STRENGTHEN CDN SERVICES AND IXP PARTNERSHIPS (E.G Congo)
Strategies and policies for the deployment of broadband in developing countries

Luc MISSIDIMBAZI
Luc.missidimbazi@arpce.cg
Agence de Régulation des Postes et Communications Electroniques

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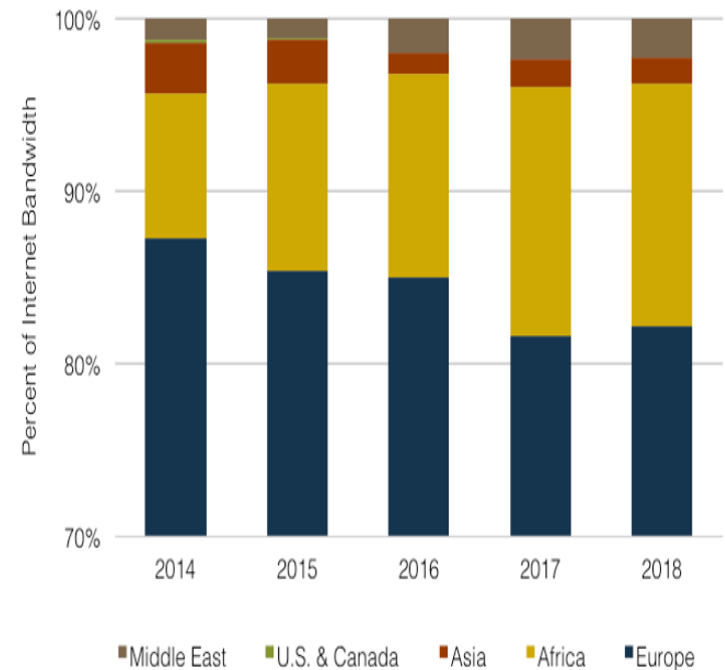
CONTEXT AND JUSTIFICATION

CONTEXT AND JUSTIFICATION

- Growth of International African Internet traffic, **the highest in the world, 43% in 4 years.**

- Europe remains the internet on the internet in 2018, accounting for **82% of the continent's bandwidth**

- Interest of the CDN and FAI to be closer to the users;

- African Union support for IXPs;

- **Low intra-African Internet traffic** 14%

- Most content in Africa still comes from or across Europe via international transit.

Share of Africa International Internet Bandwidth by Region, 2014-2018

Percent of Internet Bandwidth

100%

90%

80%

70%

2014   2015   2016   2017   2018

■ Middle East   ■ U.S. & Canada   ■ Asia   ■ Africa   ■ Europe

Notes: Data as of mid-year.

Source: TeleGeography   © 2018 PriMetrica, Inc.

OBJECTIVES

For OPERATORS / ISPs
- Saving money to be achieved by sharing international bandwidth;
- Improved QoS of network
- Develop Content Delivery Networks and Caching

For Global economy
- Emergence of new digital services and actors
- Improvement in national GDP
- Emergence of bandwidth intensive applications

For users
- Significant decrease in Internet connectivity costs
- Significant improvement in the quality of internet service

ACTIONS

**In view of the above, two axes have been chosen in Congo:**

1- Develop IXPs and give them a sub-regional dimension

2- Support inter-country interconnection by connecting IXPs

ITU-D Study Groups **THE INTERNET EXCHANGE POINT**

INTERET D'UN IXP

Platform allows internet players (ISPs, operators, banks, university networks, government institutions ...) to effectively exchange information on a common point in a country instead of having to exchange local internet traffic to the Internet.
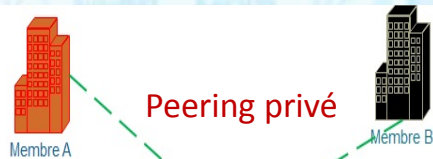
The exchange point, "local traffic remains local" and will no longer cross international links.

