The overall objective of Agenda 2063 is to chart Africa's development trajectory over the next 50 years. One of the envisaged flagship project activities is putting in place an intra-African broad band terrestrial infrastructure.

The Program on Infrastructure Development in Africa (PIDA) has further highlighted in its priority action plan, the importance of establishing Internet Exchange Points.

Africa is currently paying overseas carriers to exchange intra- continental traffic on our behalf. This is both costly as well as an inefficient way of handling exchange of local Internet traffic.
It is in this context that the African Union Commission initiated the African Internet Exchange System project to promote keeping of intra-Africa's internet traffic within the continent by supporting the establishment of National Internet Exchange Points and Regional Internet Exchange Points in Africa.

Having regardto relevant AU decisions related to the African Internet Exchange System project, the African Union Commission signed an agreement for the implementation of the African Internet Exchange System project funded by the EU-Africa Infrastructure Trust Fund and the Government of Luxembourg.
A total of 553 participants have been awarded certificates on Technical Aspects of Setting up, Operating and Administering Internet Exchange Points.

Through the support of the African Internet Exchange System (AXIS) project, AU Member States with internet exchange points (IXPs) have increased from eighteen to thirty two.

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THE AFRICAN INTERNET EXCHANGE SYSTEM (AXIS) PROJECT

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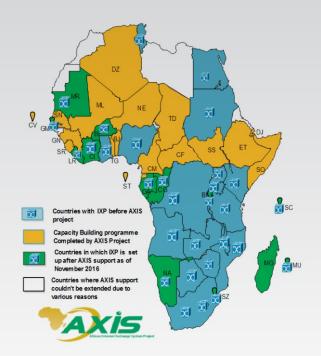
PROGRAMME FOR INFRASTRUCTURE DEVELOPMENT IN AFRICA

DEPARTMENT FOR INFRASTRUCTURE AND ENERGY
AFRICAN UNION COMMISSION

DECEMBER 2016

Legend:
- Countries with IXP before AXIS project
- Capacity Building programme Completed by AXIS Project
- Countries in which IXP is set up after AXIS support as of November 2016
- Countries where AXIS support couldn't be extended due to various reasons

With many IXPs in Africa exchanging intra-country traffic locally and intra-regional traffic being exchanged regionally, this will reduce the latency and save costs by eliminating the international transit through overseas carriers.

For example, following the establishment of the internet exchange point in Namibia, latency was reduced from 300ms to 2ms and 1.8 million US dollars was saved in one year.

The project has also supported Regional Economic Communities to develop regional interconnection policy frameworks and is currently supporting the East African Community (EAC) to develop cross-border interconnection regulations.

Following three calls for proposals issued through open tendering, grants have also been awarded to eight internet exchange points to grow to become regional internet exchange points - Kenya and Rwanda in Eastern Africa; South Africa and Zimbabwe in Southern Africa; Congo and Gabon in Central Africa; Egypt in Northern Africa; and Nigeria in Western Africa.

The support includes but is not limited to the following;

Upgrade of IXP infrastructure to have the capacity to carry regional traffic

Enhance technical capacity of staff through training and study visits to IXPs with large scale operations to equip them with the skills to become, and run a large scale IXIP

Promotion of the IXP as a Regional IXP

Within Africa, regulators and policymakers have expressed concerns about international mobile roaming (IMR), especially regarding prices. Considerable dialogue has taken place between regulators, policymakers and industry, which has at times been challenging due to the economic, commercial and technical complexities of international mobile roaming.

Under the grant awarded to the Kenya Internet Exchange point, theAfrican Union Commission supported the establishment of the firstGlobal GSM Roaming Exchange (GRX) in Africa.

By joining forces and pooling their roaming traffic, operators using the facility will benefit from lower rates and be able to make more attractive offers on mobile roaming data.

There is significant evidence that Internet adoption now lags behind access availability in many regions, and that actual usage lags its potential. In other words, existing access infrastructure may be under-utilized, with the broader Internet ecosystem also remaining under-developed.

For Internet Exchange Points to have sustainable impact in contributing to reduction of access costs and promote growth of internet usage, it is critical that users have fast and affordable access to locally hosted content.

Locally hosted content refers to content that is hosted in-country, either on servers, in caches, or delivered by content delivery networks (CDNs) with a presence in the country.

In Africa, there is very little Internet content hosted locally, with the bulk of it hosted outside Africa.

Post AXIS support should focus on a project to bring back Africa's Internet Content to Africa by working with content developers, hosting service providers and country code top level domain names (CcTLD), to locally host Africa's internet content that is currently hosted outside Africa.

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