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AFRICAN PORTS: GATEWAY TO DEVELOPMENT

Hinterland - Modernisation
Containerisation
Public-private partnership
International operators

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151 rue Saint-Honoré, 75001 Paris - France
Tel. (+33) 1 53 44 31 07
E-mail: revue_spd@afd.fr
Website: www.proparco.fr
Blog: blog.private-sector-and-development.com

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SUMMARY

The African ports sector: focusing on development

Emmanuelle Matz

Head of the Energy & Infrastructure division, Proparco

Between 2007 and 2017, a staggering USD 50 billion were invested in the African port sector. With growth of 7% a year in maritime traffic of all types and a four-fold increase in maritime trade, driven in particular by Asia, Africa is the focus of renewed interest.

Over the past decade, the majority of Africa's port terminals have been handed over to private operators: the Continent now represents 5% of international maritime trade and 2% of global containerised traffic *(pages 30-33)*. Most African container terminals are now managed under public-private partnership arrangements *(pages 14-17)* whose terms have been defined by the World Bank. Practically all of the ports that agreed to these investments have been able to make up for lost time in just a few years, both by adopting international standards to enhance their productivity and by boosting their profitability and competitiveness.

However, an effective port management strategy does not just involve maritime shipping. Land-based transport also plays a key role. Historically, African ports were built right in the heart of cities but urban development and demographic growth have rendered them obsolete and unsuitable. The underlying challenge in developing the African port sector lies in reducing urban congestion by building new ports on greenfield sites and in developing an infrastructure in the hinterland *(pages 10-13)*. Aside from the choice of port location, good links with modern, developed road and rail networks and logistics platforms are obviously going to give to an African port an edge over its rivals.

As African ports engage in fierce competition, and in some cases even head-on competition between neighbouring countries, the sustainability of all of these ports becomes a key issue. As well as offering cost advantages – an area where African ports often struggle *vis-à-vis* the international competition – they also need to provide access to attractive location and hinterland and comply with four essential criteria: to survive in the present-day port "jungle", the fittest terminal must be deep enough to welcome the latest generation of ships, be large enough to store huge volumes of goods, have a large regional market at its doorstep and be located in countries that enjoy political stability.

Private operators, particularly the heavyweights that previously shunned Africa due to its unattractive and frequently outdated port infrastructure, have now realized the importance of investing there for the long term. Now more than ever, the African port sector needs to step up and play a key role in the Continent's development. This is why *Private Sector & Development* is devoting an entire issue to the question, at a time when Africa seeks to benefit from the favourable trade winds of the new world order.

CONTRIBUTORS

Olivier Caslin
Journalist at Jeune Afrique

Olivier Caslin is a journalist for the magazine Jeune Afrique, writing on transport and multilateral economic issues. He also follows events in Burundi, Djibouti and Mauritius.

Patrick Claes
Co-founder of Vecturis and CEO of Setrag

Patrick Claes co-founded Vecturis in 2006 along with Eric Peiffer. He is CEO of Société d'exploitation du Transgabonais (Setrag), a rail concession operator in Gabon, and has considerable experience of the African rail sector.

Lionel Franceschini,
Project Manager, AFD

Lionel Franceschini joined AFD in 2014 as Transport Project Manager following 13 years at the Ministry of Transport where he worked on the renovation of navigation structures and the awarding of public-private partnership contracts. A public works engineer, he is involved in port and airport operations in locations such as Morocco, Mauritius and French Overseas Territories.

Véronique Pescatori
Project Manager, AFD

Since 2015, Véronique Pescatori has been Project Manager in the Transport Division at Agence Française de Développement (French Development Agency, AFD) where she is responsible for vetting and monitoring road, railway, port and airport projects. A graduate of ESSEC Business School, Véronique joined AFD Group in 2003 and she previously spent time working for Proparco, including a stint in the Infrastructure Department.

Clément Seka Aba
Doctor of law (LL.D.),
Ebiele & Associates

Clément Seka Aba is an expert on port legislation. Before joining the law firm of Ebiele & Associates (Abidjan, Côte d'Ivoire), he worked for Défi Consultants International as a lawyer specialising in maritime and port affairs. He has a doctorate in law from the University of Brest and is the author of *"Contributions à l'étude juridique des concessions portuaires"* [Contributions to the legal study of port concessions] (L'Harmattan, 2015). He runs a course in port legislation at a university in Abidjan.

Paul Tourret
Director of ISEMAR

Paul Tourret, Director of ISEMAR, is a specialist in international trade, maritime transport and port development. His expertise has won him a reputation across the French-speaking maritime sector, and he writes and undertakes economic and strategic research for public and private sector organisations.

Gilbert Meyer
Expert on port-related and maritime economics

Gilbert Meyer has a PhD in economics and is an expert on port-related and maritime economics. Until late 2016, he was Chairman of Catram Consultants, specialised in transport economics. In the earlier part of his career, Gilbert worked in a number of southern French ports (Sète, Port-la-Nouvelle and Port-Vendres).

Camille Valero
Maritime lawyer at ISEMAR

Camille Valero, a maritime law expert, has worked in both the public and private sectors, giving her exceptional and far-reaching understanding of the issues related to disputes over use of the sea. She is currently a desk officer at ISEMAR, where she specialises in legal issues relating to maritime concerns, in particular monitoring emerging markets.

Iskander Ezzerelli
Investment officer, Proparco

Iskander Ezzerelli has been an investment officer with Proparco for over 7 years, gathering wide-ranging experience of project financing in many different sectors and especially transportation. He began his career at BNP Paribas in 2004 working as a portfolio manager and credit analyst in France, Greece and Germany. Iskander holds masters degrees in international economics and business from Sciences Po Paris and Université Paris Dauphine.

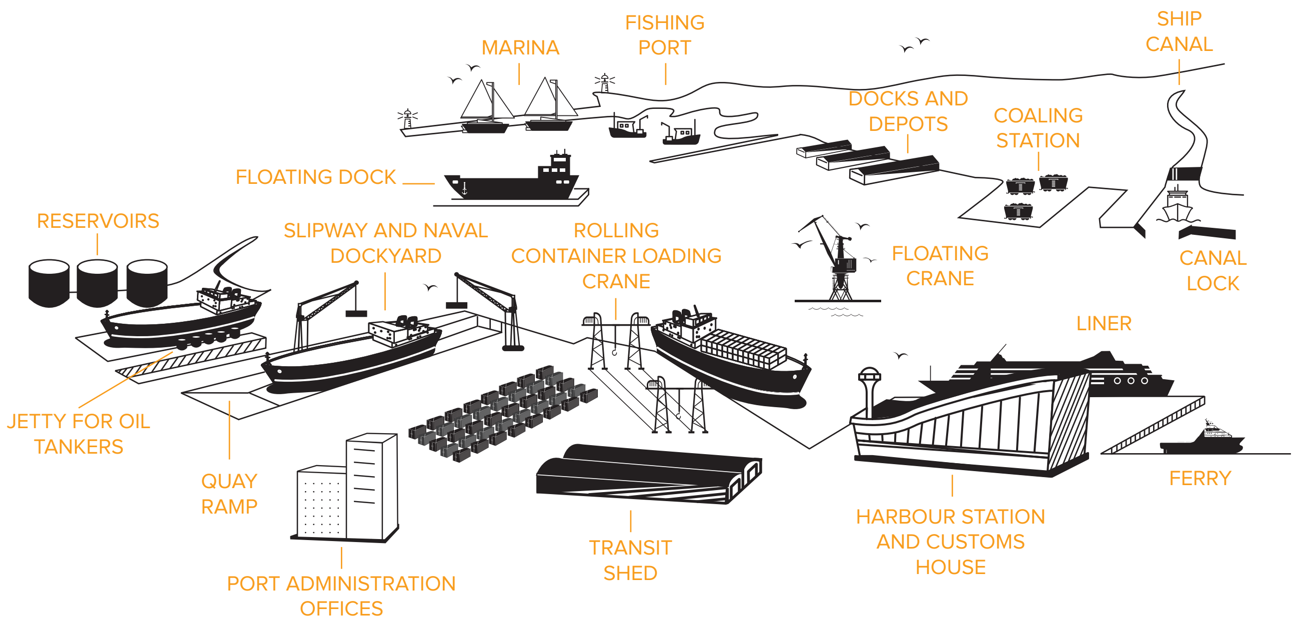
Laure Loaec
Advisor to the CEO of Proparco

Laure Loaec advises Proparco's Managing Director on numerous strategic aspects (producing memos, preparing meetings, representation, etc.). After graduating from ESCP Europe and London School of Economics, Laure worked for Crédit Coopératif and Dexia before joining AFD Group in 2012.

Anis Zerhouni
Investment officer, Proparco

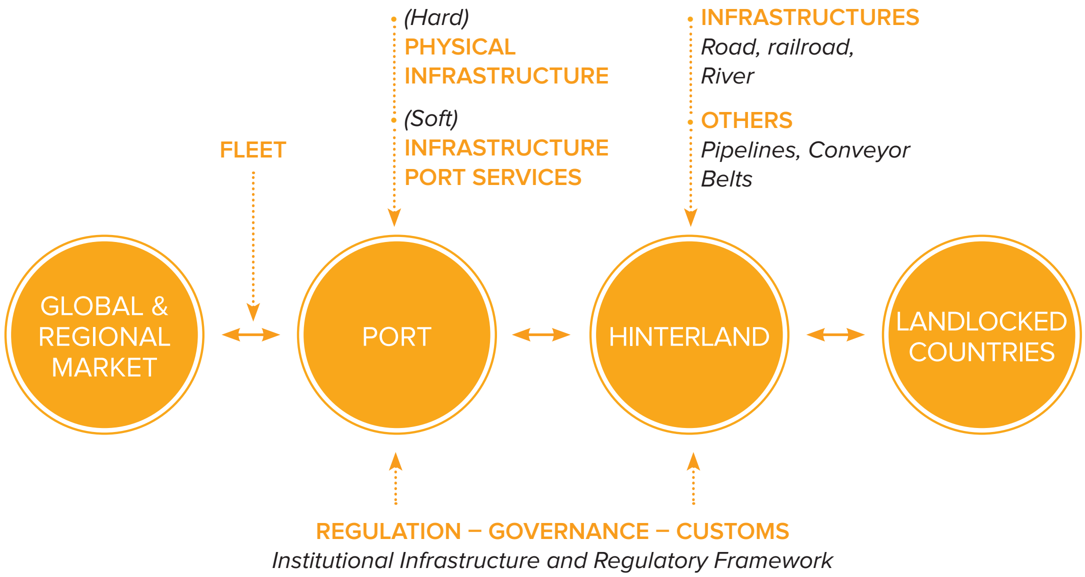
Anis Zerhouni joined Proparco in 2014 as a consultant, before moving into investment portfolio management. He had previously worked managing PPP-type infrastructure investment projects in the Middle-East and Africa. Anis is graduated in Management from Paris-Dauphine University and ESCP Europe.

How a sea port works



Source: www.infovisual.info/fr/transport/port-maritime • www.ikonet.com/fr/ledictionnairevisuel/images/qc/port-maritime-9050.jpg

Ports at the heart of the logistics supply chain



Source: The African Development Bank, *African Development Report 2010: ports, logistics and trade in Africa, 2010*

Freight: the African bet

Olivier Caslin, *Journalist at* Jeune Afrique

Major shippers are increasingly turning to Africa to avoid fierce competition on more traditional routes. However, as freight volumes are still too low, overcapacity is a constant problem.

At first sight, maritime shipping appears to have weathered the crisis of 2008. For the first time ever, combined volumes of all types of cargo carried by the world fleet have exceeded 10 billion tons, up 2.1% on 2015. Four-fifths of goods traded worldwide are now moved by sea. These figures would have been even more impressive had international trade not remained stubbornly sluggish, with growth not expected to exceed 1.6% in 2016 – the smallest increase since the last financial depression.

