

FROM IT TO CHANGE MANAGEMENT: E-BUSINESS IMPLEMENTATION TO PUT TRADE FACILITATION BALI PACKAGE INTO PRACTICE

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Abstract

The Bali Package can be a revolution for trade facilitation whereas we do not misunderstand the tools & vehicles that must be promoted in order to turn innovative policies into added-value practices. The author points out that encouraging fluidity of trade by imposing Information Technology solutions should not resume the Bali Package in the technical and technological sense.

In author's viewpoint, capacity building, change management and governance are the key issues in port and logistics community. Training, awareness, interoperability of people and not only of systems will empower the success of moving goods easier, cheaper and faster. The author also mentions political willingness and readiness of all stakeholders involved in the import-export processes.

Some initiatives have already paved the way to foster this ongoing revolution. Mauritius, Indonesia, Benin and a few others worldwide are the most recent pioneers of emerging countries that have implemented e-business solutions to encourage trade facilitation. National single window, port single window, seaport and airport community system, cross-borders Information Technology systems are amongst the tailor-made responses deployed on strategic gateways. Ports, airports and borders are no longer considered as chokepoints of value in the modern global supply chain. The author does not talk about collecting taxes and revenues but turning the breakthrough of the transportation chains into opportunities for creating product, process and service value.

In the study, the author used general scientific methods: analysis, synthesis, comparison, generalization.

In conclusion, the author highlights the importance of sharing feedback from those international experiences already deployed and for which the Sefacil Foundation has the privilege to be part of as a unique think-tank. Under the eegis of the Fondation de France, the Sefacil Foundation represents the first worldwide foundation dedicated to support applied research on port, maritime & logistics. The author proposes in this paper the key features based on the positive results and failures noted over the past decade in managing innovative practices. Some results will be discussed in detail with a few comments for adjustments. A discussion of improvements developed into a full set of recommendations is presented in the research. The author stresses that our common goal is to turn policies into practices by relying on shared common views.

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Key words: trade facilitation, the Bali Package, change management, public and private stakeholders, port and logistics community, Port Single Window system.

Introduction

In a global economy, transport networks are the arteries of a global movement of goods. Ports, airports, roads and all other transport infrastructure appear de facto as the essential backbone to ensure the exchange of goods and the mobility of people. Every day, 25 million tons are traded by sea and 1.7 million TEUs are handled on container terminals. Every day, more than 10 million passengers are found in the air (Alix 2014). International regulations support trade facilitation. Information technology promotes an assumed freedom of always improving how we move, connect and exchange.

Today, emerging countries, developing countries and moreover the least developed countries all face a chronic shortage of connectivity to major global networks of trade. This results in additional transport costs which cut the competitiveness of domestic products in world markets and hamper the purchasing power of domestic consumers (Alix & Pelletier 2011). The paradox of the globalization of trade is here today.

Import a container of electronic products from Shanghai to Libreville is cheaper than transiting a semitrailer in Brazzaville to Matadi in the Democratic Republic of Congo! Port modernization is an essential ingredient for economic growth of a democratic giant like India (Ernst & Young 2012). The same goes for Brazil, where no container over 10,000 TEU can be unloaded into the domestic terminals despite a national investment program carried out by the Presidency (UK Trade & Investment, 2011) (Galvão, Robles & Guerise, 2013).

In 2013, the entire sub-Saharan ports amounted to less than 2% of the total global containerized handling, which exceeded 650 million TEUs. Logistics connectivity (Pelletier 2012), maritime connectivity (Hoffmann 2012), connectivity of information systems (GTFC 2013): the facilitation of international trade in emerging and developing countries happens through the implementation of the recommendations Agreements Bali.

This discourse assumes that the operationalization of the recommendations of the Bali Package is as much a change in practices and attitudes as it is a successful implementation of technical solutions and technology tools. Port Operating System (POS), Port Single Windows (PSW) or National Single Window (NSW) all have in common that they are approached as technology projects. These solutions bring fluidity and simplification in the management of international trade as long as all stakeholders in the value and information chain agree to work as a supportive community. Trade facilitation within a transport chain is tested by the positive combination of the strengths of each of its links.

