

Conference on Port Logistics Performance

Organized by the ISEL and French Customs
13, 14 and 15 November 2012
Le Havre, FRANCE

This conference was organised by French Customs who hold the ISEL Chair of logistic performance. The ISEL is a public engineering institute in France in the field of logistics. Jean-Michel Thillier, Director for international trade, French Customs, decided to take advice from known experts of logistic performance and trade facilitation issues, but also from professionals, in order to describe the state of the art in this area, expose key issues and suggest solutions.

During three days experts have presented their current researches and participated to two workshops which have further explored the measurement of logistic performance, developed future research programmes, scientific productions and partnerships.

The following experts were invited:

- Jean-François Arvis, the World Bank
- Alberto Behar, The International Monetary Fund
- Samson Bilangna, The World Customs Organisation
- Bismark Sitorus, The UNCTAD
- Yann Duval, The UNESCAP
- Xavier Pascual, French Customs
- Thomas Vitsounis, The University of Aegean
- Laurent Lévêque, The University of Le Havre
- Olivier Desplebin, The University of Le Havre

Main professionals were:

- Hervé Cornède, Commercial Director of the Port of Le Havre
- Olivier Jean-Degauchy from the SOGET, a provider of port communities services
- Syndicates of maritime and forwarding agents

Students of master's degree in logistics and engineers of the ISEL, and the French Customs academy of Rouen also participated (video conference).

ISEL

Thierry DERREY



Host organisations

French Customs

Jean-Michel THILLIER
Thomas ORLIAC



Executive Summary

This conference on port logistics performance has been organised by the French Customs and the ISEL, the 13th, 14th and 15th November 2012. Jean-Michel Thillier, Director for International Trade at French Customs, presented the new missions of Customs which are mainly trade facilitation oriented. For that purpose French Customs put in place a series of performance measurement tools, developed risk analysis and automatic systems leading to the single windows concept. Consequently the performance of Customs improved, showing an increase of productivity, paperless uses and quality of service. The decrease of Customs clearance time (less than 6 minutes), the tiny rate of control (around 1% of containers) and quality surveys show a positive trend.

However the whole supply chain needs to improve its efficiency. Numerous studies stress the importance of logistic on trade costs and all actors have to work together to make France a more attractive place. In addition, such cooperation could benefit from clusters organisation. According the port authorities the core component of the supply chain is information: its fluidity and its advanced transmission. It is even more important than infrastructure issues. In France, information is collected through a Cargo Community System (CCS) called AP+. As pointed out by the SOGET, the CCS provider at *Le Havre*, it is a collaborative tool aiming to improve productivity, security and the rationalisation of processes.

Port is a complex notion. All along the history various dimensions of port performance emerged, from geographical to political, economic, environmental or even reputation issues. That is why there is a lot of ways to measure port performance, as pointed out by the European Sea Ports Organisation (ESPO) who enumerated 159 indicators to measure European port performance. Standardized measures for international benchmarking are more limited. The World Bank, the World Economic Forum and the UNCTAD provide some global indicators for policy dialogues. These indicators cover the time, the cost and the efficiency of the import/export process. Recently connectivity issues and the variance of delays have known a growing importance. These indicators are simple and useful, but suffer from methodological issues. Most of them are based on perceptions and even for hard data the correlations with firm-level data sharing the same dimensions are limited. That is why they have to be completed with specific studies focusing on a port, a corridor or a sector.

Time Release Studies (TRS) frameworks could be useful for countries who want to improve the efficiency of their import/export processes. At least "*it opposes figures to rumour*". However it appears that TRS are too much Customs oriented and there is still a need for in-deep analysis. Recent works of the World Bank tried to go beyond. They explore the whole supply chain processes and measure the time to proceed at each step, according actors, risk channels or product characteristics. The time processing charts show also anticipation and parallelism issues, both through physical and informational channels. The analyse of data goes beyond the simple average by using standard deviations or correlations between steps for example. The CCS are good candidates to launch such studies in France.

About the ways forward, it has been suggested to explore the information flow, the granularity of information, the impact of security measures, the role of clusters and sustainability issues.

