

# DryportQuarterly

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## Dryport Conference attracts global audience



The many ways in which dryports can be conceived, designed, developed, operated and optimised to support innovative and effective supply chains were discussed in detail at a major conference organised by Dryport's Scottish partners, SEStran and Transport Research Institute (TRI), with the involvement of two more Interreg projects – NMU and StratMos.

This was the UK's first ever Dryport Conference and the event, held in Edinburgh, offered a wide range and depth of experience among speakers and delegates.

More than 130 academics and industry professionals from 29 countries all over the world converged on the Balmoral Hotel to share their experiences and learn more about dryports and their potential.

"A crucial function of dryports is to encourage modal shift away from road transportation to more environmentally sustainable sea and rail options," said SEStran's chair, Councillor Russell Imrie. "As the nation's highways become increasingly clogged with traffic, finding ways of reducing the number of lorries rumbling through our towns and cities – and the consequent rise in greenhouse gas emissions – has become an urgent necessity."

The Scottish partners' participation in the EU Dryport project puts Scotland firmly at the cutting edge of developments in global freight distribution, he added.

Gordon Wilmsmeier, of TRI, said: "The research, industry experiences and case studies presented at the conference provided a global perspective on the current challenges in intermodal hinterland strategies and dryports. Our main benefit was the recognition from academics and industry of the need for an exchange of ideas and concepts, in order to find solutions to current problems and to give incentives to future developments.

"The discussions on dryports in five continents demonstrated the relevance of cooperation between private sector, institutions and planning."

However, he said that while the conference highlighted the value of effective intermodal strategies as a contributor towards a more sustainable way of freight transport, it also became clear that new and improved intermodal solutions require political will to drive developments.

The conference attracted a host of prestigious and high-profile speakers, including Lord Tony Berkeley, chairman of the UK's Rail Freight Group; Dr Charles Kunaka, a senior trade specialist in the World Bank's International Trade Department; Bruce Lambert, the executive director of the Institute for Trade and Transportation Studies in the US; and Dr Tengfei Wang, economic affairs officer at the Transport Division of the UN Economic and Social Commission for Asia and the Pacific (UNESCAP).

Russell Imrie said: "It is important that we now follow up debate with action. Scotland has much to gain from the Dryport concept and, with our partners in the project, we aim to develop it as a viable option for future global trade based in Scotland."

### From the project manager...

It was a great pleasure to attend the Dryport Conference in Edinburgh. More than 130 delegates were present for two days and listened to 35 speakers.

The Transport Research Institute (TRI) and SEStran organisers were justifiably proud that delegates had come from 29 countries all over the world. This confirms that the theme of inland connections is popular amongst researchers. The next step will be to condense the results of this conference into three special publications. Even the reaction to the call for papers has exceeded our expectations: 25 papers are in now and being edited by a team of three.

For the partners in the Dryport project, the next challenge is to filter what is essential for our purposes. Our main goal remains the integration in one way or another of a port's activity with its inland terminals, and vice versa. ICT must play a role in smooth and efficient (container) goods handling. We will be discussing which port functions can/should be moved inland (storage, warehousing, custom facilities, logistics knowledge?); how the development of dryports can/should be influenced by authorities, as often large infrastructure investments are involved; what environmental impact and advantages a system of dryports offers; and whether dryports really do support the modal shift from road to rail or inland waterway.

Dryport concentrates mainly on import/export goods flows between inland terminals and ports. The main connection between the two (or more) destinations should be rail and inland waterway. A key question could be about the relationships between dryports, also considering domestic goods flows.

But our first goal is to improve and promote dryports!

#### Dryport: the targets

"Dryport – a modal shift in practice" is a public/private sector project set up with Interreg IVB North Sea Region funding to examine the way in which hinterland intermodal freight transport hubs can best operate to cope with current and future traffic flows and the challenges of port congestion.