This paper sets the scene of an accelerated facilitation of international trade, largely inspired by the situation encountered in the sub-Saharan economic space. A second part demonstrates that IT solutions that dematerialize procedures are essential vehicles to facilitate trade and commerce. The third part illustrates feedback from international experience after the implementation and operation of SIPs and GUPs in emerging or “almost developed” countries. A critical analysis of these case studies allows us to draw recommendations in order to support the implementation of the functional elements contained in the Bali agreements.

1. Turn Physical Chokepoints into Logistics value places

Port transit and border crossing are two physical and organizational off loadings in international supply chain fluidity. These essential links of international trade are at the heart of a continuous process of practices and procedures improvements. As places of power, they become spaces for logistics creativity in order to bring fluidity which stands for facilitation in goods and people movements.

This assumes that technical, technological and regulatory frameworks support the operation of sub-regional logistics ecosystems. In sub-Saharan Africa, there are countless political and economic sub-regional agreements with the sole aim to facilitate intra-

continental trade (Mc Linden & All 2011). However, intra-African trade fails to take-off as it remains difficult to cross a political border or simply to have goods circulate without administrative, tariff or regulatory constraints between several countries (West Africa Trade Hub 2013). An observatory of abnormal practices in West Africa regularly reports the drifts of obscure and illegal practices on the main transportation corridors. The general manager of the Burkinabe Shippers Council (CBC), Mr. Ali Traoré, recalled recently how tariff and non-tariff barriers annihilated the efforts for transparency and good governance in his country (Traoré 2014). Landlocked countries, dependent on the performance of transport corridors, keep on paying additional costs for transport and transactions (Arvis, Raballand & Marteau, 2007). Cargo processing times in port areas cripple sub-Saharan economies (Raballand & All 2012).

From waiting time in port harbors to terminals chronic congestions and delays in administrative and customs processing times, a cumulative sum of breaches stacks to make cargo transit a logistics event far too uncertain. The inconstancy of transit time invariably implies additional costs that each of the stakeholders in the transport chain tries to allocate. It follows that sub-Saharan transport chains are among the most expensive in the world with a service reliability among the most random (Alix 2011) (Gekara & Chhetri 2013).

In the context of the implementation of recommendations made in Bali, the dematerialization of procedures and supporting technologies in regulating practices are fundamental. The obsolescence in documents flows management contributes to reduce the fluidity and mobility of international goods. Redundancy and administrative annoyances generates additional costs, mistakes in information processing and, of course, informal drifts. National procedures frameworks also appear in contradiction with the urgent need to accelerate paces and productivity in port interfaces and inland border posts. It is even more problematic in the case of cargo in international transit which endures delays and lacks that are unbearable in a global trade economy (Alix & Pelletier 2012). Shippers' councils in landlocked countries of West Africa regularly denounce abnormal operational practices in maritime terminals. Goods in transit stack around port terminals where a host of trucks sometimes wait for more than one month the physical and administrative processing of their cargo. This situation was once again bitterly condemned in specialized newspapers in Ivory Coast where the situation in Vridi neighborhood (in the port of Abidjan) is becoming difficult to handle.

The Bali agreements appear historical in many ways. And in the particular case of sub-Saharan Africa, it really is a revolution, in all essential nodes of the logistics chain, which must be implemented as soon as possible. By the way, it is useful to remind that the first article, section 1, of the agreement on Trade facilitation of the Ministerial conference in Bali mentions the list of the following information to be collected by each member state:

- a) Importation, exportation and transit procedures (including port, airport, and other entre-point procedures) and required forms and documents;
- b) Applied rates of duties and taxes of any kind imposed on or in connection with importation or, exportation;
- c) Fees and charges imposed by or for governmental agencies on or in connection importation, exportation or transit;
- d) Rules for classification or valuation of products for customs purposes;
- e) Laws, regulation and administrative rulings of general application relating to rules of origin;
- f) Import, export or transit restrictions or prohibitions;
- g) Penalty provisions against breaches of import, export or transit formalities;
- h) Appeal procedures;
- i) Agreements or parts thereof with any country or countries relating to

importation, exportation or transit;

j) Procedures relating to the administration of tariff quotas.