A CHALLENGING ECONOMIC CLIMATE

Against this backdrop the primary industry stakeholders - container shipping companies - are suffering not only along the highly-competitive east-west routes between Asia and Europe and on transatlantic routes, but also, much more recently, on services to Africa. This has been driven by the collapse in commodity prices over the last two years, with particularly severe consequences for the continent's economic heavyweights, Angola and Nigeria.

While traffic with Europe along the traditional north-south axis remains profitable with tonnages holding up, the London-based independent maritime consultancy Drewry is warning of a 19% decline in African container volumes traded with Asia for the third quarter and an overall fall "of over 10%" for 2016 – a trend that could be reversed with a recovery in market prices. At the same time, the most diversified African economies, such as Côte d'Ivoire, Ethiopia and Senegal, are expected to continue growing at over 5% and to increase their commercial trade by a similar margin.

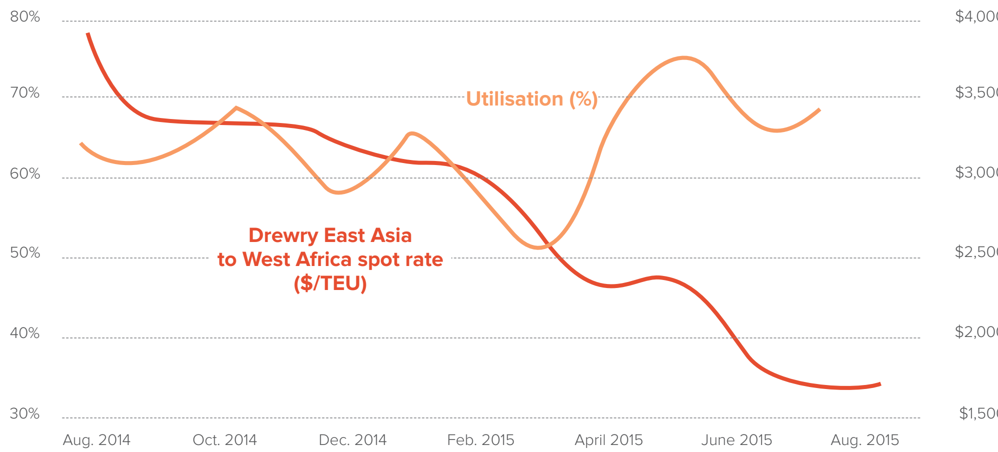
Although it is very closely linked to current economic circumstances, this decline is hitting the shipping companies hard. While Sub-Saharan Africa only accounts for 1.78 % of the world's container traffic, the economic momentum and outlook, combined with the continent's anticipated population explosion, appeared to offer a much brighter future.

Moreover, neither the top three industry players - Denmark's Maersk Line, France's CMA CGM and the Italian-Swiss operator MSC - which between them carry three-quarters of all container traffic to and from Africa, nor the plethora of smaller Asian and European operators, have skimped on the capacities they are allocating to serve the continent. →

This article was published by Jeune Afrique in his n°2917 from December 4th to 10th, 2016.

This article is available on Internet: http://www.jeuneafrique.com/mag/379466/economy/fretpari-African/

The freight-rate crisis in West Africa (2014-2015)



Source: Drewry Maritime Research, 2015

Faced with the collapse in freight rates due to the arrival of ever-larger vessels over the last three years, ship-owners have reduced shipping capacity in the north and transferred part of their fleet southwards to keep pace with growth, especially in Africa. At the same time, Africa is modernising and deepening its major ports to enable them to receive these "maritime behemoths".

SUBSTANTIAL TRANSPORT CAPACITY

While global transport capacity increased by 3.5% in 2016, it leapt by 46% for Africa and it is becoming increasingly common to see ships carrying 6,000 containers or more in Abidjan or Pointe Noire (Congo-Brazzaville). In 2011 Safmarine, the African subsidiary of Maersk, flexed its muscles with the introduction of its Wafmax class, capable of carrying 4,500 containers along West African coastal routes. A few years later, MSC began providing a transhipment service at Lomé using a 6,500 TEU (twenty-foot equivalent units) container ship. Today, the company is converting these into 13,000 TEU capacity ships – which is an awful lot better than scrapping them!

The loss of earnings arising from these overcapacities in a time of falling prices combines with "the effect of geopolitical uncertainty", according to Mukhisa Kituyi, Secretary-General of the United Nations Conference on Trade and Development (UNCTAD). The doubling of the Suez Canal in the fraught arena of the Middle East has pushed up insurance costs, which places a further strain on ship owners' accounts. With Suez Canal transit fees estimated at $800,000 (around €754,000) for a container ship, many operators are looking for alternative solutions.

The historic route around the Cape of Good Hope could be revived but the excessively long transit time remains a big drawback — particularly with Africa's developing overland links (notably rail) which should eventually provide an alternative to purely maritime services. In addition to diverting some transcontinental traffic, these new arteries could ultimately divert some of the growing intra-African trade away from the coasts. The map of maritime services would then be redrawn to reflect changing trade flows between economic zones.

ENTER THE MEGAPORTS

Pending such a logistical remapping, the supply side of the African maritime sector is a long way from full capacity. Between the recurring imbalance in quantities imported and exported – exacerbated by the slowdown in economies dependent on natural resources – and the exponential increase in vessel capacities, Drewry estimates that ship loading rates *"are sometimes as low as 56%"*.

This begs the question as to whether companies are still making money on certain ports of call. And things could get worse! Africa still has huge needs. However, at the current rate, as competition escalates between big players trying to limit their losses and a chasing pack excluded from the east-west routes due to a lack of resources, supply could well exceed demand. Fortunately, the continent's potential would appear to be limitless.

"The continent's potential would appear to be limitless."

Plans for new-generation megaports in Nigeria and on the east coast in Tanzania and Kenya, could justify the development of such capacities, not to mention new currently untapped routes with the huge Indian market.

The future may therefore be brighter than it seems although for Africa things are certainly not as rosy as ship-owners would believe. In any case, operators are accustomed to the vicissitudes of a sector that ebbs and flows along with the fortunes of the global economy and they have always been able to draw on the resources necessary to adapt or anticipate accordingly. Ultimately, everything comes down to capacity.

THE NEW SUEZ CANAL: DOUBLE THE SIZE

Built in just one year at a cost of $2.5 billion (€2.35 billion), the new Suez Canal was opened in August 2015. It is now both wider and deeper and looks set to strengthen its role as the key gateway between Europe and Asia along one of the busiest sea lanes in the world. As Yann Alix explains in *Histoires courtes maritimes et portuaires* (ed. EMS, May 2016), *"in 2015, container ships became dominant, comprising 5,941 out of a total of 17,483 vessels. Of the 4 million twenty-foot equivalent units that passed through the canal in 2015, three-quarters set out from the Far East. Apart from the very biggest bulk carriers and tankers, all merchant vessels are now able to pass through the Suez Canal."*

Gargantuan work to widen and deepen the canal was undertaken along 37 km of its 193 km and a 35-km parallel shipping lane was added. Egypt expects traffic to double by 2023, from 49 to 97 ships daily, and waiting time has been cut from eighteen to eleven hours. Revenues should climb to $13.2 billion per annum (compared with $5.3 billion today) and as this accounts for 20% of the state budget, the extra income will help to boost Egypt's stagnant economy.

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Good links to the hinterland: the key to efficient overland transport

Patrick Claes, *Co-founder of Vecturis and CEO of Setrag*

Good links between ports and their hinterland is one of the key catalysts driving growth and opening up different regions of Africa. Rail and roads – with all their respective advantages – compete to provide the Continent with an infrastructure and forge links to its ports.

DECLINE AND GRADUAL COMEBACK OF AFRICAN RAIL

Historically, most of the PPP-type operating and lease concession arrangements for African rail networks were awarded from the late 1990s on. Since most of the Continent gained independence, the African rail system has suffered a gradual decline. Due to its inefficiency and failure to keep pace with customer expectations, rail was supplanted by road transport.

These developments were reflected in the ports in the removal of rail access to the wharf or to storage warehouses. When rail concessions were handed out, we realized that in certain ports – Tamatave (Madagascar) or Douala (Cameroon), for example – rail installations had simply disappeared from port infrastructure altogether. It was then necessary to negotiate with the port authorities to lay new tracks, and above all to connect rail with the new container terminals – which became possible around the 2000s.

Today, railways are once again a feature in African ports and although they are of secondary importance in some places, such as Lagos (Nigeria), they have now largely re-emerged to become a key component of contemporary port infrastructure. For example, in Gabon where road transport is underdeveloped due to a very poor road network, nearly 95% of goods between Libreville and Franceville are transported by rail.

RAIL AND ROAD: A LONG HISTORY OF DIRECT COMPETITION

A customer who imports a container these days wants to clear customs and get it delivered as quickly and as cheaply as possible. Obviously, road transport has the advantage of getting the container directly to the end customer, which rail cannot do. But railways can constitute a more effective solution for longer distances (of at least 250 kilometres) and are capable of harnessing 30- to 50-wagon port terminal facilities loaded up by freight forwarders based on a system of reservations. Once it has been loaded up, the train travels on to a dry port – or inland port – terminal where the containers are unloaded before continuing their journey by road.

Rail can actually provide greater freight security, especially for trans-border traffic between countries such as Cameroon, Chad and the Central African Republic: once a container has been loaded onto a wagon, it generally stays there until it arrives at its final destination and container trains are rarely raided. A container sent by road may be assigned a specific route but the driver may go another way, get stopped for a

FOCUS
VECTURIS

Vecturis was created in 2006 and is headquartered in Belgium. It is focused on the rail sector and operates Madarail, the Madagascar rail concession holder. It used to operate the Transrail company in Senegal and Mali. It has also been entrusted with a mission to manage and stabilize the Congolese national rail company, SNCC, and is involved in getting a number of projects off the ground in Africa.

variety of different reasons, and have to pay unplanned "route charges". Lastly, rail is more eco-friendly and cost effective: trains can move between 2,000 and 3,000 tonnes whereas a truck can transport one, or at most two containers.

> "Over the past 10 years, Africa has made considerable strides in simplifying administrative procedures."

OUTPORT CUSTOMS CLEARANCE: A KEY COMPETITIVE ADVANTAGE FOR RAIL

As major African ports compete to attract traffic, cutting red tape has become a key issue. With growing containerisation over the past 10 years, Africa has made considerable strides in simplifying administrative procedures. Containers enjoy end-to-end traceability as both goods and their weight are clearly identified. Consequently, freight forwarders have all of the documentation needed to initiate customs clearance procedures, even before the ship arrives in port.

This gives rail transport an edge over road transport in terms of cutting down container dwell time and preventing bottlenecks in port. Indeed, it takes considerably longer to scan 30 to 50 trucks standing in line, each carrying one or two containers, than it does to scan through a single rake of loaded wagons. Let us take the example of the port of Tamatave in Madagascar where containers are forwarded by train under a "suspensive customs regime" whereby clearance takes place at destination, 400 km further on. Compared with road transport, this cuts down in-port dwell time to two / three days maximum, before the goods leave for Antananarivo where they clear customs.

MASS CONTAINERISATION: A CHANCE FOR AFRICAN RAIL

Containerisation has become an essential feature of African maritime trade: for rail transport alone, nearly 90% of goods are now moved by container, from their port of arrival towards the interior.

