



NETCOM - CALL FOR PAPERS

Differential Integration of ICT Location in Port Interfaces of the Global Supply Chain

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French port professionals have developed two kinds of technological tools which can sometimes clash but whose "*developments seek to make seaports very competitive processing areas of goods in Europe, and to present them as 'synergistic drivers' of new technology integration*".

This call for papers from the NETCOM review focuses first on how Cargo Community Systems (CCS) devised by Service companies in IT engineering are gradually integrated into the port communities and organizations and port logistics, involving seaports, platforms airports and major domestic logistics centers, which are the interfaces geographically identified within the global logistic chains.

In the same rationale, paper proposals are expected on the differentiated and localized choices in privative port operators systems of global supply chains that:

-allow the monitoring of the physical flow of goods from the linked flow of information, -improve management of material and human resources used to treat the commodity and the transit acceleration of the commodity by setting up an informational exchange and synchronizing the automated process initiated by the various operators.

Finally, this call for papers will incorporate observation of the growth of the Internet, on the one hand, within liner shipping companies and logistics operators who would use today some "new generation social networks" to set information online instantly to create the link and to compete their service providers and, on the other hand, with IT services companies serving the logistics and international transport. This seems to indicate that these various kinds of operators do not restrict to the territory of the seaport zone (and their direct forward and backward continuities), but extend over a wider area defined by the global traffic of cargo flows generated and borne by global supply chains.

Seven issues are proposed:

The first question concerns the choice of differentiated and geographically localized port and airport communities in the processing of the information flow.

The following question deals with the IT systems optimization and the new IT generations that allow inter-operable management, integrated, standardized and automated processes related to maritime operations, port and logistics.

The third issue focuses on new technology integration in the logistics and international transport developed by various service companies in IT engineering with 4 specific areas of exploration applied to instant online information, traceability, tracking and cargo security along supply chain and in seaport and airport areas.

The fourth question examines the suitability of a multi-scalar interconnections (multi-scale) between the CCS.

The fifth question focuses on geographically differentiated regulatory issues of security initiatives relating to IT including CCS.

The penultimate question highlights the progressive role of customs in the setting up of sea port CCS and airport IT systems in connection with security initiatives.

The last issue offers an open questioning of territorial prospective located in the major ports on the dying application of 100% scanning rule of U.S. bound containers by 2014 and seaport security.

A - Which are the differentiated and geographically localized choices made by the seaport and airport communities in the processing of information flows? In

other words, it is addressing the question: Is there an effect of location on the choices made in networks governance and patterns that combine public and private interests in the management and deployment of technology solutions and in software solution by the various operators in the supply chain (port authorities, customs, terminal operators, stevedores, freight port, freight forwarders, brokers and shipping agents, ...), whether local or more widely geographically distributed and present in a large number of seaports and in various parts of the logistics chain?

In this first part, we are interested in collecting data on:

- 1-The choices made in terms of CCS
- 2-Current models combining public and private interests in the management and deployment of CCS solutions
- 3-What about dimension of 'network management' in the choices made by the operators of logistics and international transport in terms of CCS and open systems?
- 4-The choices made in open systems by the operators of logistics and international transport
- 5-Operational and geographical complementarity of (digital) multiple media
- 6-The scales of telecommunication networks in various markets
- 7-The speed, reliability of information flows according to the media network used
- 8-The progress of paperless customs documentation procedures and their various applications in the global supply chains.

B - The optimization of IT systems in the context of the seaport competitiveness especially in terms of performance-based CCS fluidity of port operations.

In this part, contributions on the following questions are expected:

- 1-Software solutions for operational management of air, land and maritime international transit
- 2-Coordination and planning of terminal operations management systems
- 3-Different performance measurement systems applied to CCS
- 4-The inclusion of traceability by logistics and international transport operators
- 5-The tracking and monitoring solutions including road carriers
- 6-The safety of facilities of international transport vectors (aircrafts, ships and trains)
- 7-The security and facilitation of international routings.

C - The integration of new technologies developed by various IT services companies serving logistics and international transport with four specific areas of exploration applied to traceability, tracking and cargo security along the supply chain and seaport and airport areas.

In this third part, inputs on the following questions are expected:

- 1-What about the use of the ‘new generation social networks’ (like *LinkedIn* and *Twitter*) as an opportunity for some liner shipping companies and logistics operators to inform instantly online to create the link with their suppliers services and to compete?
- 2-Continuity and reliability of the information transmission chain
- 3-The interfacing of communication as electronic data interchange (EDI)
- 4-RFID, various solutions of coupling between RFID tag and temperature sensor or pressure sensor and/or GPS, ‘intelligent container’
- 5-Software Solutions for *Automated Manifest System* (AMS) and the application of the *24-hour rule* put into practice by the operators involved
- 6-Software Solutions for the Advanced Trade Data Initiative (ATDI) adopted by the operators
- 7-The role of ICT in the organization of ‘remote shipping agencies’
- 8-The operational implementation (feasibility) of image recognition technology (from non-intrusive inspections by customs scanners).

D - The issue pertaining to the relevance of a multi-scalar interconnection between CCS (inter-operability, interfacing CCS and integration of new technologies) in the context of a supra regional or global network of seaport cargo community systems.

In this fourth part, we are interested in collecting data on:

- 1-The benefits of expanding the CCS users regarding the spatial coverage of the supply chain
- 2-‘Technological proximity’ as source and condition of the interfacing between the port CCS
- 3-The role of ‘strategic distance’ in the establishment of seaport links

- 4-The nature and media of the interconnection of port communities in a regional or global system (ranges, port areas, organization of an operator)
- 5-The nature and media of port CCS interfacing processes in a regional or global port system (ranges, port areas, organization, operation of one or more port operators).

E – Spatially differentiated regulatory aspects of security initiatives relating to ICT.

As part of this fifth part, contributions on the following issues are expected:

- 1-The pioneer airport sector
- 2-The inclusion of ICT in tools (at a national, bilateral and community level) that regulate ‘good practice’ in security, safety and traceability
- 3-Electronic media in the *Customs-Trade Partnership Against Terrorism* (C-TPAT) program
- 4-The benefits of the CCS to supply chains economic operators in order to obtain the status of *Authorised Economic Operator* (AEO).

F - The role of customs in initiating the establishment of port and airport community information systems related to security initiatives.

As part of the sixth component, specific contributions integrating the local, regional, national view on the following issues are expected:

- 1-Customs tele-procedure softwares for major logistics service providers and global carriers
- 2-Securing cargo at seaports and airports
- 3-The security needs of the supply chain and port customs deal with the fluidity and the concentration of the flow of port traffic
- 4-Promoting the seamless movement of cargo along the trade supply chains (*SAFE Framework*).

G – The foresight on the application of the 100% scanning rule of containers bound for the U.S. in 2014 and port security.

In this last part, inputs on the following questions are expected:

- 1-Whereas the *100% scanning rule* is dying, according to recent comments from Janet Napolitano, *U.S. Homeland Security chief*, what will be the new ‘Risk Management Process’ in which ICT will remain a key role, so conceived and drawn up in differentiated multiple perimeters of geographical areas that trade with the USA?
- 2-Does the ongoing global digital revolution already support the 2007 technological revolution of 100% scanning rule including a high spatial (geographically localized and identifiable) dimension?
- 3-The transition from a differentiated security of port facilities to a ‘General Port Security’; in other words: the need for a General Port Security in response to the ineffective unlinked various port facilities security processes.

Schedule

March 1, 2012: Authors Submit Papers (dead line)

Mid May 2012: Double Blind Review of Papers

December 2012: Publication of Accepted Papers

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