariffs, legislation and shipping. And what about longevity? Is shale gas a short-, medium- or long-term

**proposition?** Who’s going to make the investments – producers, Logistics Service Providers (LSPs), partnerships? What will happen in Europe regarding investment in shale gas receiving facilities? Will there be regional exploitation of reserves? Will there be arbitrage? Will we see smaller players exiting the market, and less competition? If there are fewer players, will we see collaboration becoming even more relevant? We need much more information to understand what is likely to happen.

### TOPIC: GLOBAL TRADE AND HSSE STANDARDS

- Do we agree there is a need for global HSSE(\*) standards in SC implementation and what should be done to achieve this implementation of Responsible Care in Europe and elsewhere?
- How do we overcome subsidiarity obstacles (freedom of nation states to deal with details of implementation of legislation) in this context?

(\*) Health, Safety, Security and Environment

### TABLE 3 | KEES VAN SEVENTER:

We talked a lot about HSSE standards and differences in them. Our conclusion was that companies should take the lead in trying to harmonize these and encourage institutions, such as CDI, to facilitate this process worldwide. There are cost elements, which we can’t hide,

especially with regard to local competition. This could be a serious issue, but we need governments to pick this up.

### TOPIC: GLOBAL TRADE AND INTERMODAL

- What remains to be done to make transcontinental and European intermodal really work?
- What is the role of equipment standards and infrastructure in this connection?
- How is Europe placed compared to the rest of the world?
- What is the effect of the subsidiarity principle?

### TABLE 5 | ROMUALD DE HAUT DE SIGY:

We started by talking about the rigidity and lack of flexibility in the system, and issues to do with port facilities. We also talked about the trade-off between passengers and cargo over waiting times, and about barriers in the system – how to collaborate across intermodal providers, how to cope with disruptive natural events, and human events, like strikes. We also see some stand-out issues around standards, particularly 60-foot, when lots of us are working in 40-foot. Another key issue is rail regulation and lack of standardization across the EU.

**TABLE 8 | PETER MARSHALL:**

Our table feels that in Europe today we have a pretty well-established intermodal operation, with a pretty dense network that functions quite well, although it can always be improved. We contrasted that with the US, where intermodal is underdeveloped. But how do we connect up today's network more globally, particularly regarding flows from the Middle East and elsewhere? In the ports we need more multimodal terminals, and IT infrastructure for tracing and tracking, etc. We also looked at what is a very interesting topic: the relationship between shippers and their customers, in terms of changing daily or weekly flows, and how these impact LSP capacity utilization. We looked at whether it's possible to work together to iron out inefficiencies, although we acknowledged this was moving into a tricky commercial space.

### TOPIC: SHIPPING

- Global trade and ocean port & hinterland connections
- Are chemical regions ready for increased exports / imports?
- What is the impact of infrastructure? What is to be done to improve it? By whom?
- Impact of new regulation on low sulphur gasoil /diesel on marine transportation?

**TABLE 6 | DR. ANGELA STIEGLITZ:**

Our discussion focused on trade and infrastructure, and we had a good combination of shippers, LSPs and port representatives. There are ample examples of infrastructure bottlenecks, such as truck driver shortages in the US, or congestion