Partners work individually on regional dryport projects and together at workshops, seminars, business exchanges and port visits.

Dirk Harmsen

# Melbourne learns dryport lessons

The Dryport Conference attracted very specific interest from Melbourne, in Australia, where plans are being discussed to set up a network of dryports to ease pressure on the port.

Among the delegates at Edinburgh was Mark Curry, – freight network planning director in Victoria Department of Transport's freight, logistics and marine division.

Throughput at Melbourne, the biggest container port in Australia, is approaching 2.5 million teu and congestion is already an issue. However, volumes are forecast to increase to 8 million teu by 2035, says a discussion paper, 'Shaping Melbourne's Freight Future'. It is expected that more than 80% of that will be heading through inner suburban Melbourne to and from locations within the metropolitan area.

"Eighty per cent of containers through the port stay within 30-40 kms of the port, so there is a big distribution task," said Mr Curry. "And the port is right

in the centre of the city, which is getting increasingly congested. We are looking to develop three hubs around the fringes, for short-haul delivery."

Extensive consultations are ongoing and a final position paper and implementation plan will be ready mid 2011, he said.

As well as attending the Edinburgh conference, Mr Curry took the opportunity to visit dryports and inland terminals in the UK and elsewhere in Europe, to learn about common issues.

"The trick for us is working out what should the public sector invest in and what is the private sector best placed to do," he said.

Three sites have been identified for Melbourne's proposed intermodal hubs, which would be served by a mix of rail and road. Already there have been local trials using Australia's unique high-productivity "Super B double" trucks, which carry two 40 ft containers each.



Mark Curry | Freight Network Planning Director



Stewart Stevenson (right), until recently the Scottish Minister for Transport, Infrastructure and Climate Change, met partners in the Dryport project on the evening before the opening of the Edinburgh conference.

Mr Stevenson welcomed the partners to the City Chambers for a dinner buffet and discussions about the aims and aspirations of the EU Dryport project. He emphasised in his speech that the climate change aspect should be considered in every policy decision, not the least in transport.

## Dryports: an economic necessity in emerging markets

New figures released in October suggest that by 2030 the EM7 (emerging market countries) will outdo the G7 economies by 37%, said Raghv Dayal, of the Asian Institute of Transport Development. "That throws up huge challenges and the need for these countries to develop their economies."

The development of dryports in the hinterland is an economic necessity for these markets – there is no choice, he said.

"Goods have to move from origin to destination through a seamless transport system; if it is seamless and door-to-door, then in order to get optimal benefits, it is essential that a port uses ICDs (inland container depots) and CFSs (container freight stations), he said.

There are about 135 dryports operational in India and the country's gateway ports are leaning more and more on such facilities, which can enhance container terminals, said Mr Dayal.

ICDs and CFCs have been set up by railway operators, warehousing companies, shipping lines and logistics operators, among others.

Mr Dayal described India's rail capacity as the country's 'Achilles heel'. India is a country with rising disposable incomes and particularly a younger generation with money to spend, he said. Growing consumption is leading to higher container volumes, and so the pressure increases on the transport infrastructure network.

"Ports and dryports need to brace for huge growth. Gateway ports need to expand and modernise – quantitatively as well as qualitatively," he said.

His views were echoed by Girish Gujar, a visiting lecturer at the Hong Kong Polytechnic University who is also pursuing his PhD at the centre for Maritime Economics and Logistics at the Erasmus University, Rotterdam.

"By 2014, India will require 6 million teu additional capacity," he said. "Three ports are handling 90% of Indian cargo. Huge investments are required to create the necessary infrastructure. The role of dryports is definitely extremely important in the country's international trade."

Mr Gujar outlined the 'eco-DEA' model developed to calculate the efficiency and carbon emissions of

dryports or inland terminals and identify the most efficient from a carbon point of view.