Brief summary of each lecture

Jean-Michel Thillier opened the conference. He described the current projects led by French Customs and its vision of past, present and future issues. The missions of Customs changed. Following the development of new technologies, Customs moved towards the automation of the whole trade process and ultimately to the creation of a single window and one stop shop initiatives. One of the main objectives of Customs is to facilitate trade by reducing administrative burdens, controls and delays, through the development of risk analysis methodologies and advanced information delivery. Thus, Jean-Michel Thillier pointed out that only one percent of containers are controlled today and that Customs clearance time are limited, reaching zero minute for the green channel.

Session 1

Mr Lévêque showed that the port is a complex notion, converting macro-flows to micro-flows, flows with high variability to industrially regulated flows. It is “a reticular space”. He classified ports into two categories according their nature as nodes or clusters. He explained that the measure of performance vary within each category, from natural aspect and size of flows for nodes to more value added indicators for clusters. Indeed port clusters characteristics include imitation effects and increasing returns which benefit to the hinterland. For him, the port of *Le Havre* does not reach the potential of its hinterland contrary to other European ports like Rotterdam or Antwerp. Finally he exposed its views on the Seine Axis and the challenge of a large port. This project, known as HaRoPa, aims to use the Seine as a river highway between *Le Havre*, *Rouen* and *Paris*, a central network.

Mr Desplebin described the emergence of various performance dimensions through the historical development of *Le Havre*. Performance requirements have changed along the way, starting with pure geographical components such as the maritime quality of the bay, to political and regulatory components, to the development of technologies and networks, to the governance, and recently more economical components such as operational ones (time, cost, productivity, connectivity, security, reliability), financial (cost, price, assets), socio-economics (employment, wage, investment, restructuring), environmental or reputation ones.

Mr Bilangna first described the WCO, then the Time Release Study (TRS) frameworks and several case studies. He exposed a [new guide](#) which includes private partners, import and export sides, and communication tools. It should avoid the current “pro-customs view” of the process. The TRS can be used for various purposes such as macroeconomic issues, strategic planning, management, coordination, modernisation, or also benchmarking. But at the end of the day “it opposes figures to rumour”. He detailed the cases of [Australia](#), Cameroon and Uganda (a landlocked country). Each case leads to unexpected conclusions. Thus it appears that Customs anticipating tools are not always used by Australian firms and that transit countries sharing borders with a landlocked country are not always the weakest link of the chain.

Mr Pascual explained the French Customs strategy in the area of performance measurement. He detailed a series of objectives following the budget law and its [programme 302](#) which covers security and trade facilitation issues – so Customs missions. These objectives are related to citizens, users and taxpayers. They serve as the base for the performance plan. Today the French Customs have developed advanced [performance measurement tools](#) and continues to improve trade facilitation issues making France a more attractive place to trade. Thus clearance delays have decreased up to 6 minutes and numerous facilities have been developed since few years.

Mr Jean-Degauchy introduced the [SOGET](#) and detailed the Cargo Community System (CCS) AP+. This system collects information from all actors of the chain. It is a collaborative tool looking for synergies, it is like “*the facebook of products*”. The CCS aims at improving productivity and security, through the automation and the rationalisation of processes. The current concerns are related to the interoperability with different systems and the development of a complete single window. The CCS can also provide analysis tools to its client (dashboards). Finally Jean-Degauchy showed a time processing chart of the containers flows of *Le Havre* and *Cotonou*, the latter showing a huge impact of the introduction of the CCS in terms of reduction of delays (falling from 8 months to 2 days).

Mr Vitsounis exposed the European Sea Ports Organisation ([ESPO](#)) initiative which aims to measure the performance of European ports on standardized methods, the Port Performance Indicators – Selection and Measurement ([PPRISM](#)). It is a project co-funded by the European Commission to deliver a short-list of indicators that form the basis of a future European Port Observatory. The original set of indicators included 159 indicators covering various dimensions, but the final dashboard has selected only 14 indicators falling within the scope of the five following categories: Market trends and market structure indicators, Socio-economic impact, Environmental performance indicators, Logistic chain and operational performance, and Governance indicators. The methodology followed and [publicly available](#) could be usefully applied to the French case.