Because the major sub-Saharan commercial ports are the main points for the collection of national customs revenues and the management interface for almost all the products in transit towards landlocked countries, port logistics communities must become the laboratories for the implementation of Bali agreements. The outlook for growth in the coming years in the sub-Saharan economic area leaves little room for equivocation. From Senegal to Ivory Coast, to the Republic of Gabon through Congo Brazzaville to mention only a few, presidential speeches about the mechanical relationship between modernization of transport sector and the drastic decrease of poverty flourish. Ambitions claim to be virtuous. The struggle against corruption and informal practices goes through the use of new information technologies. The dematerialization of procedures must sanitize regulation uses reluctant to the sharing of value by the majority of people. The improvement of logistics connectivity must support a more favorable positioning of sub-Saharan economies in global trade flows.

IT community tools such as Port Operating System (POS), Port Single Window (PSW) and more broadly the National Single Window (NSW) are the adequate tools to transform ambitions into reality in the field. In 2014, virtually all Nation-states and/or port authorities in the sub-Saharan economic area already have, or have expressed their will to have, such solutions. Without being a panacea, these technological instruments are flexible toolboxes made to accompany the implementation of the prerogatives of the Bali agreements.

Ports, airports, border posts, inland logistics platforms; a set of specifications “à la carte” are offered according to the perimeters identified by sovereign authorities. Transparency and change in practices in document flows management encourage the fluidity of the transport chain.

As stated in the White Paper on Fluidity:

“International successes of Port Operating Systems (POS), Port Single Windows (PSW) or Trade Single Windows are built on the absolute transparency of information exchanges protocols.

The consultation and conciliation articulate a co-production of collaborative systems where transparency remains an absolute condition. Transparency and integrity of information systems imply de facto a virtuous involvement of men and women who deploy and use community tools. All forces of the logistics chain must be sensitized to the collective dividends generated by a fluidity optimized by a chain of best practices. Corruption and embezzlement find an answer in a dematerialization of administrative procedures and documents circulation. Multiple manual data inputs and transcription errors decrease thanks to a systematic computerization. Physical disruptions and the multiplication of controls dwindle with the progressive diffusion of fluidity throughout the transport chain” (Alix 2014).

In the context of emerging countries, the improved revenue collection through a better traceability. Attractiveness and competitiveness of a Nation or a regional sub-system are at stake here.

Once again, the White Paper on Fluidity insists on:

“In emerging countries, the trade revenue collection and traceability is enhanced thanks to drastic reduction of informal activities in port and logistics community operations.

The billing and revenue collection are optimized by the dematerialization of customs and bank documents. Transaction costs are reduced by the continuous modernization of practices, especially when goods and people cross the borders (Ndonga 2014). The integrity

of systems is materialized by the mechanical increase in revenues, should they be port, customs or logistics revenues” (Alix 2014).

2. From change management to technological project... and not vice versa!

First, it is important to clarify the following: a POS, NSW, or PSW is developed according to functional boundaries and prerogatives that the public authority allows it to cover.

If we can develop generic definitions:

A POS is a tool dedicated to the automated management of the operations performed by the port authorities. It enables a more efficient management of ships' calls, requests for services relating thereto, freight traffic, dangerous or not, management of concessions agreements, as well as waste disposal, customer relations, etc. A POS allows you to automate and optimize current processes in order to increase the revenues of the port authority through the integration of billing features and improve the competitiveness of the port while making the movement of goods more fluid (SOGET, 2014).

While a POS is the tool of the Port Authority, a PSW meanwhile addresses all stakeholders in a port and logistics community.

A Port Single Window is a neutral and open electronic platform enabling intelligent and secure exchange of information between public and private stakeholders in order to improve the competitive position of the sea and air port's communities. It optimizes, manages, and automates port and logistics efficient processes through a single submission of data and connecting transport and logistics chains (SOGET 2014).



Source: SOGET SA

Figure 1. Port Operating System and Port Single Windows key stakeholders

For example, the figure 1 shows how the ambitions of a PSW go far beyond the perimeters covered by a POS, the first being an early stage of modernization for the implementation of the second.

The main stakeholders of a POS:

- Port Authority
- Shipowners
- Consignees
- Shipping agents
- Docking pilots;
- Boatmen
- Terminal operators

While the main stakeholders for a PSW eventually cover all stakeholders in the chain of information related to the action of importation, exportation or the transit of goods:

- | | | |
|--------------------------|-------------------|--------------------------------|
| • Port Authority | • Cruise lines | • Road transportation carriers |
| • Airport Authority | • Vessel services | |
| • Customs administration | • Customs brokers | • Inlandwaterway carriers |

- Other government administrations
- Terminal operators
- Shipping companies
- Forwarding agents
- Logistics operators
- Airlines
- Rail carriers
- Importers & Exporters
- Banks
- Etc.