"Analysis based on this new model gave a clear signal that the negative impact originating from the transportation process cannot be ignored," he said. He described climate change as an elephant in the room, and said there was 'wilful ignoring' of that elephant.

Delegates also heard from Vaibhav Shah, of CONCOR, the organisation set up to promote, provide and manage multimodal transport in India.

Issues faced by Indian shippers included high port charges, archaic labour laws and minimum standards and productivity, he said. Transport patterns mean a high number of empty containers moving on the country's roads, adding further cost.

He called for more flexibility in relation to labour laws, and said there was a need to improve worker awareness and link wages with motivation.

# Which pearl is prettiest?

It is hard to explain to the man in the street about transportation – even though it is what their very lifestyle depend on, said Bruce Lambert, executive director of the Institute for Trade and Transportation Studies in the US.

He discussed how shippers make their choices in the US – while there are clearly captive areas for the West Coast and East Coast ports, Mr Lambert showed the large circle in the middle of the country that is essentially up for grabs as far as ports and logistics providers are concerned – “everyone is aiming for this area”.

However, he said, while logistics and supply chain operators focus on the best solutions, there remains the ‘damn truck’ syndrome among the general public.

“Everybody wants logistics in the US. It’s like everyone wants to go to heaven, but nobody is lining up to die. And the 2035 forecast of freight in the southeast US shows we will be handling more trucks than total freight volumes now. Will we choke on the congestion first?”

*“In many ways, we are still stuck on ‘my pearl is the prettiest’. We need to look at the entire string of pearls; we want ongoing profitable relationships where everybody wins.”*

There is the added challenge of being constrained by decisions made in the past – take low bridges, for example.

“We all agree that these things are important,” said Mr Lambert. “But there are three groups not listening to us. First, the shippers – they are too busy. Second, the general public – which doesn’t understand transportation at all. And third, the public decision-makers are not listening.”

A supply chain is like a string of pearls, where each pearl creates value, he said. An effective supply chain needs each ‘pearl’ – including the ship, the port, the Customs agency, the terminal and so on. “But in many ways, we are still stuck on ‘my pearl is the prettiest’. We need to look at the entire string of pearls; we want ongoing profitable relationships where everybody wins.”



The Port of Los Angeles: ‘West Coast US ports clearly have their captive markets’

## Viability and reliability

**Political and other changes can have serious implications for the viability of a dryport, said Charles Kunaka of the World Bank.**

Dr Kunaka, who is based in Washington, but has 20 years’ experience working on regional transport issues in Africa, described how the World Bank and other donors funded a project to give Malawi shippers access to Dar es Salaam. In the 1980s, Malawi relied predominantly on routes through Mozambique for access to the sea, and therefore world markets – but then civil war in Mozambique cut off those routes and the alternative, Durban, involved 3,500 kms of overland transport.

The solution was the construction of a dryport at Mbeya in Tanzania, close to the Malawi border and 1,300 kms from the seaport of Dar es Salaam.

By 1994, 40% of Malawi traffic was passing through this dryport – then the routes through Mozambique reopened and volumes plummeted as traffic switched back to alternative routes almost overnight.

Dr Kunaka highlighted some of the considerable challenges involved in African logistics – illustrating his point with pictures of a dryport in Tanzania covered in grass, and another dryport holding just six containers.

“We have to deal with small volumes of traffic in many of these countries and the poor performance of the railways,” he said. “90-plus per cent of traffic is moved by road in most African countries. Because of that we have serious problems at the border posts – go into Google Earth and you can see the queues of trucks waiting to go through.” There can be as many as 18 government agencies involved in border post inspections, he added, and while Customs are now generally computerised, “other agencies are not and are still using Flintstones-type technology”.

In Africa generally, exports tend to go out through one route and imports come in through another, leading to a lot of empty running in both directions. There is also the challenge of serving the high number of SMEs, shipping small-scale volumes.