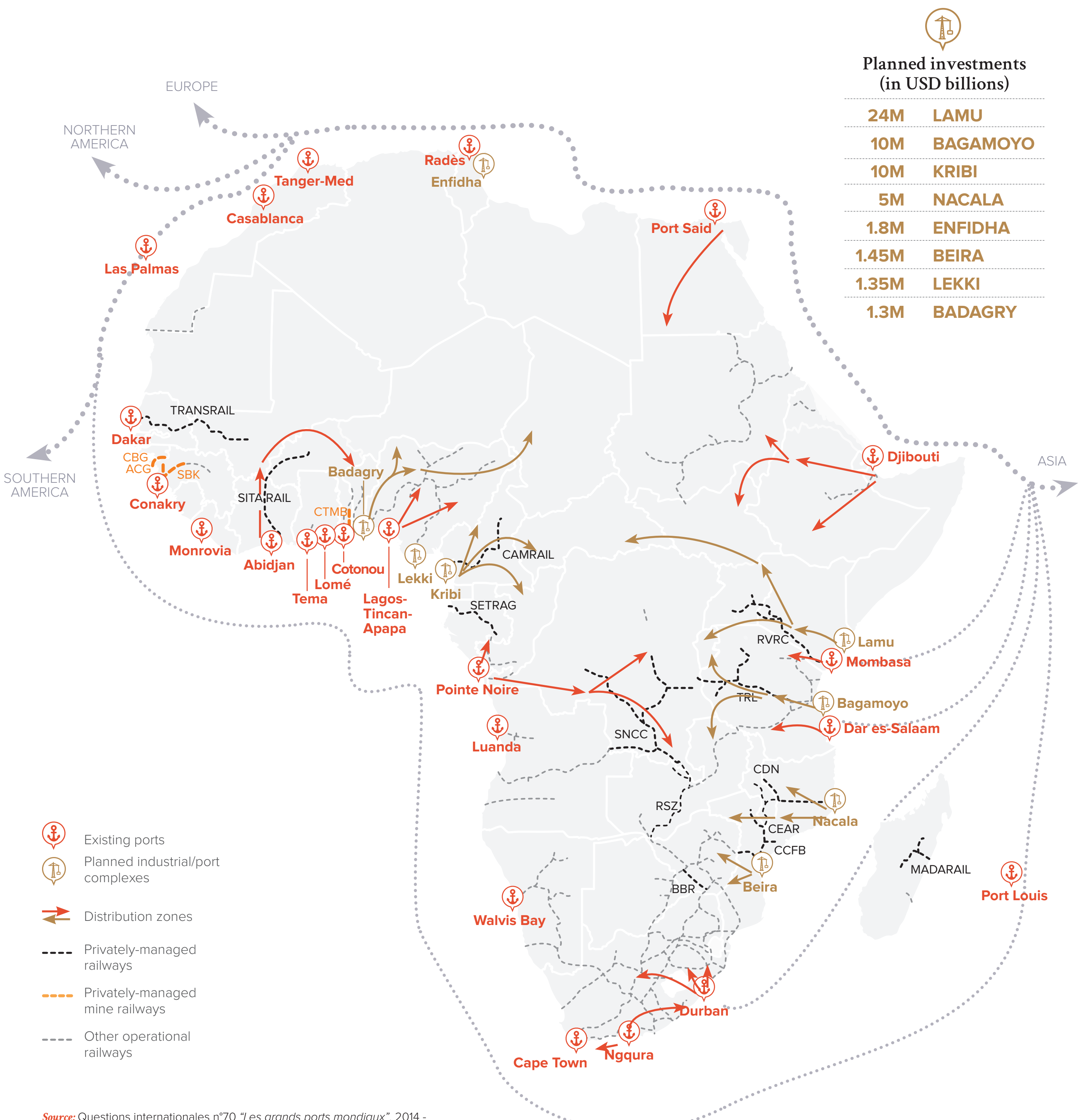
Only construction machinery, heavy machinery and equipment and certain bulk commodities – such as cement or wheat that is stored in silos before being gradually dispatched to meet the needs of major urban centres in the hinterland – cannot be transported by container. Bulky goods and commodities are only sent by rail using specially-adapted wagons if there is pre-existing demand and the required specific investments have already been made.

RAIL'S CRUCIAL ROLE IN DEVELOPING PORT-HINTERLAND LINKS

The ability of seaports to serve major urban centres as well as landlocked regions in the interior is crucial and rail can play a pivotal role here because for countries without a seaboard, like Mali or Burkina Faso, having a reliable neighbour with an efficient port and rail transport system can only be a good thing both in terms of cost and time.

However, opportunities to link ports by rail really do depend on where they lie in relation to major centres of demand. If we take Cameroon where the port of Douala is quite close to the capital Yaoundé, rail transportation between the port and the capital city is marginal compared to road transportation whereas it is far greater for longer distances within the hinterland (in Chad and the Central African Republic, for example). In Gabon, the main centre of demand is right next to the port in Libreville, so the city does not depend on rail-based transport, however, the hinterland and the city of Franceville are all served by container trains. In DRC, the major urban demand centre of Lubumbashi in the →

Entry points into the hinterland



Source: Questions internationales n°70 *"Les grands ports mondiaux"*, 2014 - Proparco/Private Sector & Development, 2011

Source: Bolloré Africa Logistics

province of Katanga is served by container traffic that either comes up through South African, Namibian or Mozambican ports, or in through the *"national way"* which involves moving goods along the Congo and Kasaï rivers as far as Ilebo where railway then takes over.

WHAT DOES THE FUTURE HOLD FOR RAIL-BASED TRANSPORT IN AFRICA?

All port development strategies in Africa now generally include a rail-based component. In Ethiopia, a new line was commissioned in late 2016 to link Addis Ababa to the port of Djibouti. In Angola, the port of Lobito has been completely redeveloped: it now includes a brand new rail terminal linking up to the newly-rebuilt Benguela railway that goes all the way to the DRC. Kenya and Uganda have a joint railway line that works very well.

However, despite such momentum, African railways still faces huge challenges and building new infrastructure and investing in new equipment are only part of the improvements that need to be made. The future of African rail-based transport is also contingent on an effective interface between port and rail operators, which in turn depends on the quality of customs clearance services provided by freight forwarders. Development will also depend on the ability of rail networks to serve a wider customer base so that they do not become captive to a small number of port operators who monopolise transport capacities.

Legal instruments to support the development of African ports

Clément Seka Aba, *LL.D, specialist in maritime and port affairs, Ebiele & Associates*

Governed chiefly by concession and permit agreements, the legal instruments underpinning public-private partnerships (PPP) in the African port sector are often inappropriate. These need to change in order to meet private operators' expectations with regard to stability and security issues. More stringent application of competition regulations and greater flexibility in legislation on public land ownership would undoubtedly encourage private investment.

Development policies still consider maritime ports as essential transport infrastructure vital to the economic emergence of African countries today (Daudet, 2014). The reason is simple: over 80% of Africa's foreign trade passes through a port — and this applies even to countries with no seaboard.

This sector is undergoing massive changes. A new entrepreneurial approach to governance is being established in maritime ports in Africa and the port authorities are starting to base their development strategies on efficient facilities, commercial responsiveness, results-driven culture and transparent management. Increasingly, maritime ports in Africa are not only accommodating the requirements of multimodal transport operators but are also inviting them to become technical, economic and financial partners. For example, the Tanger-Med port authority along with those in Abidjan, Kribi, Dakar, Conakry, Pointe-Noire and San Pedro have now started to outsource their handling, storage, and, more broadly, full terminal operation to private operators.

The public-private partnerships which handle such outsourcing operations are founded on an array of legal instruments. However, business arrangements in Africa are not always legally secured,[1] even though this is an essential prerequisite to the economic development of the continent's ports. Moreover, the legal instruments underpinning PPP need to be adapted to today's new legal, economic and political challenges while reflecting the ongoing modernisation across the sector.

1 As illustrated, for example, by the Conakry container terminal concession — initially granted to Getma International and terminated by decree of the President of the Republic of Guinea on 8 March 2011.

CONCESSION AND PERMIT: THE LEGAL INSTRUMENTS USED IN PPP

The traditional legal instruments that have helped to make a success of PPP in African ports are largely governed by concession agreements and authorisations. A port concession is an overall outsourcing contract in order to occupy and operate a domain within the public port area. Concessions are granted to private partners, generally for the operation of a port terminal or public port installations. The signatory parties to an operating agreement for a port terminal often refer to a "Build, Operate, Transfer" (BOT) type of arrangement, which allows an entire public port service to be outsourced, from project design through project financing and construction to project operation. This type of agreement allows an alignment of the expectations of the port authorities (seeking to outsource overall operations) with those of the private operators (seeking to make a good return on their investments) and those of institutional funders seeking to leverage the dynamism of their private partners for the public good. As for concession agreements for public equipment, they seek to outsource the operation of warehouses, oil storage facilities, berths, cereal silos etc. to a private partner. The private partner most often undertakes some building works, even on a small scale, and so privately occupies public port domain. Such agreements are described as a joint public service delegation combined with a property concession.

The authorisation scheme exists alongside the concession scheme. Authorisation to occupy public port domain must be obtained from the port authority before such domain is used for private purposes. Depending on the circumstances, the port authorities may grant a temporary permit, an official authorisation to occupy public domain, or an authorisation for private operations with a public service obligation. As a rule, port authorities grant simple temporary permits for short-term private occupancies which do not require significant investment. This would be the case, for example, with catering services for dock workers on public port property. However, where private occupancy requires high capital investment and major works to be carried out, it may be necessary to grant an official permit to occupy public domain, a property concession or a roadway concession. These are long-term concessions whereby the port authority provides the operator with some guarantee of stability.

These legal instruments are the traditional PPP tools. They enable the refurbishment of port areas and the modernisation of public services, thereby helping African ports to grow and develop and so become profitable and efficient. However, such legal instruments need to be adapted to the new challenges facing public private partnerships. →

> "The legal instruments underpinning PPP need to be adapted to today's new challenges while reflecting the ongoing modernisation across the sector."

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Abidjan-based international law firm Ebiele & Associates provides advice and litigation services to Côte d'Ivoire and overseas clients, often in collaboration with partner firms that are members of the Paris and New York bar associations. The firm's partners have amassed considerable cross-sectoral expertise over the years in the main aspects of business law (Ohada treaty law, transport legislation, maritime law, port and airport legislation, international trade law, insurance and industrial risk legislation, competition law, property and construction law, social legislation and public procurement law).

THE NEED FOR LEGAL INSTRUMENTS TO EVOLVE

"Permits offering unsecured occupancy of public port property are hardly conducive to partnerships with the private sector."

Indeed, traditional legal instruments still reflect colonial law. However, as African ports adopt new governance policies in an environment of entrepreneurial management and competition, these instruments will need to evolve to respond to the new aspirations of private investors who today demand a secure investment framework.

The legal characterisation of the traditional instruments that have enabled PPP to succeed may sometimes be inappropriate. An example of this is the concession for the second container terminal in the port of Abidjan. The term used — a "public service concession" — conflicts with international standards for modern port management. Handling operations were indeed a public service in the past since they used public equipment but international operators offer nowadays identical services with private equipment. The choice made by the Abidjan port authority therefore runs counter to international practices in the operation of port terminals.

It should also be noted that authorisations offering unsecured occupancy of public port domain are hardly conducive to partnerships with the private sector. The legal philosophy surrounding African ports considers the precarious nature of the private occupancy of public port domain to be one of the main pillars in the system of public ownership. In other words, the port authority can terminate private occupancy of publicly owned domain at any given moment by unilateral decision, even where the occupant is not at fault. This would appear to be irreconcilable with a spirit of partnership based on solid legal guarantees for investors.

Furthermore, practices are changing. In Côte d'Ivoire, for example, private investors have real rights enabling them to provide their lenders with guarantees. Their ownership of the buildings they construct on public port domain is recognised. Despite such progress however, port operators consider their protection on publicly-owned property remains very precarious given the large sums of capital they are seeking to invest.

RE-THINKING THE RELATIONSHIP BETWEEN AUTHORITIES AND PRIVATE OPERATORS

Many economic reports (see, for example, MLTC/CATRAM, 2013) continue to argue that the emergence of African countries depends on the development of maritime ports. The relationship between the authorities and port operators needs to change, given the increasingly important role of the private sector in port operation and management. In fact, *"occupancy of publicly-owned property is not in the interests of the occupants alone. The public authority also benefits from the added value they bring along with their investments and the activities they exercise there. The benefits are mutual."* (Rézenthel, 2001).