In figure 2 presents a comparison of the main features that are found in a POS and a PSW.

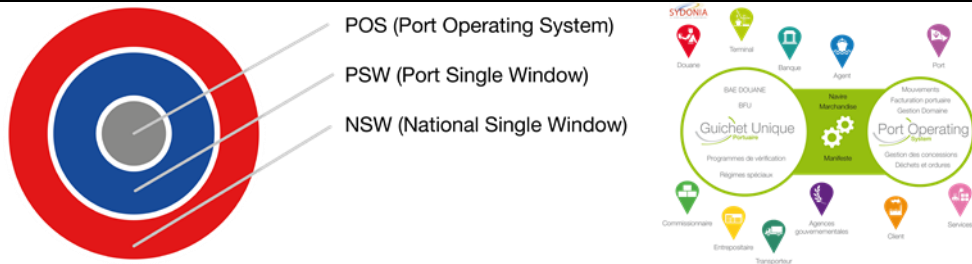
POS	PSW
Port of Call Management	Submission of the manifest
Cargo, Passengers & Containers Flows Management	Container discharge
Billing Management	Customs Clearance
Waste Management	Delivery Order
Concession Management	Billing
Port Gates Management	Electronic Permit
Area Management	Inland transporter identification
Statistics & dashboard	Gate-Out authorization
Customer Relationship Management	Gate-Out
	Gate-Out of the container under Customs Control (LCL)
	LCL (House Manifest, Stripping operations, customs clearance of goods, etc.)
	Gate-In at the importer
	Gate-In at the empty containers depot
	Booking confirmation
	Cargo announcement to terminals
	Empty container release order
	Empty container Gate-Out
	Empty container Gate-In at the exporter
	Empty container Gate-Out at the exporter
	Customs Authorization to move the containers
	Loading Authorizaton – Shipping line & forwarding Agent
	Stuffing under Customs Control
	Gate-In at the terminal
	Laoding on board
	Logistics & Customs procedures for transshipment
	Calls & schedules management
	Real time tracking & tracing
	Real date stats
	Notifications by profession
	Inventories
	Centralised billing

Source: Author based on SOGET SA

Figure 2: Key features of POS and PSW

Of course, these boundaries are not hermetic and each country or port authority demands the implementation of solutions in tune with the realities and needs identified. Each product has specific characteristics that emerge tailored to the problems encountered when rendering procedures paperless or simplifying the management of certain business documents. Clearly, the three circles of competence and operation lead a dynamic and interoperable interaction as shown in Figure 3.

With regard to ambitions in the Bali agreements, a combination of three features tools proves suitable. This implies that from the port authority (for POS) to the extended port



Source: SOGET SA

Figure 3. POS, PSW & NSW: Interoperability of integrated systems

and logistics communities (PSW) as well as to responsible ministries (NSW), a form of global consensus is established before all ambitions of technical and technological implementations. Understanding all the ins and outs of each of the three solutions (POS - PSW- NSW) must be grasped by all stakeholders. These preliminary provisions require two critical milestones:

- It is imperative that all the features covered by the proposed systems are understood and accepted by all public and private stakeholders directly affected by the implementation of future solutions;

How to develop a Port Community System The Twelve Actions



Source: EPCSA

Figure 4. The twelve keys actions to implement a Port Community System by the EPCSA

- It is imperative that all public and private stakeholders be consulted prior to any decision of implementation and that they are closely associated at the time of the implementation of these solutions and their operationalization.

These essential steps require a methodology that EPCSA summarizes in 12 key actions in the case of the establishment of a PSW (Figure 4). Prior to the first step, “Create a common understanding ...”, even more important a real port community must exist. However, in emerging countries, these notions of community and port logistics players remain mostly rudimentary. As part of the implementation of the recommendations of the Bali package, this logic knit community of public and private actors is a challenge that first draft PSWs or NSWs must honor. Of course, this goes far beyond the gap analysis and other prerequisite techniques on functional interoperability of IT systems in place.

Dematerialization of procedures and the systematic introduction of IT solutions in collaborative information management are perceived as threats to the authority or business integrity of the stakeholders. Defense perimeters and practices require a playful and didactic approach to the attention of all strata of action and decision, both within the various public administrations as well as for the private operators. Trade facilitation in emerging and developing countries implies that consciousness and practices evolve as quickly as technology tools and their interoperability.

