



IX-F - Best Practices

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Internet Exchange Federation

➤ Other IXPA's



IX-F Board

- **AFIX**
Nishal Goburdhan – JINX (South Africa)
Kyle Spencer – UIXP (Uganda)
- **APIX**
Raphael Ho - Equinix (Hong Kong)
Katsuyasu Toyama - JPNAP (Japan)
- **Euro-IX**
Arnold Nipper - DE-CIX (Germany)
John Souter - LINX (United Kingdom)
- **LAC-IX**
Ariel Graizer - NAP CABase (Argentina)
Milton Kashiwakura - PTT.br (Brazil)

➤ Internet Exchange Federation (IX-F)

- MOU signed by APIX, Euro-IX and LAC-IX to form the IX-F in November 2012 – www.ix-f.net
- AFIX signed the MoU to join the IX-F in 2014
- IX-F DB –
 - Automate Data Collection from IXPs
 - Collaborate with others:
 - PeeringDB & Telegeography already in place
- Work on Global IXP related projects..



ITU IXP Consultation

➤ ITU IXP Consultation

- On 3 February 2015 the Council Working Group decided that Open Consultations would be convened on the following issue:

”With a view to discussing the establishment of Internet Exchange Points (IXPs) to advance connectivity, improve service quality and increase network stability and resilience, fostering competition and reducing interconnection costs, as proposed by Opinion 1 (promoting IXPs as a long term solution to advance connectivity) of WTPF-13 (World Telecom Policy Forum) and consistent with PP-14 Resolutions 101 and 102, **stakeholders are invited to elaborate and exemplify on the challenges faced and identify widely accepted best practices for the design, installation and operation of IXPs.**”

ITU IXP Consultation

- So what does that actually mean?
- The IX-F Board agreed we should have a unified voice from the IX-F.
- What is our positions:
 - We are already doing what they have asked us
 - We should continue to do it via the IXPAs
 - We will use the opportunity to engage with the ITU but that does not mean we should comply with the terms they have laid out in the consultation.

➤ ITU IXP Consultation

- Our response:
 - Explains what the IX-F is, number of IXPs represented with the membership
 - Definition of an IXP – taken from IX-F website <http://www.ix-f.net/ixp-definition.html>
 - Best practice developments by IXPA's - IXPA's are recognised by the wider stakeholder community as the authoritative source of best practice development because of their governance and development methodology:
 - IXPA's are organisations controlled by the IXP operators themselves, IXPA's are *responsive* to the needs of IXPs.
 - IXPA's are *inclusive* and provide a structure for ensuring that IXP operators *play a leading role* in organisational governance.
 - As *private* organisations, adoption of the IXPA best practice reports is *voluntary*. This makes it *flexible*, and *adaptable* to the specific needs of each IXP operator.

➤ ITU IXP Consultation

- Our response, contd.
 - IXP operators inherently have the greatest understanding of the challenges they themselves face. IXPA's enable the IXP operators to ensure that Best Practice development is directed *pragmatically* towards what is most *useful to IXP operators*, rather than what appears susceptible to standardisation.
 - IXP operators inherently have the greatest experience of operating IXPs in their own context, and therefore of what has been tried, and with what results. IXPA best practices therefore reflect *actual operational experience*.

➤ ITU IXP Consultation

- What about cooperation between IXPA, governments and other stakeholders?
 - IXPA have long recognised that one of the key components of Best Practice programmes is a supportive and enabling policy environment
 - IXPA seek to engage with governments and other stakeholders to promote the development of such an environment
 - As was the opinion of WTPF, multistakeholder cooperation should focus on “enable the emergence of Internet Exchange Points through the fostering of supportive policy environments” so as “to promote public policies aimed at permitting the local, regional and international internet network operators to interconnect through IXPs”.

➤ ITU IXP Consultation

Contd.

- It is already common for individual IXPs in many countries to engage with their national governments “for the purpose of promoting policies aimed at creating an enabling environment for the interconnection of international, national and regional networks through IXPs”, which WTPF recognised as “an effective way to improve international internet connectivity and to reduce the costs of such connectivity, with regulation only when necessary to promote competition”.
 - **The Internet Exchange Federation believes that there is a further opportunity for national governments and other stakeholders to learn about the experiences of IXPs in countries other than their own, through liaison with regional IXPAs facilitated by the Internet Exchange Federation.**
 - As stated by paragraph 69 of the Tunis Agenda, such multistakeholder cooperation should avoid intervening in “day-to-day technical and operational matters, that do not impact on international public policy issues”, which remains the responsibility of the operators themselves.
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- History of the IXPAs.

ITU IXP Consultation

- Appendix, includes examples of what the IXPA's support;
 - BCOPs
 - Benchmarking
 - IXP Manager
 - IXP Wishlist - <https://www.euro-ix.net/ixps/ixp-wishlist/>
 - Twinning and Fellowship Programs
 - IXPA Meetings

➤ ITU IXP Consultation

Summary:

- We'll be sending the IX-F response to the ITU consultation to the IX-F Board list soon (today)
- They will share this with the IXPA community.
- IX-F Board need to ACK the report and we'll submit it to the ITU before 28th August – **HARD DEADLINE!**
- IXPs don't need to do anything, if you really want to you may endorse the IX-Fs document.



IGF IXP Best Practice Forum

➤ IXP IGF Best Practice Forum

- What is the IGF Best Practice Forums?
 - A report produced by the UN & Social Council called for more tangible outputs to enhance the impact of IGF in global Internet governance & policy
 - To enrich the potential for IGF outputs, the IGF Multistakeholder Advisory Group (MAG) developed a program intended to complement other IGF activities, one being the BPFs.

IXP IGF Best Practice Forum

- Other IGF BPFs include:
 - Creating an enabling environment for IPv6
 - Practices to countering abuse against women
 - Regulation & mitigation of unwanted communications
 - Developing meaningful multistakeholder participation mechanisms
 - Supporting computer security incident mechanisms
 - Enabling environments to establish successful IXPs

IXP IGF Best Practice Forum

- What's the outcome:
 - A document that explains current best practices for establishing IXPs
 - A panel discussion at the IGF in Brazil in November 2015

➤ IXP IGF Best Practice Forum

- What's included in the document –
 - IXPs are a well established concept and there is a lot of knowledge within the IXP operator community (**THAT's YOU!**)
 - The role & benefits of IXPs
 - The main stakeholders & their roles:
 - IXP members / participants
 - IXP Operators
 - Regulators / Ministry
 - Community / Facilitators
 - Building / Facilities operators

IXP IGF Best Practice Forum

- What's included in the document, contd. –
 - The dimensions of the environment
 - Examples – Survey
 - Widely-accepted criteria for an enabling environments for IXP success
 - Further information & resources
 - Information about IXPA's
 - Papers with examples

IXP IGF Best Practice Forum

Timelines

- We need survey completed by 4 September 2015
- Document needs to be completed by end September
- IGF 2015 – Brazil, November 10 – 13 2015

➤ IXP IGF Best Practice Forum

- How to get involved –
 - Mailing list -
http://mail.intgovforum.org/mailman/listinfo/bp_ixps_intgovforum.org
 - Provide input to the document -
<https://docs.google.com/document/d/1SHojH6cmr1D-O0oLM2DXx2vtTMnwoNjpBTftzTudyJk/edit#>
 - Take part in the survey -
www.intgovforum.org/survey-bpf-ixps



Thank you!

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