Lamu Port

PIDA Week 2018
27 November, Victoria Falls
Project Description: LAPSSET Corridor

- The South Sudan, Ethiopia Transport Corridor (LAPSSET Corridor) is a regional multi-modal infrastructure program intended to **enhance trade**, **facilitate regional connectivity** and **promote regional economic integration**.

- Comprises above 6 infrastructure projects and **Economic Zones, and an SEZ adjacent to the Port**
Project Description: Lamu Port

• Once completed, the LAPSSET Corridor will provide a gateway to landlocked Ethiopia and South Sudan.

• Lamu Port anchors the Corridor by providing access to key shipping routes.

• The Port is located at Manda Bay in Lamu - Kenya and will eventually comprise 32 deep sea berths.

• Berths 1-3 are currently under construction.

• The GoK is funding the construction of Berths 1-3 but intends to develop Berths 4-6 (and a portion of Berths 1-3) via a PPP.
Project Status

• **2011 Feasibility Study** for the LAPSSET Corridor formed the basis for the GoK’s investment and commitment.

• **Construction of Berths 1-3:** China Communications Construction Company (CCCC) appointed in 2014 and all three berths will be completed by 2020.

• **Auxiliary facilities already in place:** port headquarters, housing (60% complete, police station, connection to the power grid.

• **Transaction advisor appointed with support from NEPAD IPPF** to investigate the feasibility of various funding models including a public private partnership (PPP) for the development of subsequent berths. The **TA study, including market soundings,** to be completed by the end of 2019.

• **Sourcing of a PPP partner/consortium** to start in 2020 and for Berths 1-3 to start operating in 2021.
Technical Features

- Berths have a draft of 17.5 m and length of 400 meters
- 18-metre-deep entrance channel
- Potential to serve as a transhipment hub, offering feeder capabilities into regional ports (e.g. Mombasa, Mogadishu, Dar Es-Salaam, Durban, Cape Town and the Indian Ocean islands)

Vessels:
- Accommodates large vessels
- 200,000 deadweight tonnage (DWT) bulk vessels
- 12,000 TEU container vessels.

Volumes:
- Completed Lamu Port (32 berths): 23 million tons
- Berths 1-6: Cargo volume of around 5 million tons
Key Parties

Three Partner States (Kenya, Ethiopia and South Sudan) – Key development partners.

The Kenya Port Authority (KPA) – Implementing Authority

The LAPSSET Corridor Development Authority (LCDA) – responsible for planning, coordinating and managing the delivery of the Corridor and its infrastructure.

The Development Bank of Southern Africa (DBSA) – committed KES 126 billion (US$1.5 billion) of funding to the LAPSSET Corridor.

NEPAD IPPF – provided project preparation funding for the appointment of Transaction Advisor.
Supporting Frameworks

**Political frameworks**
- *The Presidential Infrastructure Champion Initiative (PICI)*
- AfDB 2014-2023 strategy blueprint
- The AU Agenda 2063 and SDGs
- Kenya Vision 2030 Strategy

**Legislative frameworks**
- Kenya’s Public Private Partnerships (PPP) framework
- Kenya’s Investment Framework
- Kenya’s Foreign Investment Protection Act (FIPA)
- Kenya’s Environmental Framework
Market Size

Cargo volumes expected to follow the demand for exported commodities and imported goods and will be sensitive to economic growth. Following factors likely to drive cargo volumes:

Agriculture exports: currently account for 70% of foreign export earnings in East Africa. Opportunity for diversification: livestock, fisheries etc.

Industrial exports: expected to drive future cargo volumes (SEZ, growth of Ethiopia’s manufacturing industry, etc.)

Natural resources: crude oil exports will also drive cargo volumes.

Three countries expected to benefit from significant real annual growth till 2027 (Kenya 5%, Ethiopia 6.1%, South Sudan 4.4%) which should drive demand for imported goods.