The example of the customs administration proves symptomatic of this complexity in the transformation of business practices and on the altar of a technological revolution. The customs officer turns into a logistics facilitator through risk management processes refined through technology. Transparency in the management of information flows related to import, export and transit products enhances the ability of the customs administration to facilitate the passage of goods in a port interface or when crossing a border. The customs administration is a major linchpin in the success of a community informatics solution.

Once this is said, and for the Bali agreement recommendations to find an efficient operational implementation, the government (the highest peak of the state) needs to understand these computer mutations in their human, cultural and managerial dimensions. The political courage to want to change practices with the objective of collective well-being is part of the official discourse. Cultural change, both in attitudes and practices cannot be decreed. It requires direct consultation with all levels of operation and decision. It should include all stakeholders and be managed as an integral part in parallel with technical and technological challenges. It requires the mobilization of skills. It requires boldness and creativity to cope with reluctance, if not hostility of players who have not fully federated (or been included in) the mutation of dematerialization. On the ground, the first lessons learnt from international experiences in the countries concerned by the Bali agreements recall that the managerial and cultural challenges seem too often overlooked.

3. Comments & feedback about international experiences

Amongst several experiences known in emerging countries, two examples have been remarkable and serve to feed our analysis:

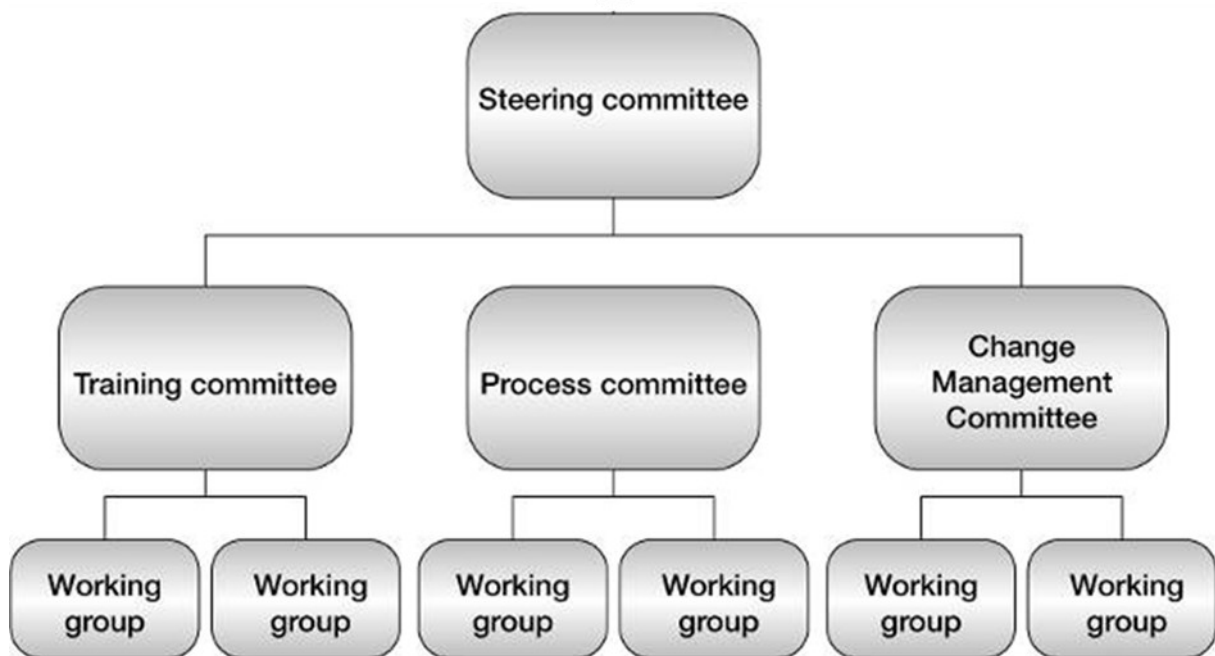
- The first deployed in the Republic of Benin at the Port of Cotonou (Port Single Window which has been extended since 2013 to deal also with Cross-border Management between Benin & Togo)
- The second one at Jakarta in Indonesia, the largest archipelagos in the World with more than 17 000 islands and more than 100 commercial & 614 non-commercial ports.