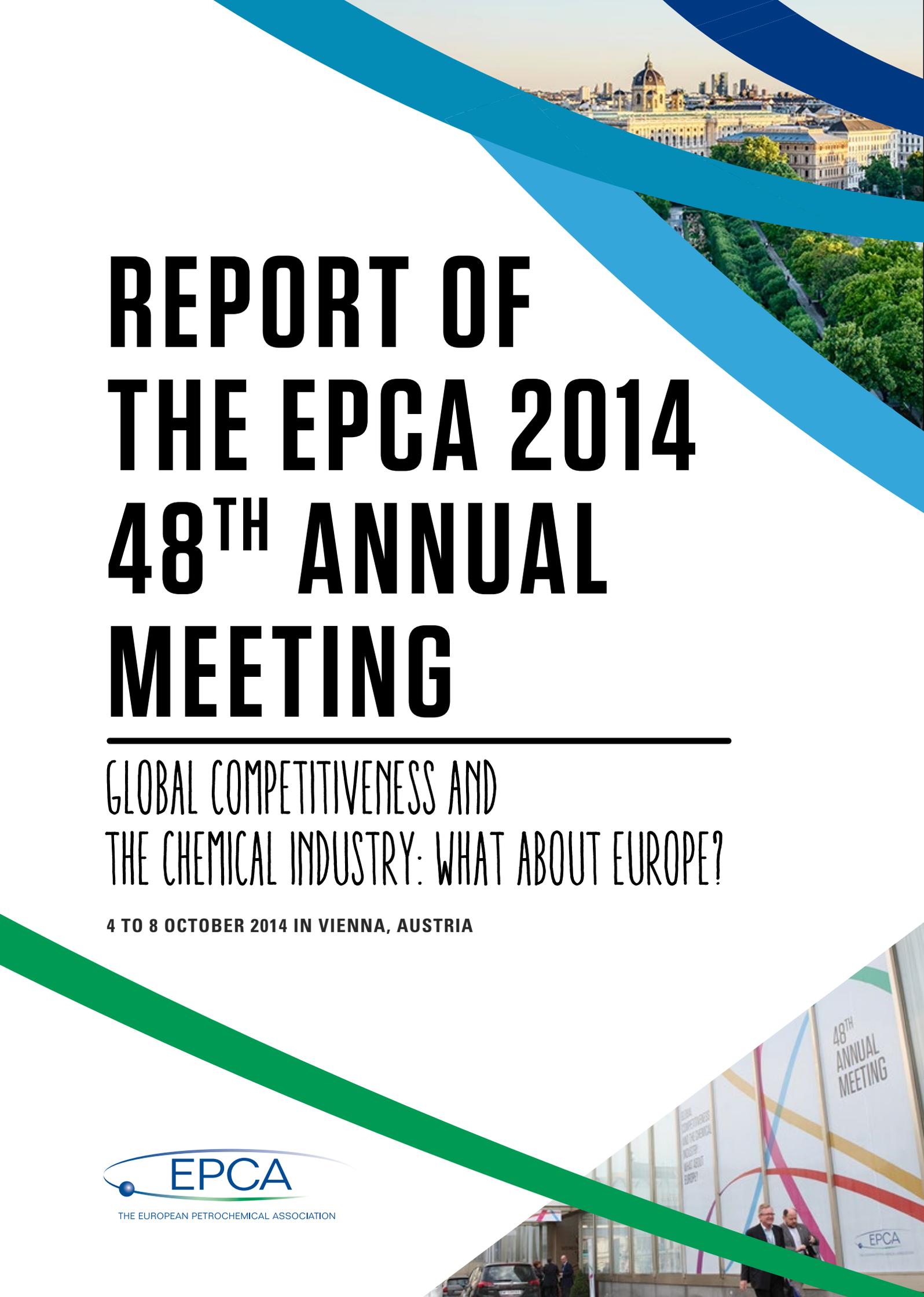
**“OUR THOUGHTS ARE THAT COLLABORATION IS NOT ROCKET SCIENCE, BUT MORE ABOUT COMMON SENSE.”**

in European and Asian ports. There are capacity issues at ports and with hinterland equipment, facilities, personnel, etc. It's a broad topic. In the next 30 years, transport demand is set to double, which means a significant challenge. Will we be able to cope? New ports are being built, but there is also a need to upgrading existing facilities. There are big issues of timing given the long lead times on infrastructure investment, even if the political will exists. There are issues between the private and public sector, and there are broader political issues to be addressed. Companies can address some of the short-term issues through investment and collaboration, but we need to work across industry sectors, and across governments.

### SUGGESTED FUTURE SC/LOGISTICS TOPICS FOR EPCA TO ADDRESS IN THE NEXT 3 TO 5 YEARS:

- Review progress made against the work of previous EPCA think tanks and workshops. How are we doing? What progress is being made? Where are the gaps and what are the barriers?
- What's changing in European supply chains and logistics as a result of changes in global flows?
- Where are we on European infrastructure?
- Can we better synchronise delivery from the shipper with when the customer needs to receive the material, to improve space/time performance?
- Look at practices outside chemicals sector – perhaps automotive – and look at technological breakthroughs and developments, such as driverless trucks.
- Intermodal technology: what's needed to make the system work better?
- Look at connectivity tools to iron out problems in the intermodal system.
- Look at intermodal capability development, especially from the perspective of extending collaboration outside of Europe to develop global trade.
- Better coordination and collaboration for activities between EPCA, CEFIC, ECTA and the many other associations in Europe.
- Responsible Care®(\*): 5 years after the introduction, it is time to examine progress.

(\*) Responsible Care® is the global chemical industry's unique initiative to improve health, environmental performance and security, and to communicate with stakeholders about products and processes.



# REPORT OF THE EPCA 2014 48<sup>TH</sup> ANNUAL MEETING

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GLOBAL COMPETITIVENESS AND  
THE CHEMICAL INDUSTRY: WHAT ABOUT EUROPE?

4 TO 8 OCTOBER 2014 IN VIENNA, AUSTRIA