Modernising the management of African ports must therefore necessarily entail a change in the legal instruments underpinning public-private partnerships. "These contracts must be subject to a balanced, closely-regulated regime and to specifications that clearly stipulate each party's rights and obligations." (Ndendé, 2013). Competition regulations must be fully applied in the

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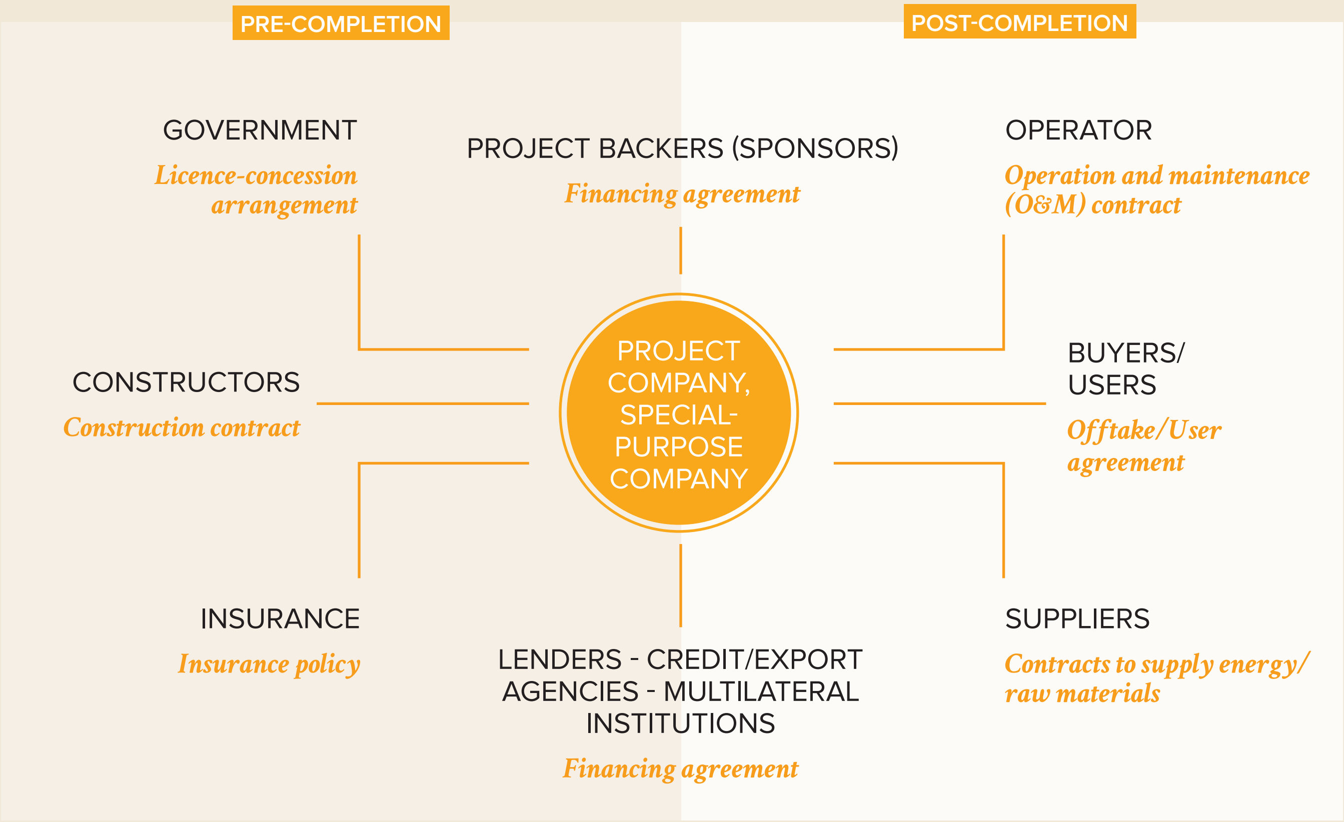
Standard project financing contractual arrangements



Source: Agence Française de Développement (AFD) / Proparco

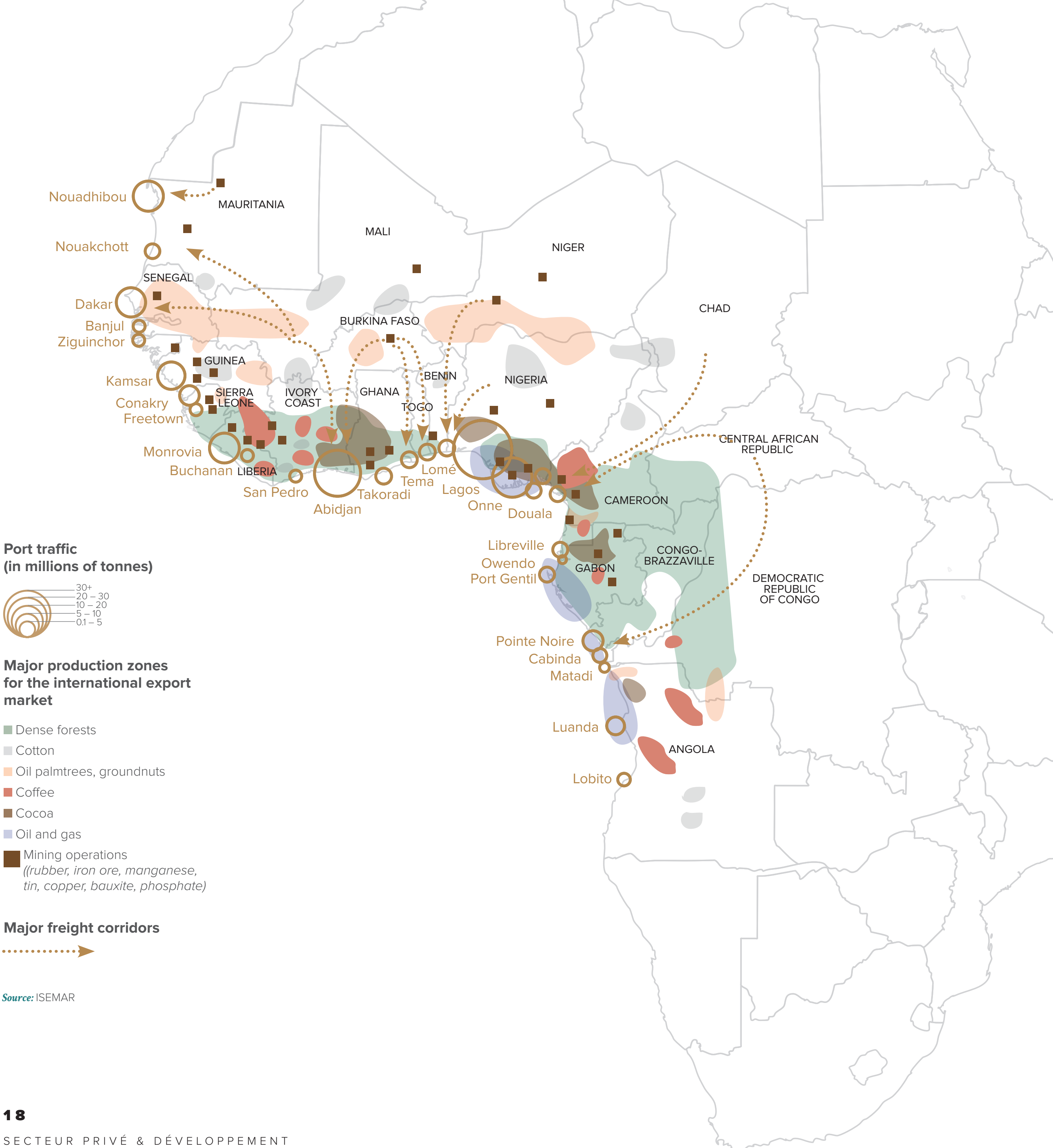
selection of private operators, and the lack of security that surrounds the authorisations for private occupancy of publicly-owned property in numerous African ports must be called into question.

Specifically, three recommendations can be made here. Firstly, the law governing publicly-owned domain needs to be adapted to the specific context of African economies in order to encourage their participation in global maritime trade. Some publicly-owned domain used primarily for economic purposes (such as maritime ports) should enjoy a more flexible and dynamic legal protection in favour of private partners. These domains should be exempt from rules that benefit to port authorities and penalise private investors for no good legal reason. Besides, nothing prevents African port authorities from offering *sui generis* contracts tailored to the needs of their port areas in compliance with rules for public domain. Finally, port authorities could declassify plots of public domain for the purpose of allowing industrial facilities. Such agreements could take the form of private-law contracts, like construction leases. ■

> “Modernising the management of African ports must necessarily entail a change in the legal instruments underpinning public-private partnerships.”

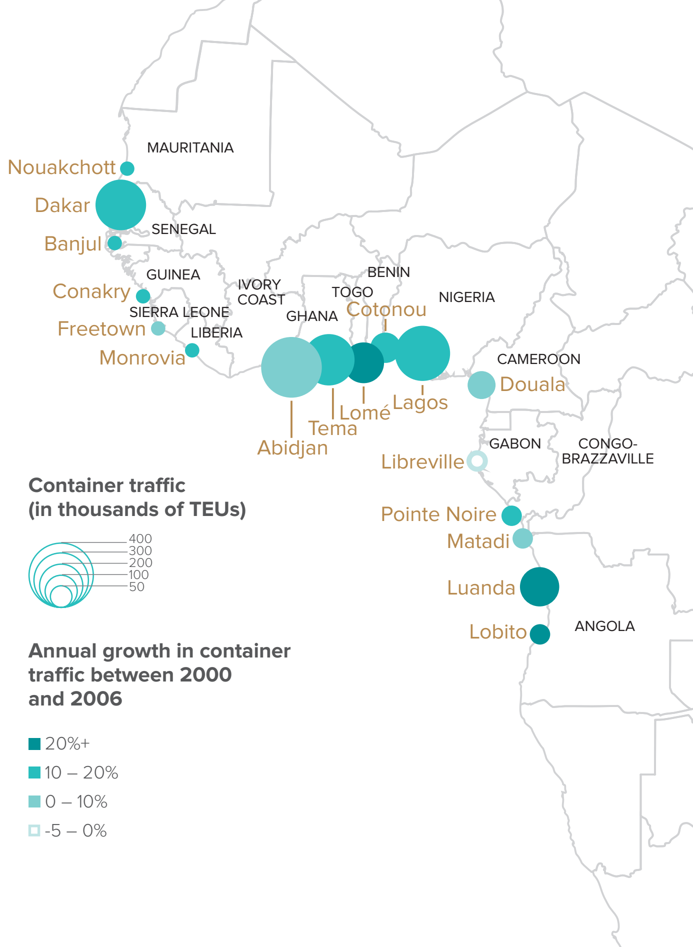
African maritime ports

Port organisation in West Africa: getting raw materials out and keeping goods flowing into landlocked countries ▼



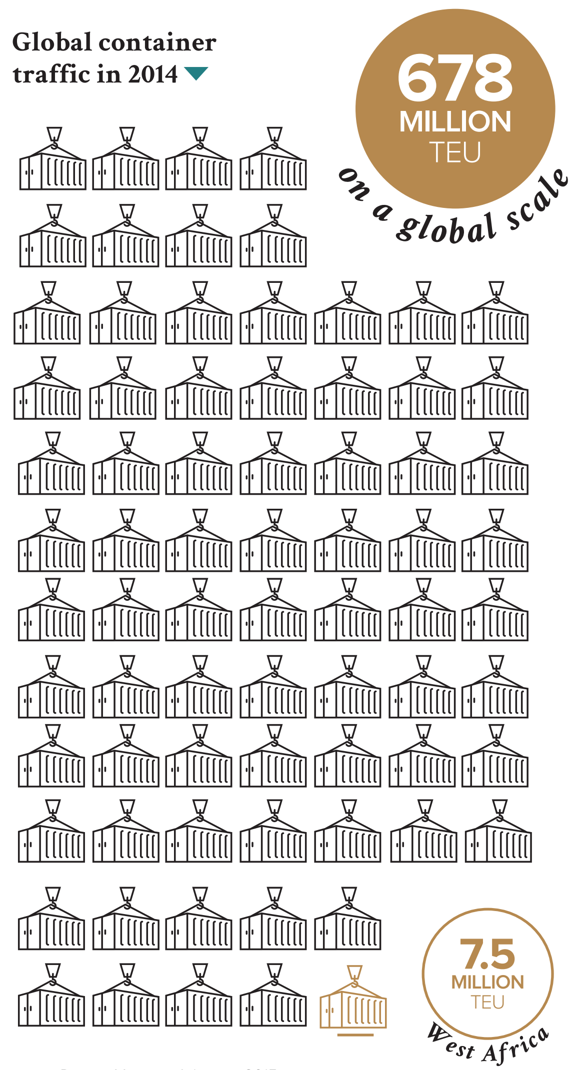
Source: ISEMAR

Distribution and concentration of container terminal facilities on the African Atlantic seaboard