Dr Kunaka highlighted the need to tackle constraints along the supply chain corridor and added: “You have to be careful you are not simply shifting a problem from one place to another. Look at how the whole corridor is performing, rather than just one section.”

That includes issues such as rail compatibility. The City Deep inland port serving the North-South Corridor in Southern Africa handles approximately 200,000 teu a year, but has the capacity to handle four times that, he said. “But there are problems with changing locos at borders – that is one reason why cargo by rail is declining.”

Dr Kunaka said reliability was more important even than cost or time. He concluded: “Assessment of dryports really needs to focus on logistics costs and we need to look at the chain as a whole: maritime, cost and reliability, and reliability is emerging as the major issue.”

# Key messages from Edinburgh...

## Government decision-making

Prof Kevin Cullinane, director of the Transport Research Institute (TRI) at Edinburgh Napier University, emphasised the role that dryports can play in dealing with growing freight flows and providing additional operational and storage space for ports. The value of and need for dryports should be understood and recognised in government policy at local and national level, he said.

"That is not to say it is dependent on government decision-making – the main instances are of private investment in dryports. But government at local and national level can do a lot to facilitate dryports and the decision-makers need to address the issues," he said.

## Tell the world

"It doesn't matter if you have the best project in the world if you don't tell the world about it!" These were the words of Christian Byrith, head of the secretariat for the EU's North Sea Region Programme.

He emphasised that the role of EU projects like Dryport is to build synergies, focus on real action and demonstrate the work that is being done. "We are looking for less focus on fancy words and more focus on action, on delivering tangible results," he told delegates.

## 'That's odd – we are on an island'

Scotland is suffering from 'double peripherality', said Dr Gordon Wilmsmeier, senior research fellow at TRI and an active partner in the Dryport project.

The country suffers from technical, financial and market discontinuities which challenge accessibility, and it is heavily dependent on maritime services via remote southern England ports 600 to 700 miles away – "which seems odd, because we are on an island".

"We are peripheral with regard to Europe but also with regard to the UK and there is a failure to exploit the benefits of a Scottish maritime highway – compared to other countries, the amount of cargo moving through Scottish ports is very small and the biggest flow comes up by truck."

And yet Scotland is an exporting nation, he emphasised. "And by 2014 we will have a problem in capacity if we don't do anything. There is an urgent need for ports in Scotland and we need political support."



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## Call for rail freight competition

Rail freight in the UK has grown by 60% in terms of tonne-miles in the past 12 years and intermodal traffic has grown 21% in the past four years, despite the recession and a fall in box volumes through the ports, Lord Tony Berkeley said.

"So the market share of rail freight volume has increased – this is largely down to competition and fair open access for operators."

The overall future for rail freight in the UK is positive, "providing we can get the financing right", said Lord Berkeley, who is chairman of the Rail Freight Group. "Road congestion is getting worse, there is concern about CO<sub>2</sub> emissions, and fuel costs are going up."

However, he said it is remarkable how few people understand the similarities between terminals for freight and stations for passengers. "No station: no passengers. A lot of politicians look at me and say 'I never realised that'."

"We need big hubs and we need little hubs and we need open access hubs – and we need warehousing as close to rail as it can be."

He highlighted the EU's proposals to open up rail terminals to any train operator that wants to use them, provided there is capacity. "It would be much better if the rest of Europe accepted competition and I hope the EU proposals will go some way towards that."



## Changing patterns

Our world is changing and logistics patterns will follow, said Stephen Taylor, of PortCentric Logistics Partners. "Forward-thinking port communities and their service providers are planning and investing for more change."

"There has been a little pause with the economic downturn but congestion issues are returning, fuel prices are rising and hence the cost of the supply chain is increasing. That causes change."

In a carbon-constrained society, we should be considering supply chain solutions which take advantage of both portcentric logistics and dryport solutions, he said.

"They tick the same boxes: lower oil usage, less carbon, more reliability, more visibility of freight and a better supply chain."

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