The case of the Port of Cotonou has pioneered the implementation of a PSW on the West coast of Africa (2011) whereas the case of Indonesia demonstrates the qualitative approach adopted to turn a technological project into a management project.

The Port of Cotonou PSW project can be summarized as:

“The Port Single Window at the Port of Cotonou went live in October 2011, just 11 months after signing the concession. All business processes are now streamlined and fluid from Customs Authority to final importer of cargo throughout shipping lines, terminal operators, freight forwarders, Port Authority, Customs Authority, Truck operators Government agencies and Banks enabling the whole port community to be more efficient (Pascal Ollivier, SOGET SA 2013).

A programme that could be called “guilds” was initiated with the introduction of dematerialization solution within the port and logistics community in Cotonou (Alix & Grosdidier de Matons 2011). And because the highest political spheres of the Republic of Benin was involved at the outset of the process, a “supervisory committee” was initiated with five representatives from five Ministry. This supervisory committee has a general role and oversight to the steering committee some necessary recommendations to set-up the system. The steering committee consists of representatives of those aforementioned Ministries, in addition of senior representatives involved in the operational deployment, including representatives of shipping agents, freight forwarders, carriers and banks as well as Customs and Port Authority of Cotonou.



Source: SOGET SA 2014

Figure 5. Structuration and hierarchy of the project follow-up decision-making bodies for the implementation of the PSW

Three commissions cover key dimensions of successful implementation and only one is technically oriented whereas the two others deal with change management as well as training. The training committee accompanies technological learning with a very structured environment for the management of skills and know-how. This committee encompasses representatives of each professional group involved in the PSW Project. Training programmes are based on knowledge and practices recorded locally in order to tailor-make some teaching material accordingly. The committee has built-up a “feedback process” to enhance the quality and the efficiency of the programme.

This approach appears inconceivable without a strong commitment to implement a culture of change including all the layers engaged into the process of implementation and operation. When the time has come to set-up new technologies as a PSW, reflexes of rejection or lack of motivation to be part of the collaborative project are often underestimated. The change management committee works closely with the training one to inform all the stakeholders about the foreseeable consequences of setting-up such an IT system. The commission collects reluctance expressed but also operational constraints practices observed when implementing specifications and applications. Its role combines an explanatory nature to better communicate the consequences of using a PSW and a managerial support to maximize benefits.

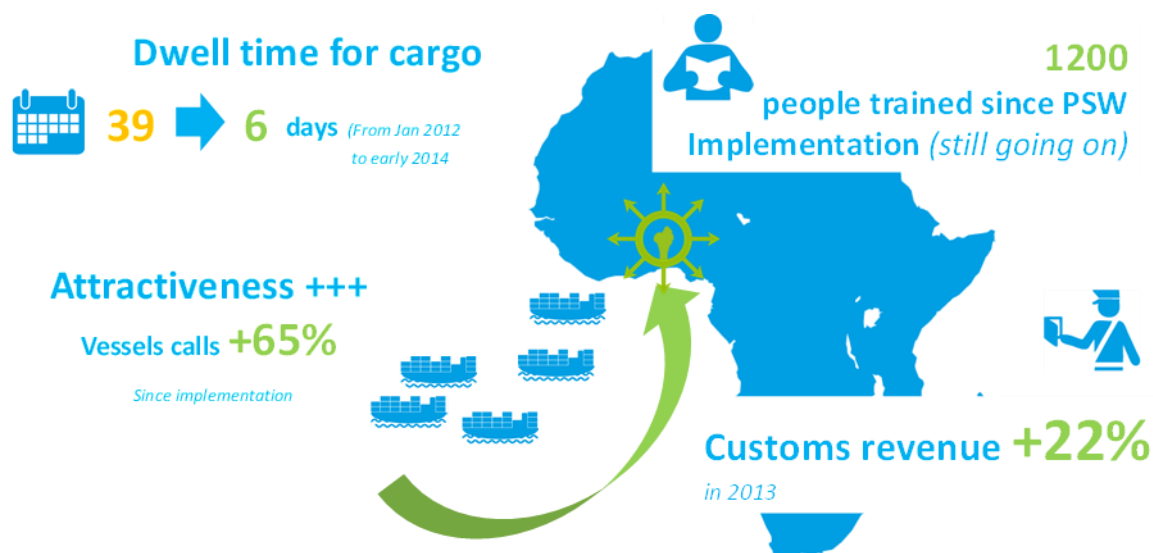
Beyond the process and tool usually deployed to undertake change management, some fieldwork and listening actions have been consistently spread out for supporting all the stakeholders. Being close to the people, paying attention to their feedback, bearing in mind the gap to bridge between their former practices and the new ones are absolutely essential to drive successfully such a project at Cotonou.