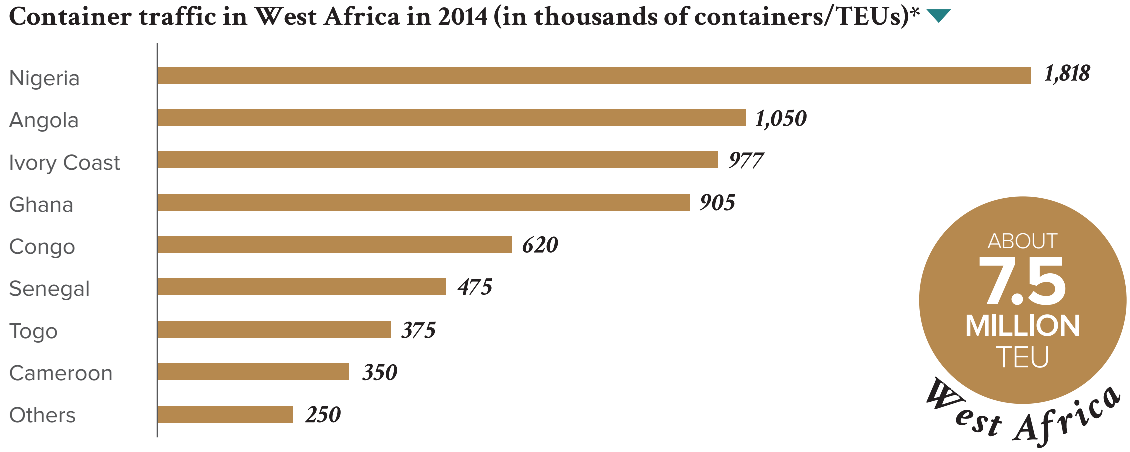
Source: ISEMAR

Global container traffic in 2014



Source: Drewry Maritime Advisors, 2015

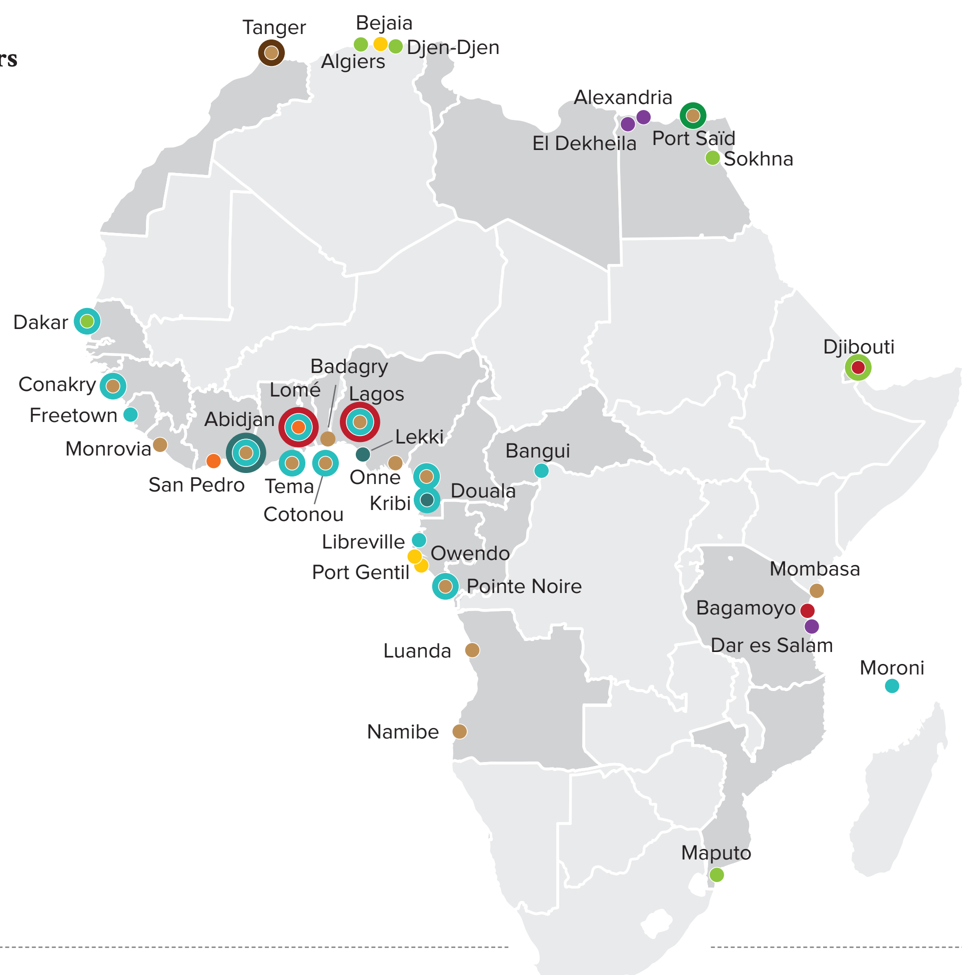
Container traffic in West Africa in 2014 (in thousands of containers/TEUs)*



*Contains estimates

Source: Drewry Maritime Advisors, 2015

International port operators in Africa



EUROPE
- Bolloré Logistics (France)
- CMA CGM (France)
- MSC (Italy – Switzerland)
- APM Terminals – Maersk (Denmark)

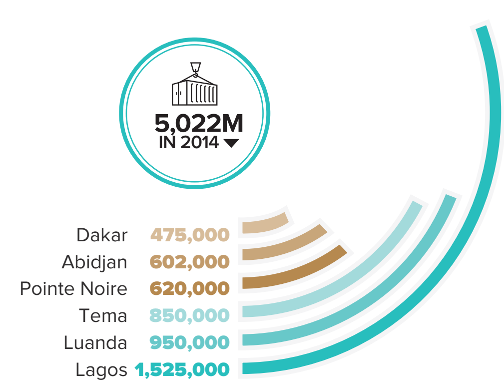
ASIA
- China Merchants
- HPH (Hong Kong)
- Cosco (China)
- Portek (Singapore)
- PSA (Singapore)

MIDDLE EAST
- DPW (United Arab Emirates)

Source: Port operators

Overview of the container market in West Africa's six main ports

West Africa's six main ports handle 64% of containerised traffic in the region.



ANNUAL RATE OF GROWTH: 2005-2014

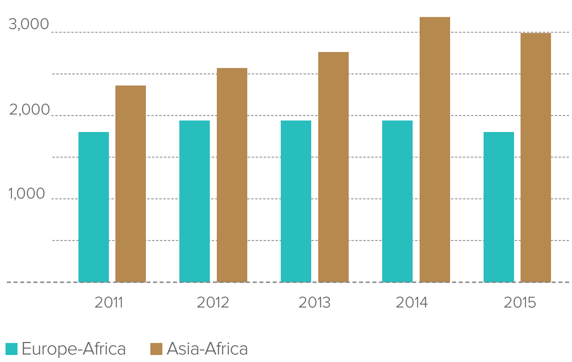
+4,4%	+0,5%	+19,7%	+8%	+8%	+11,5%
Dakar	Abidjan	Pointe Noire	Tema	Luanda	Lagos

Source: Drewry Maritime Advisors, 2015

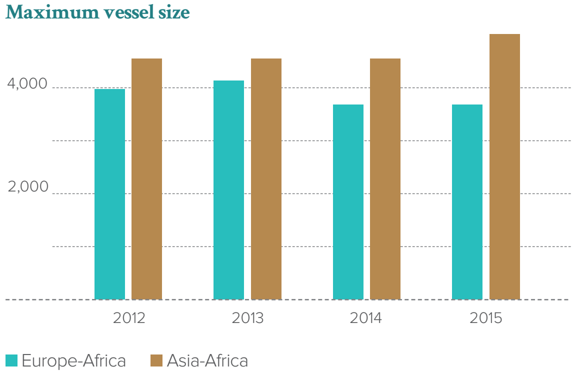
Structure of services in W Africa – vessel size trends (in TEU)

There has been a trend towards much larger vessels serving West Africa in the last few years, but so far larger vessels have been deployed only on the Asian services.

Average vessel size

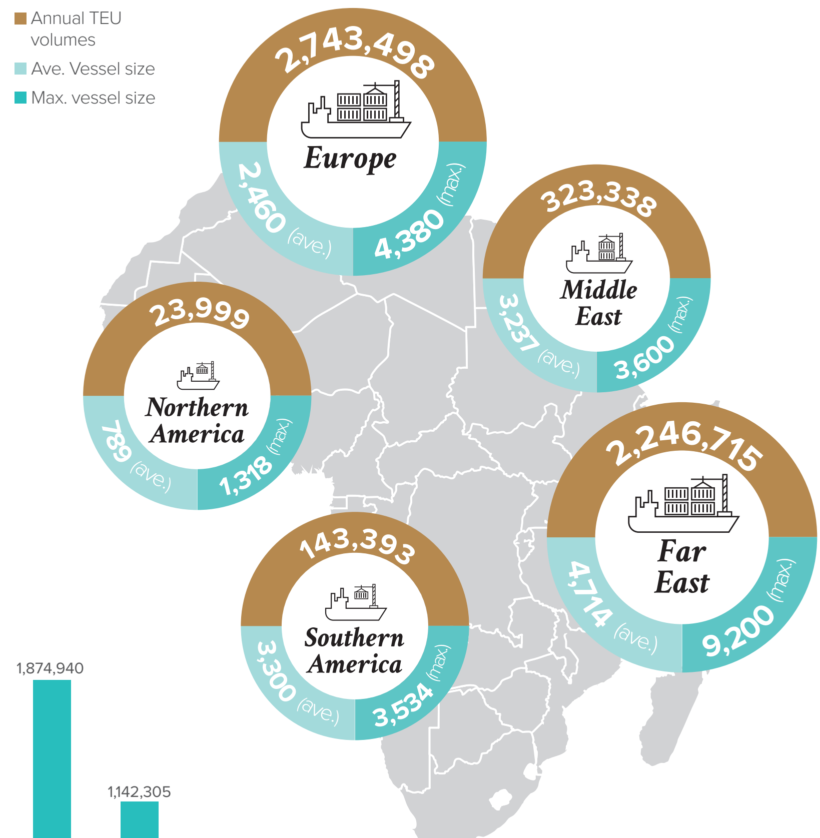


Maximum vessel size

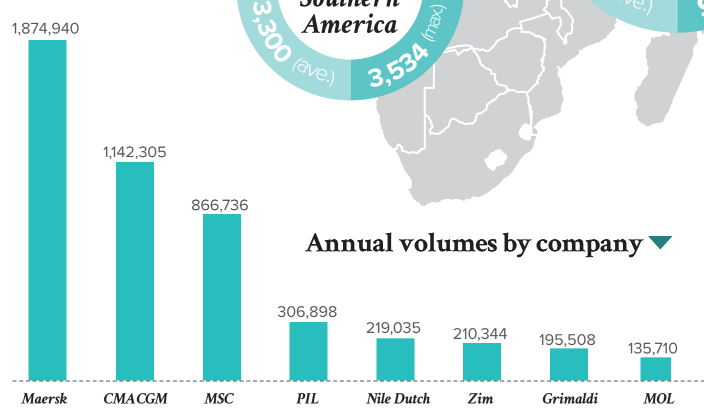


Source: Drewry Maritime Research, 2015

Maritime traffic with Africa by geographical region (containers/TEUs)