INTERET D'UN IXP
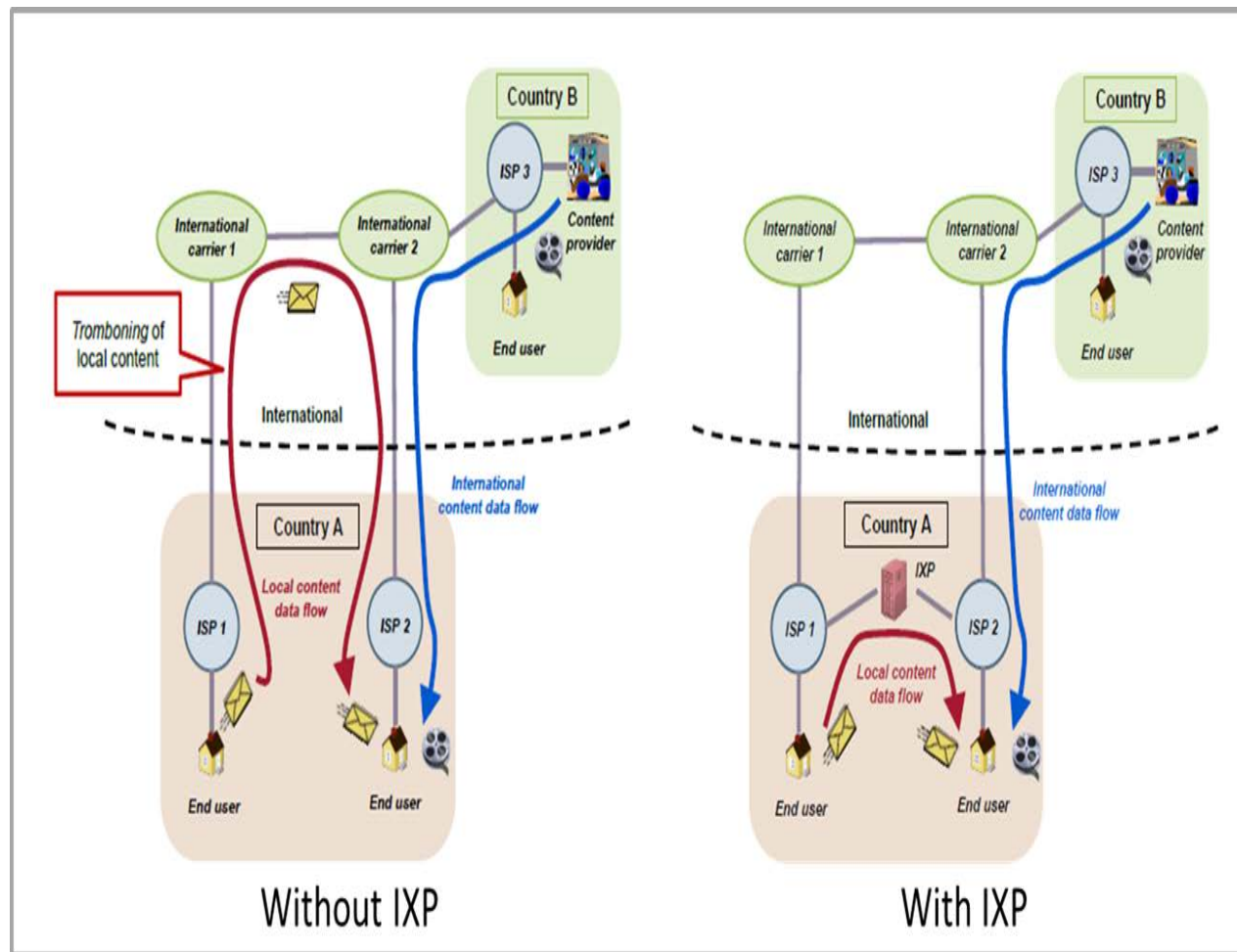
Typologie d'acteurs Internet

«A regional IXP is the place where traffic between two or more countries is exchanged by public peering (IXP) or private with a third country»
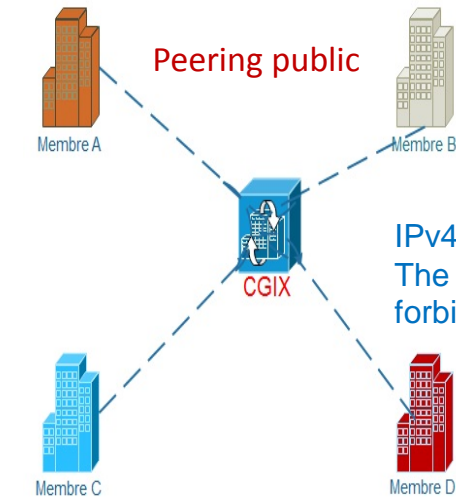
PLATEFORME TECHNIQUE

Peering privé

Membre A
Membre B
Membre C
Membre D
CGIX

it will be possible to configure one or more VLANs for traffic between 2 or more members.