Mr Arvis presented the World Bank's view about logistic. He pointed out the importance of services, security and connectivity issues. He also explained that the variance of delays could have exponential effects. He suggested exploring new ways for research, as the merge of cluster theories and supply chain theories. Finally he pointed out the growing importance of logistics observatories around the World.

Session 2

Mr Arvis exposed his view on international logistic indicators divided according their purpose (macro or micro). He detailed the [Logistic Performance Indicator](#) (LPI) which is designed for policy dialogue. He claimed that the LPI is built from the point of view of traders. He also pointed out the subjectivity of the scores and the difficulty to determine the right profile of respondents. But the LPI team encourages any collaboration on data. He presented also briefly [Doing Business](#) and the expansion of its original scope to the field of trading across border few years later. It was a good idea, simple and designed for benchmarking. However there are some methodological issues, especially for the logistic dimension which is quite complex. According to Mr Arvis these international indicators are mainly for policy purposes but they have to be completed by specific analysis on ports or corridors.

Mr Sitorus explained the UNCTAD and its index, the Liner Shipping Connectivity Index (LSCI). Data are [available on-line](#). He described the growing divergence of the LSCI components, between the increase of ships' size and the decrease of companies. Finally he showed a new bilateral index based on the LSCI. It appears to have a high potential for future research.

Mr Behar presented an international [comparison of alternative sources of trade facilitation](#) data such as the LPI, Doing Business and the [Enterprise Surveys](#) firm-level data of the World Bank. He showed that it remains huge differences between these apparent similar indicators, expressed by low coefficients of correlation. He pointed out some methodological issues. For example Doing Business data are collected from lawyers, not from the current service providers. He concluded by arguing in favour of specific indicators an in-deep analysis, e.g. sectoral ones.

Mr Arvis described the recent approach of the World Bank regarding border performance measurement, especially port performance. Using fact base analysis, their objective is to put in perspective Customs clearance time and port clearance, going beyond Time Release Studies which are too much Customs oriented. In order to analyse the propagation of phenomena, it is essential to decompose the process by steps, actors and risk channels but also to trace possible anticipation and parallelism issues. Processes can also be divided in physical and informational levels. About the analysis of such surveys, it is important to go beyond the simple average by studying, standard deviations, correlations between stages, impacts of trade or trader characteristics (sectors, containers, AEO, size of operators...) and break points.

Round Table

The French Customs (Mr Thillier from the General Directorate of Customs and Excise and Mr Marin from the regional Customs office of Le Havre), the Commercial Director of the Port of *Le Havre* (Mr Cornède) and the SOGET (Mr Jean-Degauchy) debated on port performance. It appeared that information is the core component of the supply chain. The fluidity, the interconnection -cooperation- between actors and systems are essential. According to Mr Cornède, information issue is more relevant than infrastructure one, at least it should be considered first. In addition to efficient processing time, the port has to provide differentiated services to its client to remain competitive. That is why the approach of the port is to analyse its performance through its users point of views (industrials or logistic providers) and even by using their own indicators.

Workshops

The objectives of the two workshops were to discuss about the E-Maritime observatory launch by the ISEL and to provide new areas of research. Suggestions were about the information flow (the way it is organized, the interoperability), the granularity of information (commercial vs. customs data), the impact of security measures (costs, risks, responsibility), sustainability issues (socio and environmental dimensions) and the role of clusters (investment, scale returns, hinterland).

Session 3

Mr Behar explained the gravity model used in the international trade literature. He presented his paper which measures the impact of logistic on trade. He showed the potential impact of an improvement of this factor. He also presented a new database, the exporter dynamics database, available [on-line](#).

Mr Duval presented the [UNESCAP](#) and his work on [trade costs](#). He stressed the importance of bilateral trade costs in Asia. He exposed the decomposition of the variance of trade costs among a series of components as logistic (using a connectivity index), non-tariff barriers (Sanitary and Phytosanitary measures, Technical Barriers to Trade), direct and indirect costs of Customs procedures, and natural costs. He also presented a time procedure chart of import/export process between China and Thailand, showing the place of pre-carriage.