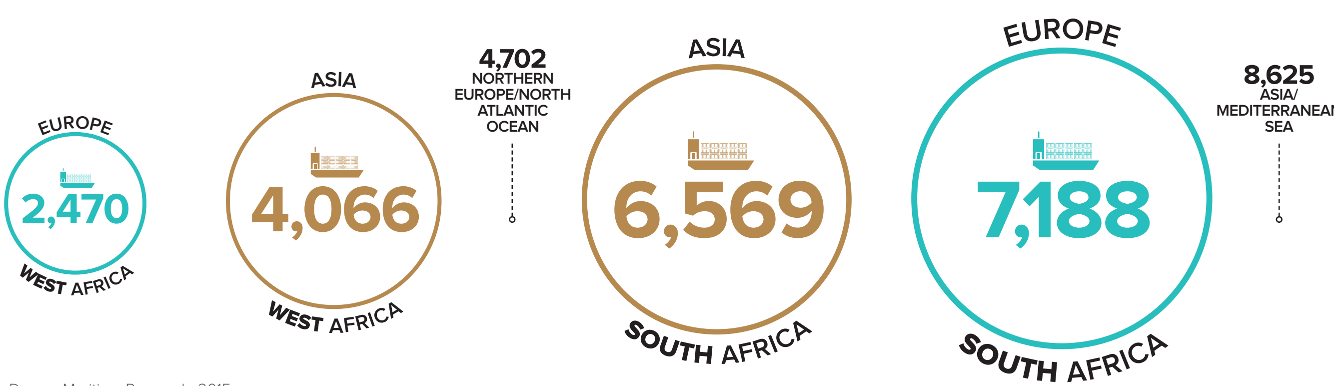


Annual volumes by company



Source: Drewry Maritime Advisors, 2015

Average size of commercial vessels operating on African routes (in TEUs)



Source: Drewry Maritime Research, 2015

Integrating African ports into international commercial flows: strengths and weaknesses

Gilbert Meyer, *expert on port-related and maritime economics, Catram*

Increased containerisation of trade, changing infrastructure and more and more mammoth projects... for the past 20 years, African ports have enjoyed huge momentum. But the obstacles hampering development are many and port infrastructure still has a long way to go before it complies with international standards.

FOCUS
CATRAM CONSULTANTS

Catram Consultants was set up in 1982 and is now part of Inddigo Group. It carries out all sorts of economic studies into ports and their development (feasibility studies, development blueprints, market studies, pricing guidelines, etc.), as well as into maritime, inland waterway and rail transport. Catram Consultants are active in France but also have a big international focus, especially on French-speaking African countries.

In 2011, some 2.63 million TEUs arrived in West African ports, including 0.705 million TEUs from Northern Europe and 1.925 million from Asia. In 2014, this figure had climbed to 3.313 million TEUs, a jump of 26% in just three years. Although this is an impressive increase, it needs to be placed in the overall context of containerised international trade: in 2015 for example, around 630 million TEUs were traded across the globe. Nevertheless, the growth in tonnage passing through major West African ports – 134% growth between 2009 and 2014 for the Port of Lagos; 100% for Pointe Noire (ISEMAR, 2016) – are a testimony to real dynamic growth.

This surge in container traffic in Africa has been driven by economic growth and upgrading of port facilities, notably in relation to port concessions developed in recent years, which have greatly enhanced technical capabilities: the advent of mobile cranes and quay cranes has speeded up handling considerably. 25 years ago for example, without proper port facilities, four or five containers an hour could be processed per team, whereas today this figure averages 15 containers. Despite considerable progress, the development of African ports is still being hampered by numerous problems.

IMPROVING AFRICAN PORT PERFORMANCE

African ports have experienced huge growth over the past 20 to 25 years thanks *inter alia* to more modern facilities and infrastructure made possible by greater private sector investment. This means that these big ports now have facilities and container throughput productivity rates closer to those found in Europe.

And while Africa is still a minor player in international trade terms – if global exports in 2014 are broken down, 3% came from Africa, 32% from Asia and 36.8% from Europe (WTO, 2015) – it has nevertheless become a key player with essential ports of call for the major international operators. The ports along the West African coast have become familiar territory for the big maritime transport companies. These include, unsurprisingly, the European heavyweights and big international players: A.P. Moller-Mærsk (Mærsk), Mediterranean Shipping Company (MSC) and CMA CGM. These companies are obliged to have a global footprint and to be able to serve their customers in all markets.

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RE-ROUTING TRAFFIC TO ASIA

The operators present in Africa are increasingly looking towards Asia, and China in particular. In order to meet its gargantuan raw materials requirements – especially oil, mineral ores and rubber – China is in the process of deploying a comprehensive strategy to diversify its supply base. Africa is one of China's key investment priorities and it has secured numerous infrastructure contracts, notably in the port sector.

The shift in commercial flows is now an established reality: 20 years ago, Europe was the predominant trading partner for both African imports and exports. Asia has now supplanted it, albeit not completely. While the picture varies from port to port, 40% (on average) of containerised foreign trade with Africa is now with Europe, compared with 60% with Asia.

> "The operators present in Africa are increasingly looking towards Asia."

It is fairly easy to understand why. Chinese exports, which boomed during the same period, essentially comprise cheap consumer goods which are highly attractive to the African market given its prevailing low living standards. But other factors are also at work. China is increasingly present in Africa as an economic superpower with considerable financial muscle and enormous resources. It is able to offer financing arrangements that other countries are unable to match.

MONOPOLIES AND HIGH PORT DUES

The primary role of ports is to supply their countries and keep goods flowing through the many surrounding transit corridors that connect landlocked countries with no direct access to ports: in West Africa, this is the case for Mali, Burkina Faso and Niger.

The port sector in West and Central Africa is currently witnessing significant concentration although there are opportunities for new entrants. This monopoly situation combined with poor container flow and very long dwell times (frequently over 20 days on average) make African ports very expensive: if we just take container terminals, transit fees are often far higher than those in Europe (up to €1,500 for handling, warehousing and local delivery versus €250 to €300 in Europe).

While lack of competition goes some way towards explaining these higher costs, it is not the only factor at work. Historically, the French-speaking world often served as a model for these African ports, frequently resulting in cumbersome processes and excessive red tape. Until recently, they were run like state-owned enterprises. The number of checks operated by various state and security bodies before goods can leave port and a road infrastructure that is often saturated considerably increase processing times and ultimately, the cost of moving goods through African ports. In addition, road connections still present major difficulties that negatively impact the competitiveness of African ports: networks in disrepair, dangerous routes due to the risk of attack or sometimes no network at all. All of these factors generate increased costs and longer delivery times – and concern around one container per day delivered by truck – for journeys that may only be a few kilometres long. →

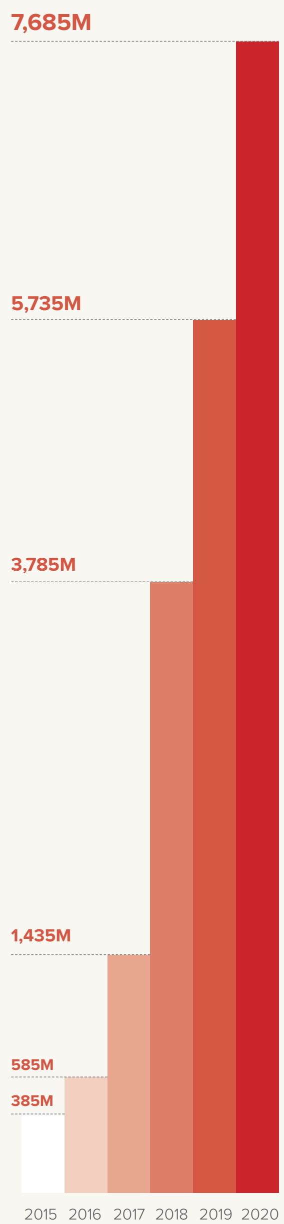
The world's top five container ship operators

1. APM-MAERSK
2. MEDITERRANEAN SHG CO
3. CMA CGM GROUP
4. COSCO SHIPPING CO LTD
5. EVERGREEN LINE

Source: Alphaliner – Top 100, 9 February 2017

Planned capacity expansions to 2020 (Million TEU)

By 2020, completion of the main expansion projects within the largest ports in W Africa could increase terminal capacity by nearly 20 million TEU, allowing larger vessels to serve the region.



Source: Drewry Maritime Research, 2015

Lastly, scale can also help explain these high costs. Overall, African ports are fairly small and none figure on the list of major international ports: a big container port like Abidjan (Côte d'Ivoire) handles around 700,000 TEUs every year; 1.5 million TEUs went through the two terminals in the port of Lagos (Nigeria) in 2014. While these figures are impressive, they are still a very long way from the 20 million+ containers that pass through the port of Ningbo-Zhoushan (China), the 12 million+ that go through Rotterdam (Netherlands), or close on 10 million TEUs that go through Antwerp (Belgium).

WHAT IS THE WAY FORWARD FOR AFRICAN PORTS?

Although the Continent's infrastructure does appear to have improved, much work needs to be done if Africa is to be in a position to compete with the world's top ports.

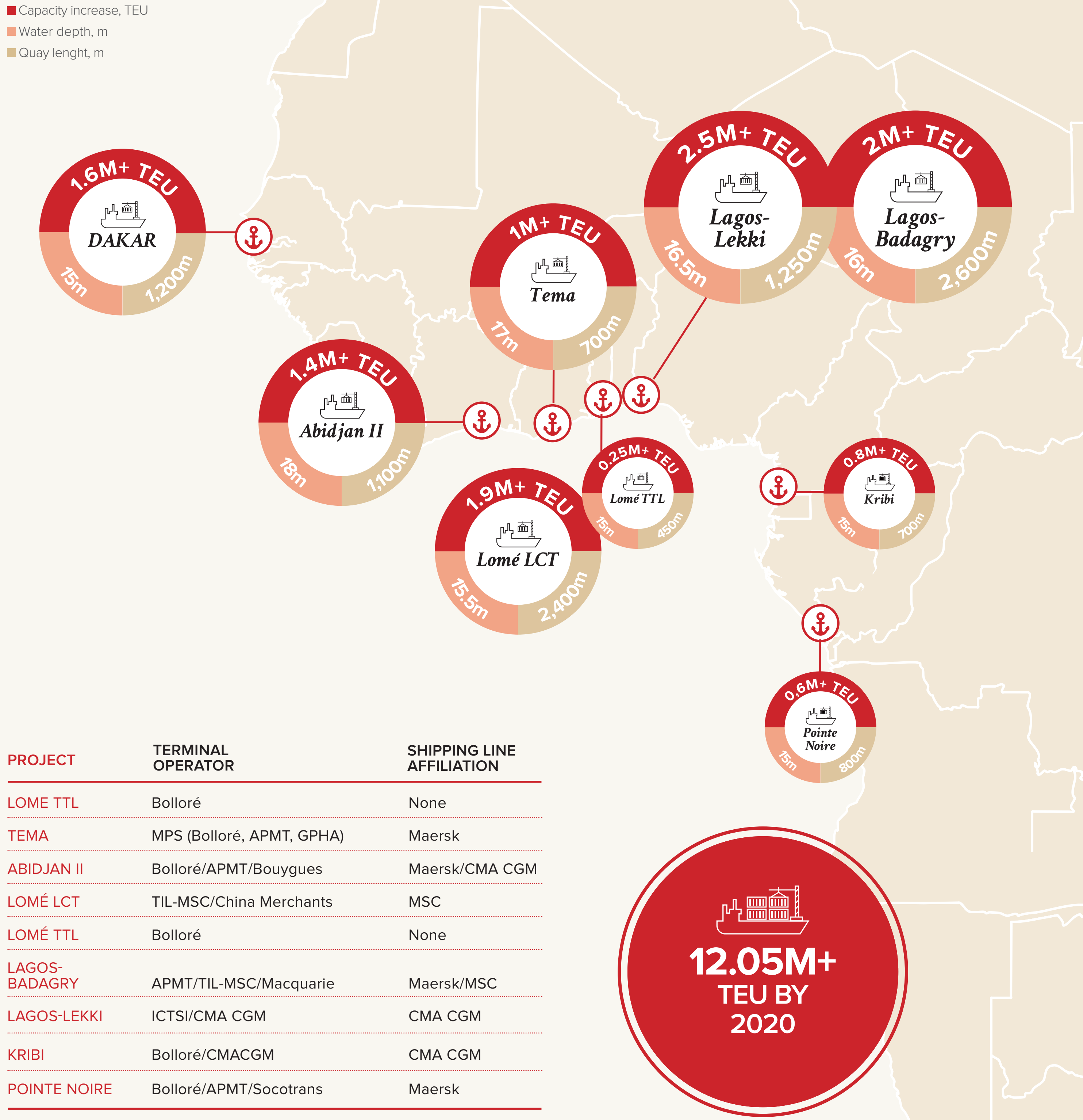
African ports appear to be entering a "two-speed" system. Leaving aside North Africa – particularly Tanger Med with a great location in the Straits of Gibraltar – where ports are in a different league from those of Sub-Saharan Africa, there are legacy ports from a previous generation and other ports that are either planning to increase their capacity or have already done so. For example, Pointe Noire (Republic of the Congo) has built a 15 metre-deep quay to welcome the biggest carriers; plans are afoot to build two new ports at Lekki and Badagry (Nigeria), and two new container terminals are set to open for business in Tema (Ghana) and Abidjan (Côte d'Ivoire). Ports will eventually split into two categories: those with a maximum 10 metre draught,[1] and the others. The best-served African countries will be those that have developed deep-draught port infrastructure with enhanced technical facilities.