LAPSET Corridor forecast to generate a surplus of 40 million tons of general cargo by 2035
**Delivery & Business Models**

**Funding model:**
Kenya intends to source for a PPP partner to:
- Fund a portion of berths 1-3
- Fund construction of berths 4-6
- Operate Berths 1-6

Kenya has contributed USD336m to the Project to date

### Estimated project costs for berths 1-6

<table>
<thead>
<tr>
<th>USD 000</th>
<th>Berths 1-3</th>
<th>Berths 4-6</th>
<th>Berths 1-6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction related costs</td>
<td>468 808</td>
<td>468 808</td>
<td>937 616</td>
</tr>
<tr>
<td>Compensation payments</td>
<td>17 793</td>
<td></td>
<td>17 793</td>
</tr>
<tr>
<td>Land costs</td>
<td>19 253</td>
<td></td>
<td>19 253</td>
</tr>
<tr>
<td>Other preliminary costs</td>
<td>1 199</td>
<td></td>
<td>1 199</td>
</tr>
<tr>
<td>Equipment</td>
<td>129 610</td>
<td>129 610</td>
<td>259 220</td>
</tr>
<tr>
<td>Total costs (excl. overruns)</td>
<td>636 664</td>
<td>598 418</td>
<td>1 235 082</td>
</tr>
<tr>
<td>Funded to date by GoK</td>
<td>(336 046)</td>
<td></td>
<td>(336 046)</td>
</tr>
<tr>
<td>Funding gap (excl.)</td>
<td>300 617</td>
<td></td>
<td>899 035</td>
</tr>
</tbody>
</table>

Envisaged funding & ownership model: **Project Company** or **SPV owned by PPP partner & GoK**.

*To be confirmed by NEPAD IPPF funded feasibility study in 2019*
Revenue estimates

Revenue/profit sharing model
- Will be developed as part of the feasibility study in 2019 & will depend on model implemented
- Should allow the GoK to recover its upfront investment in infrastructure
- Estimated revenue for the first 3 berths of USD27.5m in 2021, growing to USD235m in 2035 (for 6 berths).

<table>
<thead>
<tr>
<th>Year</th>
<th>Handling Revenue</th>
<th>Light Due, Port Harbour Due, Dockage Fee, Security Due</th>
<th>Mooring Service</th>
<th>Cargo Handling Revenue</th>
<th>Light Due, Port Harbour Due, Dockage Fee, Security Due</th>
<th>Mooring Service</th>
<th>Total Revenue for Terminal &amp; Port</th>
</tr>
</thead>
<tbody>
<tr>
<td>2021 (3 berths)</td>
<td>13 600 000</td>
<td>317 000</td>
<td>35 000</td>
<td>12 655 000</td>
<td>726 000</td>
<td>167 000</td>
<td>27 500 000</td>
</tr>
<tr>
<td>2021 (3 berths)</td>
<td>40 210 000</td>
<td>532 000</td>
<td>154 000</td>
<td>16 534 000</td>
<td>951 000</td>
<td>219 000</td>
<td>58 600 000</td>
</tr>
<tr>
<td>2030 (6 berths)</td>
<td>148 560 000</td>
<td>1 778 000</td>
<td>492 000</td>
<td>43 882 000</td>
<td>2 522 000</td>
<td>580 000</td>
<td>197 814 000</td>
</tr>
<tr>
<td>2035 (6 berths)</td>
<td>174 650 000</td>
<td>2 642 000</td>
<td>630 000</td>
<td>54 000 000</td>
<td>3 102 000</td>
<td>712 000</td>
<td>235 736 000</td>
</tr>
</tbody>
</table>
Financial Analysis

Basis for the GoK investment to date:

- 2011 economic assessments by JPC
- Forecasted an EIRR: 23.4% (32 berths)
- Declared the project economically viable based on an opportunity cost of 12%.

Next steps:

- Financial and economic assessments to be undertaken in 2019 for berths 1-6 by the transaction advisor appointed by KPA.
- Determine the financial and economic viability under different funding models to conclude on preferred model.
Delivery & Business Models (and funding opportunities)

East African ports traditionally operated by the public sector, resulting in:
- Lower operational efficiencies
- Limited investment in port infrastructure and equipment due to fiscal constraints.

