Dryport evaluation per work package
WP 5 IT & Security

One of the major factors in Dryport's IT and security activities has been its involvement in the newly formed European Port Community Systems Association (EPCSA).
Port Community Systems are at the heart of the maritime, shipping and logistics industry; the electronic communication platforms they provide represent the vital cog in the smooth transport and logistics operations that drive day-to-day trade across Europe.

The establishment of EPCSA, which is part-funded through the Dryport project, has given Port Community Systems a common lobbying position at the European Union.

One of the key policies being pushed by the European Commission is the Single Window concept, along with a number of other initiatives and directives such as e-customs, e-freight and e-maritime. Port Community Systems can, and will, play a major role as Europe moves towards Single Windows. EPCSA members will explain to EU institutions and others the central role of Port Community Systems in facilitating trade, and provide an important source of expert opinion, with the potential to save the European Commission time, money and effort by creating a picture of what is already possible.

For the Dryport project, this involvement has provided valuable input and expertise on the implications of IT and security when planning/considering dryports and how they could operate.

Early on in the Dryport project, Emmen and Coevorden hosted an IT and Security workshop in November 2009; this attracted high-profile and prestigious speakers and generated some enthusiastic and well-informed discussions.

Among the speakers, Berry Hanssen, of DSV Solutions Nederland BV (Customs) talked about the implications of global security and the ISPS Code on dryports. Alan Long, of Maritime Cargo Processing (MCP), discussed how Port Community Systems could be adapted for dryports, and Paul Swaak, of Portbase, talked about how collaboration and clever logistics can reduce a supply chain's footprint and reduce congestion.

It was at the Emmen workshop that Banverket (now part of Trafikverket – the Swedish Transport Administration) first outlined to Dryport partners an RFID (radio frequency identification) system being piloted on key routes in Sweden. Banverket's idea was to set a main pilot based on passive tags on the 130 km stretch of railroad between the sea port of Gothenburg and the dryport at Falköping.

This system of tagged identification of individual freight wagons allows for proactive wagon maintenance and delivers other benefits. Based on trackside detectors, an early warning system reduces maintenance costs, ensures less disruption of traffic, but it also allows more efficient shunting and ensures correct train assembly.

The pilot programme involved fitting 'passive' tags to a number of freight wagons in a regular shuttle, to be read by trackside readers placed at strategic points, with the necessary software and database built for the system.

As well as promoting more efficient goods handling, an important point of the system would be to create an early warning system based on individual wagons, to avoid damage to tracks. Long-term, the aim is to make the system available to third parties – for example, a port – which would be able to access advance information on the exact composition of a goods train and could therefore plan container handling and shunting in the port. One of the goals of this sub-project is to achieve a European standardisation of RFID. It could be used for tracking and tracing wagons and freight across the whole of Europe, said Mats Åkerfeldt of Banverket. This could deliver a better use of resources, lower freight costs, reduced environmental impact and correct charging.

Other pilot projects by Banverket have been completed on SSAB's steel billet trains between Luleå and Borlänge; SCA's paper wagons between Munksund and Holmsund; Stockholm commuter trains; and the post train from Stockholm to Gothenburg.

The vision is to build an infrastructure of 700 RFID readers along the Swedish Rail Authority's track, focusing on major junctions/stations and shunting yards.

The RFID pilot within the Dryport project was completed in 2012 and a finals report has been produced.

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