“A regular, not to say a daily, attendance at the Customs office allows to keep a watchful eye on Customs officers who are surprised at first, but rapidly get reassured by our presence”.

Mme Laurence Debain, Project Manager, PSW Cotonou, 2014

Explaining, listening, supporting and finally adjusting remain the hallmarks of success which was really co-constructed between technology suppliers and all the public & private stakeholders encountered in Benin. A customized sheet was even created for any kind of user to record complaints, problems, comments and suggestions. Feedback and testimonies take place at all stages of the decision and operation. Those adjustments make people feel very worthwhile and many have expressed their appraisal from both sides (trainers and trainees)!

The case of Cotonou constitutes a unique case where drastic change have driven informal practices to be regularized, especially among small local freight forwarders. They probably were the most virulent against the project but they noticed that formal training and



Source: SOGET SA 2014

Figure 6. Few figures about the success of the Port Single Window solution implemented at the Port of Cotonou

informal meetings have transformed their practices and vision of their own job. With obtaining a license, the smallest freight forwarders can now use their skills and expertise in a community system where they can display some updated tools to be more efficient and competitive. To carry them for a better understanding of the tools, some customization services were developed in the case of Cotonou.

The revolution goes far beyond changing a working system to another more modern and automated. It allows to formalize and regularize practices to bring most of the players to better qualitative and quantitative standards. A couple of months before the official go live of the project, a speech has been defended at the World Bank Transportation Conference in March 2011. Experts and advisers from the World Bank recommend to produce strong indicators to argue on the qualitative and quantitative benefits of such an IT system in a port like Cotonou (Alix & Grosdidier de Matons, 2011). KPI's, data records, statistics and dashboard were developed to demonstrate and attest to the profits reaped (CETMEF 2012).

The figure 6 provides several key results as for instance the increase of the revenue collection (+22% in one single year) or the training of more than 1,000 people.

In addressing the IAPH IT Gold Award in 2012 in Los Angeles at the Port Authority of Cotonou, the recognition of international port authorities welcomed the success of Benin and tagged awareness because it was the first time in history that a sub-Saharan port received such a distinction.

The Secretary General Susumu Naruse mentioned during the awards ceremony:

“For sharing best practices and experiences, IAPH recognizes and honors excellence in port management and operations through its biennial award program. The 2013 Award program comprises three organizational awards: Port Communications, Port Environment and the Information Technology Award which has been granted today to the Port Authority of Cotonou for its successful Port Single Window project conducted in Benin in 2011 and 2012” (Bureau Veritas & SOGET SA, 2013).

The case of Indonesia proves that an IT project as a PSW can be totally different from what was experienced in Africa or in Europe. The Indonesia Port Corporation II has chosen to implement the largest PSW in the World in 2012. Since the Port Reform in 2008, efficient port operations are crucial to the development and the competitiveness of the country. The degree of economic maturity of Indonesia, its population and geographical size constitute a huge challenge. More than 100 commercial ports including Jakarta are targeted. One of the main goals of the PSW is to bring a mix of solutions for international and domestic traffic as well as some better connectivity for transshipment.

As mentioned Bambang Susantono, Vice Minister of Transportation:

“The application of such system will strengthen and accelerate Inaportnet (Indonesia Port Net System) implementation. As the Inaportnet is a vital element of Indonesia domestic and international connectivity. Enhancing connectivity will undoubtedly improve logistic performance and increase Indonesian economy competitiveness” (SOGET Press Release 2012).

Change management and socialization is a key for a successful PSW implementation and for the stakeholders to take over the PSW. However, the solution which was promoted and implemented in Benin regarding this aspect of such a project was not seen as the ideal solution in Indonesia.