Peering public

Membre A
Membre B
Membre C
Membre D
CGIX

IPv4 unicast in the same VLAN. The provision of IP transit is forbidden within the CGIX

Supervision

Route Serveur

Membre A
Membre B
Membre C
Membre D
CGIX
CVP
Serveur root
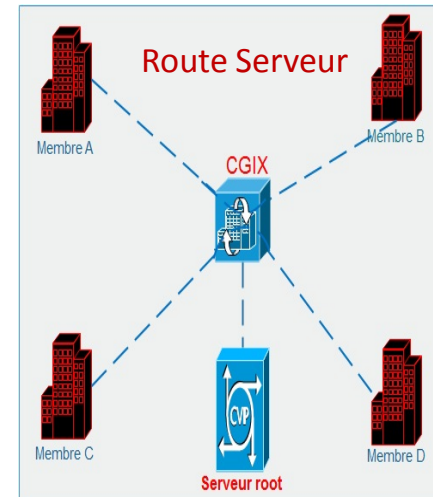
the exchange of routes between participants. Different functionalities as well as BGP communities have been set up to help you refine and secure your routing policy.

Strengthen CDN-IXP   10

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ORGANISATION OF IXP

ASSEMBLEE GENERALE CGIX-AC

MEMBRES

CA

SPONSORS

PARTENAIRES

INSTITUTIONS

UGO

- The CGIX-AC is an association under the 1901 law with an operational management unit (UG0).

- All entities connected to the CGIX-AC are de facto members of the association.

- Founding Members are de facto members of the first Board of Directors.

- The Board of Directors is chaired by a Chairman who is the legal officer and legally represents the Association.

- The UGO implements the CGIX's strategy which is voted in the General Assembly.

- The UGO is headed by a General Delegate appointed by the President of the CA.

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Carte de l'Afrique centrale
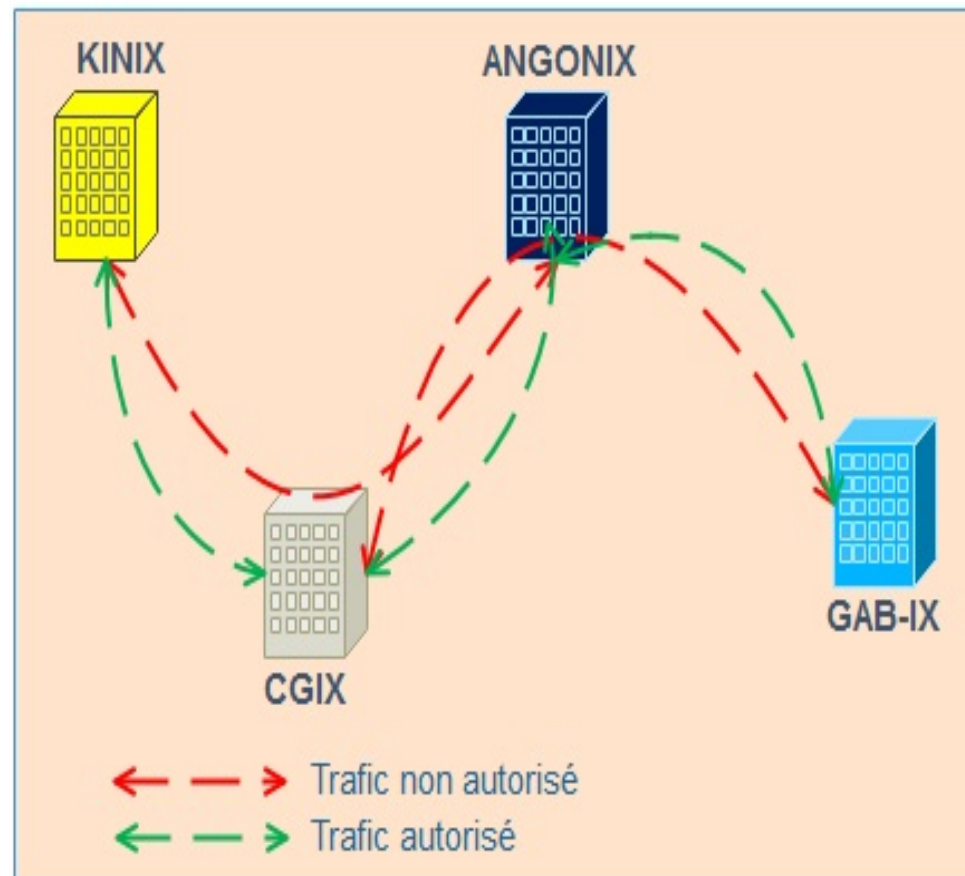
INTER-COUNTRY PARTNERSHIPS

	Congo – Gabon	Congo – Angola	Congo – RDC	Congo –Cameroun
Country IXP	GAB-IX	ANGONIX	KINIX	NC
Réglementation	MoU signé	Under discussion	Under discussion	NC
Infrastructure	FO CAB Installed	Under discussion	FO Installed	NC
Transit IP	CGIX-CA & ISP	NC	NC	NC

Le principe est de signer des MoU entre IXP pour permettre les échanges de données

END

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