

# Internet Society

## National IXP – what does it mean ?

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## Origin of “National IXP”

- **During the AXIS project the term “National” IXP emerged**
- **As a result, it is becoming seemingly confusing to most an IXP is referred to as “National”**
- **Does this mean there is a difference between a National IXP and a non-National IXP ?**

# Background

## Some definitions of an IXP

**Dr. Peering:** An *Internet Exchange Point (IXP)* is a place where multiple ISPs interconnect their networks together (see figure below). Potentially many peering sessions can be established across a single well-populated IXP peering fabric or across private peering sessions over (typically) fiber cross connects.

**IX-F :** An Internet Exchange Point (IXP) is a network facility that enables the interconnection of more than two independent Autonomous Systems, primarily for the purpose of facilitating the exchange of Internet traffic. - <http://www.ix-f.net/ixp-definition.html>

**Open-IX:** A physical network infrastructure operated by a single entity with the purpose to facilitate the exchange of Internet traffic between Autonomous Systems. The intention is to connect more than 2 Autonomous Systems, and there **MUST** be a clear and open policy for others to join.

Why is the definition of an IXP important ?

## definition, *n.*

Forms: *a.* ME-15 *diffinicioun*, etc.  
*diffinition* , etc., 15 *Sc.* *diffinitoun*;  
*definition*.

The action of defining, or stating  
exactly what a thing is, or what a  
word means.

# Why does the IXP definition matter ?

- **Definitions enable us to have a common understanding of a word or subject;**
- **Meaning of “National” from the dictionary – (Oxford)**
- **Adjective**
  - Relating to or characteristic of a nation; common to a whole nation:
  - Owned, controlled, or financially supported by the state:
  - (*rare*) nationalistic or patriotic
- **Noun**
  - A citizen of a particular country:
  - A national newspaper as opposed to a local one



Lets put this into ...

Perspective...



**Perspective 1: National IXP = ONE IXP per country**

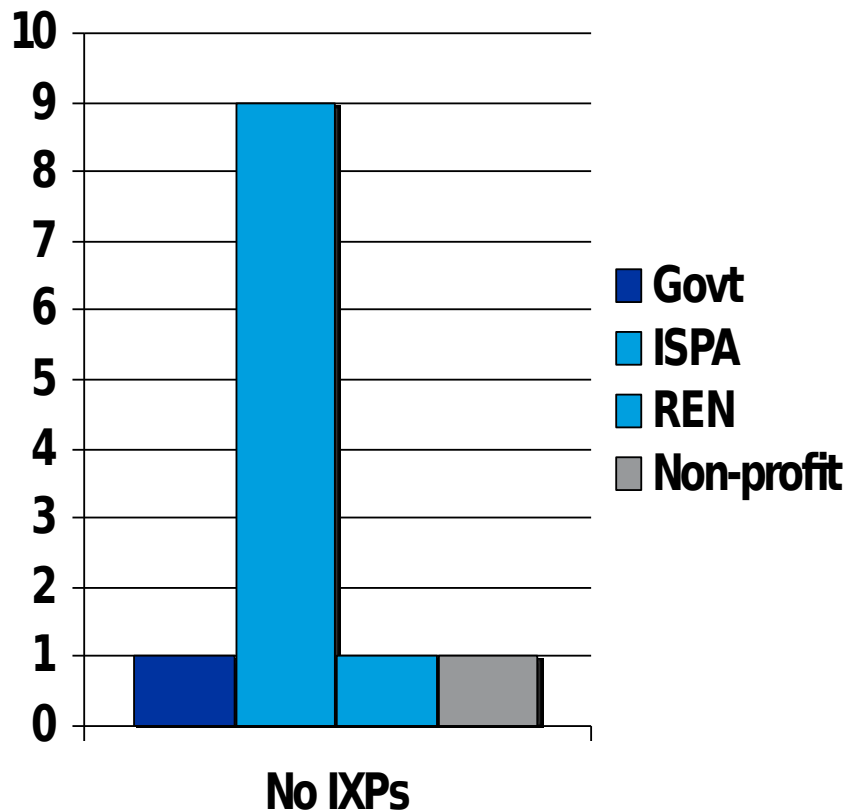


## Perspective 2: Owned or Financially controlled

- By definition; “National IXP” may imply that an IXP is partially owned or financially controlled by the Govt.
- The definition could leave room to different interpretations



## Reality 2: In 2008 the ownership structure of IXP in Africa was



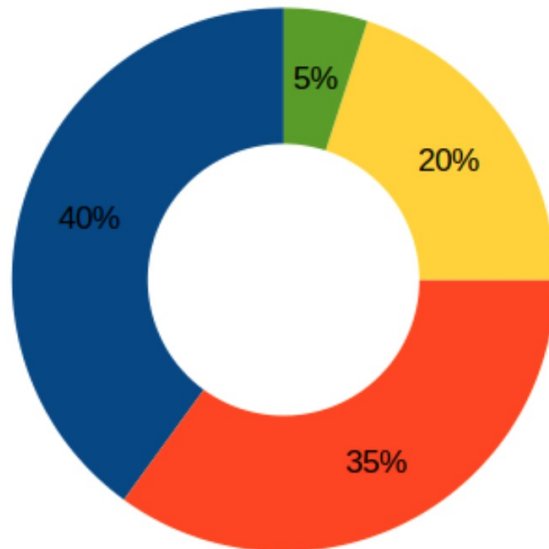
- 75% of IXPs are non-profit entities run by the ISPA
- One IXP was operated by Government
- One IXP was operated by an academic institution on REN
- One IXP receives Govt Support with potential clients been recommended to seek services with IXP members only

# Reality 2: AF-IX 2015 early indicators on IXPs

## Benchmark: Early Indications

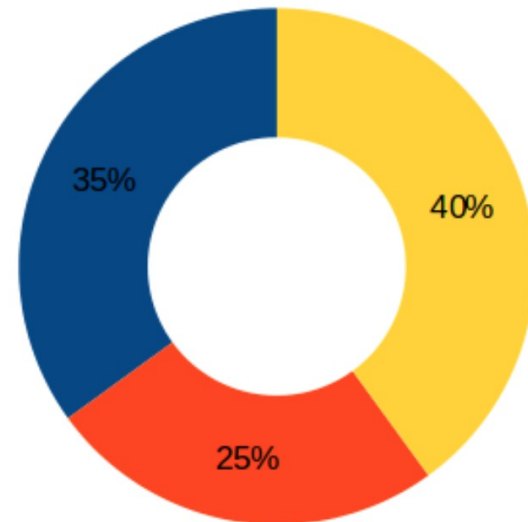


Who operates the IXP?



- A private not-for-profit
- Industry association
- Government / regulator
- University

Who owns and/or operates the IXP facility?



- It's owned and/or operated by the IXP.
- It's owned and/or operated by an industry association.
- It's owned and/or operated by another entity.

# Conclusion

- **We need to review the definition of IXPs in our region**
- **We need to consider the long term perspective in the definition**
- **What is Af-IX's definition of an IXP?**



*Any Questions?*

Thank You!  
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