The usual sponsor, which must be identified early in the project in order to support and promote the project, was difficult to find. Very often, this sponsor is a high-level institutional authority which has the upper hand on other institutional stakeholders, but in Indonesia, the multiplicity of governmental bodies involved in the supply chain made it hard to choose the right partner without out casting the others. For instance, port authority is divided in three entities – one for the sea side regulation of the port, one for the land side,

and one dedicated to the management of infrastructures, finances and administration. Other government bodies were identified, more directly involved in the port supply chain, such as Immigration, Customs, Health & Quarantine or the Directorate General of Sea Transportation. Such institutions, already overwhelmed by their sovereign missions, could not decide which of them was the best adapted to take over this role of sponsor.

Besides, even if a PSW is a tool which will improve private companies efficiency, it is not a tool for private stakeholders only, it is a project for the sake of public interest through a collaborative use of it. This concept must be strongly promoted inside the port community. In Indonesia, the port stakeholders could not merge their actions towards this objective. Each of them wanted to keep on working on its own, because of the lack of a sponsor to spread the message about public interest. The socialization which was performed in Benin, through nationwide communication campaigns, was not heard in Indonesia. This is why the PSW operator, with our support, had to change strategies to reach the objective of a common platform built for all.

This is why, instead of having a sponsor on the government side, it was decided to have multiple sponsors on the private side. The major stakeholders became the new ideal sponsors in order to convince all other stakeholders – smaller private companies as well as government entities – to move together in the same direction for the implementation of the PSW. First, they understood that they could defend their own interest by having an operational PSW as soon as possible to accelerate port activities, increase and improve port traffic, and eventually they supported the public interest. Government bodies were then seen as partners of private stakeholders activities, ensuring at the same time a future increase of goods volume and revenue collection.

Summary and concluding remarks

Transparent fiscal and regulatory frameworks (Banque Mondiale 2012) (Grosdidier de Matons 2014) in support to formalised institutional practices (Ollivier & Alix 2014) in reinvested infrastructural environments (PIDA 2011) (Vedrine & all 2013) are the ingredients which will enable the Bali Agreements to facilitate trade in emerging and developing countries. The relationship between trade facilitation and economic development has been demonstrated (The World Bank 2014) (Arvis & all 2013). UN recommendations establish a causal link between trade development and structured facilitation aiming paperless procedures (UNECE 2013). Experts insist that legal frameworks have to be reformed in order to enable the optimised implementation of new solutions.

The General Secretary of the WCO presents clear insight on the significance of the challenge that will have to be resolved in coming years:

“The potential of the ATF in the Bali Package is significant. In accordance with some analysis, the measures will boost prosperity by reducing administrative burden and transaction costs, and are expected to save developing countries around US\$325 billion a year and accelerate their integration into the global value chains. According to OECD, Developed countries also stand to gain with a 10 percent cut in their trade costs and easier trade flows for their operators. The potential new gains from trade facilitation are considerable, especially for countries that have yet to apply its principles” (World Customs Organization 2014).

The technological solution requires a precise understanding of the real issues underlying paperless procedures in the professional lives of transportation chain stakeholders. Customs are a laboratory going through significant complexities in applying this revolution in the management of border crossing or the management of the port interface.

Governance is a key conception in the transformation of the Bali Agreements recommendations, whatever the economic the political or economic environment is in emerging and developing countries. New open governance dynamics including all stakeholders are an indispensable step to reach modernisation objectives and paperless procedures. Building on the experience of Cotonou and Jakarta, the success of such changes requires constant and total support from stakeholders. Professional training, recognising knowledge and valorisation of know-how is a combination of things that will enable change in daily practices. The issue of the Bali Agreements rests on a collective and dynamic mobilisation of different expertise which has traditionally worked in silos. Transformation of political intentions and operational practices will have to through a common objective fixed by all stakeholders of international trade. A paperless transportation service chain implies that all links are aware of the mutual benefits of an electronic management of logistical information.

The competitiveness of emerging economies will rely on this revolution which will enable millions on economic stakeholders of the informal sector to cross to the formal sector. Corruption and malpractice eliminate the emergence of numerous sub-Saharan countries. The port has to become the showcase of successful change. Today, the Cotonou experience is claimed by international port professionals, banking institutions and most of all, the stakeholders of Benin's logistical community themselves.

Abidjan (with an operational POS), Lome (with the implementation of a PSW) and shortly Libreville, Dakar or the ports of RDC, all will demonstrate new African port modernity. Growth rates higher than 6% announced for the coming years will then be possible to reach with secured, reliable and transparent services in ports and at borders. And Customs will have done nothing!

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