African ports face a massive challenge: staying in the race towards ever more enormous ports being spurred on by the big operators that is instrumental in redirecting bulk carrier traffic. Each new 18,000-TEU container ship port facility that comes on stream redirects 13,000-TEU vessels to other ports, which in turn redirects 10,000-TEU capacity ships towards other ports (hence the term "cascading"). This race to be big that is being driven by the major shipping companies is having a knock-on effect on the ports which are forced to accommodate ever-bigger ships and to upgrade their technical facilities. The fact that investment is being concentrated at the most modern ports, or those with the highest potential – with consideration for existing infrastructure and hinterland – risks leaving the least advanced African ports even farther behind.

Africa's trump card remains its formidable dynamism and the growth opportunities it currently offers for the port sector. To stay in the race, it has to invest in improving service quality as well as in lowering transit fees. The challenge is there and certain African ports have already decided to take it up. ■

1 ▸ Draught is the vertical distance between the waterline and the bottom of the ship's hull (keel), with the thickness of the hull included.

Developments in nine West African port infrastructure



PROJECT	TERMINAL OPERATOR	SHIPPING LINE AFFILIATION
LOME TTL	Bolloré	None
TEMA	MPS (Bolloré, APMT, GPHA)	Maersk
ABIDJAN II	Bolloré/APMT/Bouygues	Maersk/CMA CGM
LOMÉ LCT	TIL-MSC/China Merchants	MSC
LOMÉ TTL	Bolloré	None
LAGOS-BADAGRY	APMT/TIL-MSC/Macquarie	Maersk/MSC
LAGOS-LEKKI	ICTSI/CMA CGM	CMA CGM
KRIBI	Bolloré/CMACGM	CMA CGM
POINTE NOIRE	Bolloré/APMT/Socotrans	Maersk

Source: Drewry Maritime Research, 2015

Becoming a "green port" in Africa

Lionel Franceschini and Véronique Pescatori, *Agence Française de Développement*

Port authorities have a number of levers at their disposal to pursue a "green port" model: contracting taxation, environmental certification and the adoption of international standards. However, while ports in developed countries are evolving swiftly towards more sustainable models, their African counterparts may require support in responding to environmental challenges and this is where development agencies can help.

FOCUS
AFD

Agence Française de Développement is the operator for France's bilateral development finance mechanism. It is a public industrial and commercial institution with the status of specialized financial institution. Its action is in line with the policy set out in France's Framework Document for Development Cooperation. This document was approved at the end of 2010 and in 2011 was translated into a three-year contract specifying objectives and resources between the French Government and AFD.

Although essential to global commerce, the maritime transport sector is also creating a number of negative externalities. One example is combustion of the heavy fuel oil used by marine vessels, generating sulphur oxide emissions that are estimated to result in some 60,000 premature deaths annually within the European Union (Van Eeckhout, 2015). Furthermore, some 6.4 million tons of marine waste are discharged each year into our seas and oceans (UNEP, 2005); in 2015 alone tankers discharged some 7,000 tons of hydrocarbons (ITOPF, 2016).

While most of these impacts are generated by the vessels themselves, ports also cause a certain amount of environmental damage, including aquatic and atmospheric pollution, habitat alteration, waste generation, and more. Ports are often located in very densely populated areas and may generate conflicts over the use of coastal areas or harmful externalities for nearby populations (noise and light pollution).

Initiatives such as specific standards, labels and certification, and international and EU regulations are currently persuading the majority of players in the maritime sector to reduce their environmental and climate footprints.

ACTION, BEST PRACTICE AND CERTIFICATION: TOOLS FOR THE DEVELOPMENT OF "GREEN PORTS"

More and more ports are taking measures to prevent marine and atmospheric pollution, improve energy efficiency, enhance their waste management processes, and reduce their greenhouse gas emissions. Due to its key position within the logistics chain, the port authority is the key driver in a port's development.

As managers of their own facilities, port authorities are in a position to integrate both environmental and social issues into their strategic planning. They are also able to contribute in a very concrete manner to making their infrastructure more sustainable, for example through the use of energy-efficient, sustainable materials, or by providing in-port electrical connections that enable vessels to avoid consuming their own fuel while in port.

As managers of commercial activity zones, port authorities are in a position to influence the behaviour of the various entities operating in the port. The authorities can make use of both regulatory tools and financial incentives: for example, port taxes can be tied to a vessel's environmental performance, i.e., higher taxes for carbon-heavy fuels and/or lower taxes for "clean" engines. They may also use their contracting powers to effect change by inserting environmental clauses into concession arrangements regarding the energy efficiency of handling equipment. As a local stakeholder, the port authority is also a key voice in debates over the relationship between the port itself and its environment, covering issues such as urban planning strategy, goods transit arrangements, etc.

Port authorities may sign up to various environmental certification systems such as ISO 14001, the European Union Eco-management and Audit Scheme, or the Port Environmental Review System. The European Sea Ports Organisation (ESPO) has developed an "EcoPorts" label for ports voluntarily adhering to best sustainable development practices and ninety-eight ports have been certified to date. Enhanced awareness of environmental and climate challenges coupled with the availability of these different resources have given rise to the concept of the "green port" where both the port authorities and stakeholders adopt a more eco-friendly and society-friendly mindset, focusing on the three – social, economic and environmental – pillars of sustainability.

> "International and EU regulations are currently persuading the majority of players in the maritime sector to reduce their environmental and climate footprints."

IMPLEMENTATION DIFFICULTIES IN DEVELOPING COUNTRIES

Although these initiatives are entirely voluntary, the current international context combined with fierce competition between ports at global level are providing the ports themselves with a strong incentive to implement them. A study undertaken by ESPO shows that substantial progress was made in terms of environmental management between 2004 and 2013.[1] A large number of major international ports are now pursuing ambitious environmental policies (Rotterdam, Amsterdam and Antwerp *inter alia*). In many developing countries however, and notably in Africa, ports are struggling to mitigate the negative impacts of their activity. Indeed, a number of African ports have to contend with a range of difficulties and issues which hamper both the identification and adoption of best environmental practices. The choice of effective measures and their implementation are complicated by geographical, regulatory and technical factors. For example, in-port electrical connections require a reliable, powerful electrical supply – something not available in every country. Obstacles may also be of an economic and financial nature and it may be difficult to justify measures that are not directly linked to port activities in a context of fierce competition.→

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1 › Over this period the number of ports implementing an environmental management system was up 43% and the number publishing an environmental report was up 33%.

There are also management and governance difficulties: a more sustainable approach must be underpinned by an effective and stable environmental management system, however institutional frameworks may be in very poor shape. Moreover, the sheer number of port stakeholders complicates the implementation of effective and comprehensive measures which require careful coordination. Social factors may also come into play; the maritime sector is becoming increasingly automated, raising the spectre of job insecurity among cargo handlers.

> "Funding agencies can play an important role by supporting initiatives aimed at mitigating environmental and climate impacts, reducing energy consumption or enhancing the living and working environment around the port."

Funding agencies such as Agence Française de Développement (AFD) can play an important role here by supporting initiatives aimed at mitigating environmental and climate impacts, reducing energy consumption or enhancing the living and working environment around the port. Such partnerships may take a variety of forms, ranging from assistance to skills transfer or even direct funding.

THE ROLE OF FUNDING AGENCIES

Funding agencies can make infrastructure financing contingent on preliminary environmental studies – or even fund such studies directly. To take an example, AFD financed an environmental and social assessment study in favour of the Autonomous Port of Pointe Noire (Congo-Brazzaville) as well as a study on the feasibility of designing a waste management system and a wastewater system designed for the port (see Insert). Funding agencies may also seek out additional funding for their partners from international "green fund" institutions – principally in the form of investment subsidies. Of course, they will also be directly involved in financing more effective infrastructure and agencies often play a key role in transferring skills between developed and developing countries.

Funding agencies are also able to take a more global perspective at the level of a sub-region. For example, the German development agency, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) launched the *Sustainable Port Development in ASEAN Region* programme in partnership with two regional intergovernmental organisations.[2] The results of this programme are quite encouraging and all of the partner ports have improved their safety, health and environment management systems.

Funding agencies also focus on the links between a city and its port. This may involve helping a city to develop around a port by coming up with an integrated urban development strategy – AFD is currently financing studies and expertise with a view to developing the

2 ‣ This programme was set up in cooperation with the Association of South East Asian Nations (ASEAN, composed of Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand and Vietnam) and with the Partnerships in Environmental Management for the Seas of East Asia, an intergovernmental organisation which developed the Port Safety, Health and Environmental Management (PSHEM) System), a standard equivalent to ISO 14001 and 9001 certification and the British standard OHSAS 18001.

area around the new port of Kribi (Cameroon). Older cities sometimes need help with managing the traffic problems generated from increased port activity or building storage areas outside a congested port.

> "Ports undeniably play an important role in mitigating the negative externalities generated by the maritime transport sector."

Ports undeniably play an important role in mitigating the negative externalities generated by the maritime transport sector. Major strides have already been made, especially in developed countries, as witnessed by the measures introduced in European ports and the growing success of international standards and certification procedures. While some initiatives are clearly difficult to replicate in developing countries, others must be promoted, encouraged and supported. Funding agencies can help the players involved in this sector, particularly in Africa, to start thinking in terms of a "green port" rationale – for example, by tying infrastructure funding to the adoption of more sustainable practices.

AFD and the Autonomous Port of Pointe Noire (PAPN)

In common with all ports, the Autonomous Port of Pointe Noire generates negative externalities for its surrounding environment. As part of the port's Investment Priorities Programme, AFD has been helping to fund port infrastructure (quays, open storage areas, etc.) since 2009. A consultancy firm was commissioned to devise and implement an environmental management system at Pointe Noire and various studies were produced concerning rainwater treatment and the management of waste and hazardous materials. Funding was also given for a plan to improve port procedures and cut waiting time in harbour and port congestion, both of which negatively impact the environment.

In addition, as PAPN had to contend with a pollution incident during dredging operations, due to the presence of bituminous sands in the subsoil, AFD and the European Investment Bank insisted on an environmental and social management plan for the dredging operations which are so essential to the port's operations.

But PAPN knows that more needs to be done in terms of environmental and social management and it has commissioned a simplified "sustainable development" audit to identify areas for improvement and, ultimately to do what it takes to obtain an environmental label or certification. In the shorter term, it has already set out the priorities for coming years: construction of the wastewater system recommended by the preliminary study and improving waste management (in particular by setting up a "MARPOL Ecopoint" pollution monitoring station). Aside from these specific investments, and given the wide range of environmental and social aspects that need to be monitored, PAPN needs a proper environmental and social management system and a suitably adapted organisation structure.