PPPs offer the following opportunities:
- Improved operational efficiencies (demonstrated at various ports in West Africa operated by the private sector).
- Optimised design of port infrastructure.
- Transfer of construction risk and overruns to the private sector.
- Access to private capital to fund infrastructure.

Opportunity for innovative funding mechanisms
- Opportunity to structure investment grade project bonds (secured against the revenues of the Project) through NEPAD’s 5% Agenda.
Estimated Job Creation Opportunities (32 berths)

**Potential:** construction and operational phases are likely to create significant job opportunities

<table>
<thead>
<tr>
<th>Phase</th>
<th>Project preparation</th>
<th>Construction</th>
<th>Operation</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Years in phase</td>
<td>3</td>
<td>20</td>
<td>100</td>
<td>123</td>
</tr>
<tr>
<td>Direct jobs</td>
<td>1 877</td>
<td>21 771</td>
<td>3 296</td>
<td>6 265</td>
</tr>
<tr>
<td>Indirect jobs</td>
<td>323</td>
<td>5 518</td>
<td>1 126</td>
<td>1 821</td>
</tr>
<tr>
<td>Induced jobs</td>
<td>2 350</td>
<td>5 117</td>
<td>2 002</td>
<td>2 517</td>
</tr>
<tr>
<td>Secondary jobs</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>15 105</td>
</tr>
<tr>
<td>Total average jobs p.a.</td>
<td>4 550</td>
<td>32 406</td>
<td>6 424</td>
<td>25 708</td>
</tr>
</tbody>
</table>

**Risk:** lack of necessary skills among local communities to participate in these job opportunities.

**Mitigating measures:**

- GoK has committed to a **capacity building programme** in port and cargo operations & a **training institution** to upskill local communities.
- Include **local content requirements** in the PPP agreements.
Environmental, Socio-Economic Impact & Sustainability

2011 Feasibility Study (JPC)
Risk areas identified: impact on marine life and mangroves, fishing industry, the world heritage site of Lamu, and terrestrial floral and faunal species.

2012 Environmental and Social Impact Assessment (ESIA) (Heztech Engineering)
Risk areas identified: water quality, mangroves, fisheries, archaeological, historical and cultural sites and land ownership.


2016/17 Strategic Environmental Assessment (SEA) (Repcon Associated)
Identified strategic resources, linkages between environmental protection & economic growth, and mitigation measures.

Mitigation measures include:
Implementing above studies' recommendations, including: addressing land tenure issues, introducing conflict management committees and providing training for communities to improve employability.
## Risks and Mitigation Measures

<table>
<thead>
<tr>
<th>Category</th>
<th>Specific risk</th>
<th>Mitigating measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market</td>
<td>• Geographic</td>
<td>• Market soundings</td>
</tr>
<tr>
<td>Technology</td>
<td>• Performance</td>
<td>• Appointing an experienced PPP consortium</td>
</tr>
<tr>
<td>Interface</td>
<td>• Implementation of supporting LAPSSET infrastructure • Fiscal constraints</td>
<td>• Assurances and downside protection may be required by private sector • Innovative financing mechanisms</td>
</tr>
<tr>
<td>Predictability of cash flow</td>
<td>• Lack of contracted revenue • Regulatory constraints • Rerouting</td>
<td>• Market soundings • Adequate tariff &amp; revenue mechanisms • Comprehensive demand &amp; traffic study</td>
</tr>
<tr>
<td>Credit</td>
<td>• Nature of asset ownership</td>
<td>• Adequate levels of ownership • Financial modelling and structuring to optimise credit metrics</td>
</tr>
<tr>
<td></td>
<td>• Key credit metrics</td>
<td></td>
</tr>
</tbody>
</table>
Timeline & Milestones

Berths 1-3’s completion is scheduled for December 2020 and operations is expected to start in 2021. Berths 4-6 is expected to be operational in 2025.