Growth in containerisation signals a modernisation of African ports

Paul Tourret, *Director of ISEMAR, holds a PhD in economics and geography*
Camille Valero *is a maritime lawyer working at ISEMAR*

Port logistics in Africa are rapidly shifting from conventional transport to containerisation. A number of modernisation projects are under way at existing ports, and new infrastructure is emerging. While containerisation is already a reality across North and South Africa, it is much less well established in the West and East of the continent. However, very few of the investors and operators who will benefit from this trend are actually African.

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Over the past 10 years, Africa's GDP has grown by 5% a year – one percentage point higher than global growth – and the continent is closely tied in to the global value chain (GVC). Between 1995 and 2014, Africa's share of global commerce grew from 1.4% to 2.4%, while that of the US, Asia and Europe fell slightly. However, Africa remains primarily confined to the role of raw material supplier and unable to transition to that of a production platform. It runs a trade deficit, with imports – mostly of manufactured goods – exceeding exports, 80% of which are primary products: oil and gas, and mining, agricultural and forestry products.

Globally, between 2005 and 2014 international transport costs averaged 9% of the value of imports; for the African continent however this figure was 11.4% (UNCTAD, 2015). GVC is dependent for 90% on transport by sea and is therefore constrained by the costs and limitations that characterise this mode of transport in Africa, including logistical problems, delivery delays, and poor intermodal infrastructure. For example, it has recently been reported that "it costs USD 2,055 to export a 20-foot container in Kenya and USD 1,531 in South Africa compared with just USD 577 in Morocco and USD 500 in China" (AfDB/OECD/UNDP, 2014).

Since the early 2000s, Africa has seen exponential growth in containerisation and, with it, modernisation of infrastructure and changes in port administration. The pace and nature of these changes vary widely from region to region, however.

AN OVERVIEW OF PORT MODERNISATION IN AFRICA

North Africa has a privileged position: along its Mediterranean coastline, Tanger Med in Morocco and Port Saïd and Damietta in Egypt are transhipment ports serving the most integrated economies in the region. With a third container terminal coming on stream, operated by Marsa Maroc, Tanger Med is a vibrant trading hub. Meanwhile, Algeria and Libya are oil- and gas-exporting countries that import a wide range of goods, while Tunisia – which is less rich in raw materials – is reliant on international outsourcing and subcontracting.

> “Since the early 2000s, Africa has seen exponential growth in containerisation and, with it, modernisation of infrastructure and changes in port administration.”

In sub-Saharan Africa, and particularly in Western Africa, the falling cost of crude oil has triggered a decline in imports coming through ports. The economies best able to deal with this are the most diversified. Côte d'Ivoire exports most of its cocoa beans through the port of San Pedro, which will become one of the entry points to Mali once the planned motorway linking San Pedro, Boundiali, Zantiébougou and Bamako is built. A logistical base funded by EUR 20 million from the CMA-CGM group (specialised in container transport) will also improve supplies to Mali and Burkina Faso. As well as opening up markets in landlocked countries, gaining access to production areas is an integral part of the major maritime operators' strategies. Links with inland areas are a major factor in competitiveness, along with access to deep-water ports capable of receiving ships with a capacity equivalent to 8,000 TEUs. Lomé comfortably leads the field in this regard, with an annual capacity of 2 million TEUs. In some ports (Dakar, Cotonou, and Pointe Noire), the upgrading of the port system implies a modernisation of quaysides, while in others, such as Tema, Lomé, Freetown and Conakry, the focus is on extensions of various sizes. And new sites are being developed or planned, such as in Sao Tomé and Kribi (Cameroon), while the Nigerian city of Lagos is scheduling new, high-capacity deep-water ports. Total port traffic in West Africa, from Dakar to Luanda, is currently 7.5 million TEUs, with a capacity of 10 million TEUs. The new projects coming on stream will double this capacity over the next few years.

South Africa is the undisputed leader in Southern and Eastern Africa, with three container terminal ports: Durban (which has a capacity of 2.6 million TEUs and primarily serves the Far East, Europe and the United States), Port Elizabeth, which serves nearby agricultural regions, and Ngqura, which was set up in 2009. With its Doraleh terminal, developed as a public-private partnership by the Dubai-based company DP World, Djibouti has evolved from a regional hub to a recognised driver of economic growth in Ethiopia. Further south, DP World is also involved in the port of Berbera in Somaliland. The acceleration of port traffic containerisation across Southern and Eastern Africa is largely the result of Chinese exports, a development that brings its own problems. For example, the Kenyan port of Mombasa almost exclusively handles imports, and between 2000 and 2012, global traffic increased by 118%, creating a major bottleneck and stifling the economies of landlocked countries. →

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The Higher Institute of Maritime Economics (known by its French acronym ISEMAR) was set up in 1997 by regional and port sector stakeholders in Nantes Saint-Nazaire. Its role is to analyse developments in the maritime and port sectors in France and around the world, with its work being available to the public particularly through its publications. ISEMAR's Summary Reports are today a benchmark, providing respected analysis of major issues in the maritime sector covering markets, stakeholders and geographical regions.

THE PLAYERS IN THE AFRICAN TRANSFORMATION

Over the past 10 years or so, USD 50 billion has been invested in ports in sub-Saharan Africa by a small number of global players: APM Terminals, the Maersk group port subsidiary; Mediterranean Shipping Company (MSC); CMA Terminal, a subsidiary of CMA-CGM; the Bolloré group, which operates 16 container port concessions across Africa; and, increasingly, the maritime conglomerate China Merchant. While DP World has a base in Dakar, the two port handling giants, Hutchison Port Holdings (HPH) and the Port of Singapore Authority (PSA), are conspicuous by their absence from the region. By contrast, the Philippines-based International Container Terminal Services, Inc. (ISTCI) is involved in Matadi (Democratic Republic of Congo) and especially in Lekki (Nigeria). This handful of players operates either as partners or as competitors, depending on the nature of their West African concessions.

The presence of major industry players and significant investment partly explain the increase in the number of megaport projects in the region.

> "Over the past 10 years or so, USD 50 billion has been invested in ports in sub-Saharan Africa."

However, other factors also contribute to this development. For example, there are plans for a new port in Lamu in Kenya to serve a rail link between the Indian Ocean and the Gulf of Guinea. The project also involves building a liquefied natural gas plant, a refinery, a desalination plant and several new towns. Whether a genuine regional development project for Africa, or merely a vanity project of the governement with the support of Chinese construction partners, the project is far from receiving unanimity from the population. It also throws up numerous potential difficulties, among them the threat of pollution, potential property speculation, the impact of the simmering civil war in South Sudan, and terrorism in Somalia.

Other gigantic projects being funded and built by Chinese partners are springing up across Africa, including in Bagamoyo in Tanzania and Technobanine in Mozambique. Furthermore these projects also target the domestic markets of landlocked countries, with plans for major rail routes linking the new ports with, in particular, the African Great Lakes and Southern Africa. While these Chinese turnkey projects, especially in the Gulf of Guinea and the Indian Ocean, are unquestionably part of Africa's modernisation, they are also resulting in over-equipping the region with ports. Time alone will tell whether this new infrastructure has conferred a real benefit or merely a relative one.

FOREIGN COMPANIES DOMINATE

It is significant that the companies managing the regular lines to Africa, and the constructors and operators of port infrastructure on the continent, have one thing in common; all are foreign businesses. Indeed, the African market remains fragile: among other factors, competition is intensifying, port infrastructure is close to over-capacity, markets are dispersed, and some lines either fail to be profitable, or are insufficiently so. Operators considering investing in Africa therefore need to be particularly robust, especially in response to proposals for ever more ambitious projects. These companies also seek to reduce their risk by cooperating with others and creating partnerships. Moreover, operators across the logistical chain are increasingly vertically integrated (in terms of land-based organisation, purchase of raw materials, etc). Such bold action may nonetheless be rewarded when concessions are up for negotiation. However, all this does mean that African investors have only scant opportunity to play a part in their own right within the constellation of port operators.

Despite this, 'local' initiatives are taking shape, such as plans by the Economic Community of West African States (ECOWAS) to launch a pan-African maritime company, Sealink, with support from the African Development Bank and the Federation of West African Chambers of Commerce and Industry. Sealink will provide transit for goods and passengers in West Africa to make traffic more fluid and promote intra-African trade.

"The conditions are in place for port projects ranging from simple modernisation to mega-projects that also extend to landlocked countries."

The conditions are in place for port projects ranging from simple modernisation to mega-projects that also extend to landlocked countries. A wide range of stakeholders are taking an interest in the African maritime sector, including international funds, Chinese developers and European operators. Their origins and profile illustrate just how weak is the African presence in the sector: local partners with direct involvement at operational level are confined to a few local port authorities and companies. Taking a more optimistic perspective, however, the current modernisation of African ports will help develop the continent and encourage economic tools that will, eventually, find their way into the hands of local stakeholders. ■

By Iskander Ezzerelli and Anis Zerhouni, *coordinators of this issue, investment officers in Proparco's Energy & Infrastructure and Portfolio divisions, respectively*

As Charles Baudelaire wrote, *"you will always cherish the sea!".* This adage is borne out by the figures of maritime traffic, which is the world's main means of transportation for goods: every year, over 9 billion tonnes of oil, mineral ores, bulk goods and container cargo are moved across the world's oceans. Port facilities and the roads and railways that link those to their hinterland play a crucial role in handling this traffic. In a context of globalisation and fierce competition, Africa's major ports are no exception. All along its vast coastline, ports are veritable gateways to the Continent and lie at the heart of development challenges. They must be able to provide an effective interface with the global economy.

Although Africa covers more than 30 million square kilometres and has a population of over a billion, its weight in international trade terms remains modest indeed: only 3% of global exports came from Africa in 2014, versus 37% from Europe. And many obstacles continue to hamper the development of African ports, which are still a long way from being able to meet the international standards found in Europe or Asia. As Gilbert Meyer explains, poor container flow within port infrastructures and outdated transport networks connecting those ports are serious challenges for the Continent and impediments that continue to push up delivery times and costs – including transport and port handling costs – in comparison to European levels.

However, the picture is not unilateral and we need to bear in mind both the Continent's vast resources and the strong dynamics at work. There have been enormous changes over the past 20 years: as Paul Tourret and Camille Valéro point out, like their Chinese, European and American counterparts, many African ports are now equipped with mobile cranes and quay cranes and projects to develop modern terminals are sprouting up all over the Continent. Whereas just a few short years ago, the world's largest container ships never put into African ports, it is now no longer uncommon to see giant ships capable of transporting between 7,000 to 9 000 containers thanks to the development of deep-water port facilities (up to 16 metres in certain ports). And although African ports are not yet able to handle the 18,000-container behemoths, things are definitely moving in the right direction.

This progress is being driven by a number of factors, not least by the mass containerisation of African trade: for example, between 2009 and 2014, container storage capacity at the port of Lagos in Nigeria shot up by 134%. As Clément Seka Aba reminds us, the participation of the private sector via public private partnerships and concession arrangements plays a crucial role in this development – if an appropriate accompanying legal framework is provided. Lastly, the shift in commercial flows to Asia is one of the major developments shaking up the picture in Africa. China continues to invest heavily as it seeks to build a New Silk Road on both land and sea that will criss-cross the planet. With all of its untapped human and economic potential, Africa – and African ports in particular – with all of its untapped human and economic potential lies at the heart of this strategy.

Now more than ever, African port infrastructure needs to develop in a sustainable manner. As Patrick Claes stresses, with a capacity to serve the hinterland in an efficient manner that shares out the resulting benefits for all African economies. But also, as Véronique Pescatori and Lionel Franceschini elaborate it, with a greater attention paid to environmental issues. As we look to the future, we should remember the words of Erik Orsenna: *"Ships do not just set sail from port to port, they are also propelled by dreams."* One may believe that African ports carry Africa's hopes for development.

Private Sector & Development

Private Sector & Development (PS&D) is a quarterly publication that provides analyses of the mechanisms through which the private sector can support the development of southern countries. Each issue compares the views of experts in different fields, from academia to the private sector, development institutions and civil society. An extension of the magazine, the PS&D blog offers a wider forum for discussion on private sector and development issues.

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