

IXP & Peering/Interconnection [Pakistan]

“A Panel Discussion”

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1. Good peering/IX ecosystem

- Geographical distribution and diversity
 - PKIX - Islamabad, Karachi, Lahore
- Good (intention) custodianship - PTA & Ahmed Bhai :-)
 - What was the motivation? How did it come about?
 - Localising domestic traffic? Improving end user experience?
- Open/BLPA, Neutral & Community Driven: PTA & PKIX Members?
 - Can anyone with public ASN & address space join?
 - Perceived neutrality, especially location?
 - How is the IX operated? Group of volunteers?
 - How are key decisions made? 1 member 1 vote?

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Good start, but what next?

2. Number of (access) Peers/Networks?

Islamabad (HEC)	Karachi (HEC)	Lahore (PITB)
PTCL	Connect	Brain Net
Wateen	Cybernet	Connect Tel
Cybernet	GCS	Cybernet
Nayatel	Multinet	KK Networks
Telenor	PERN	Multinet
Transworld	Satcom	Nexlinx
Multinet	Telenor	PITB
Worldcall	TWA	TWA
HEC	Wateen	Wateen
Wi-Tribe		SIGN IN
Virtuary		

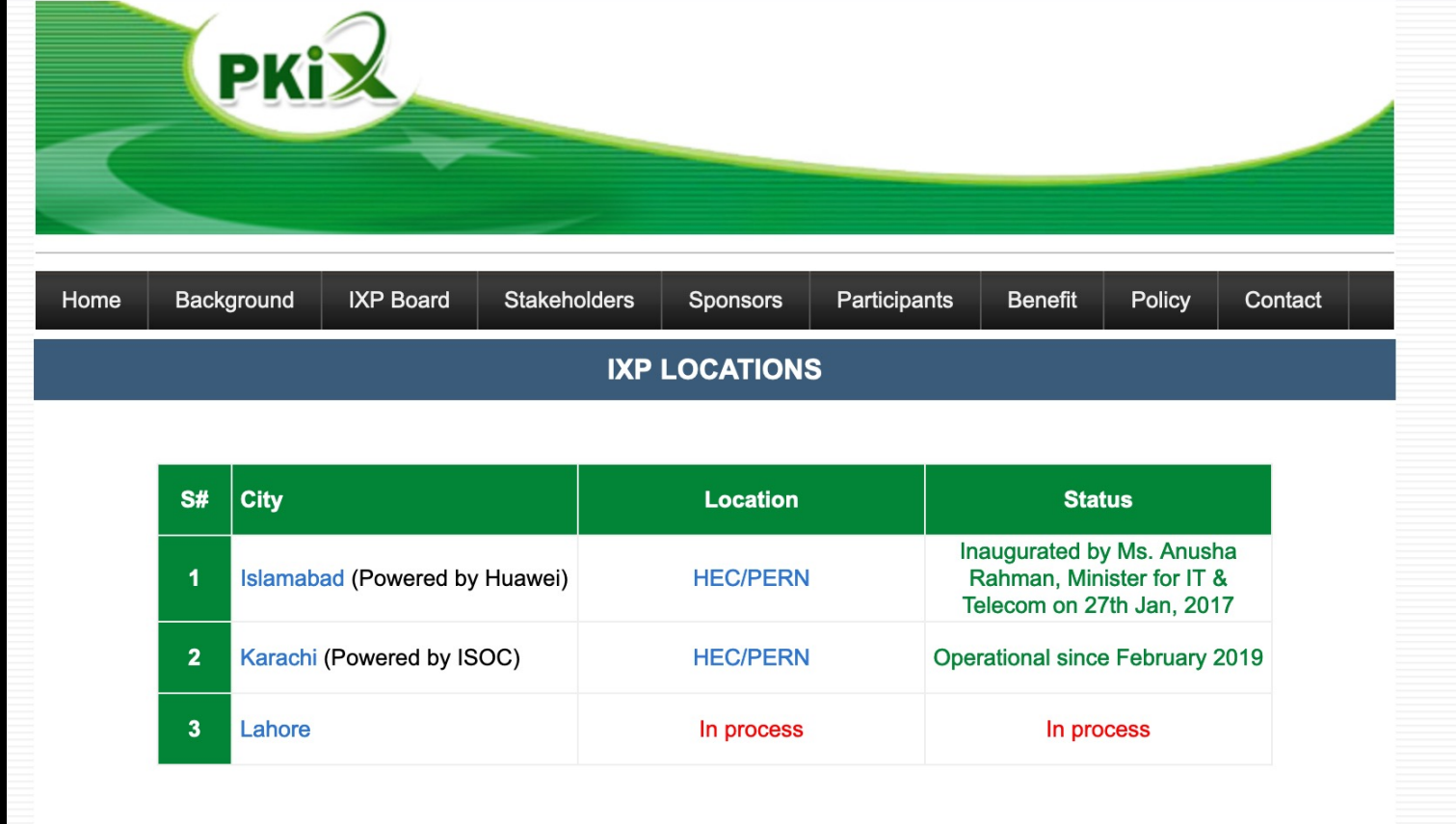
- If you have a public ASN & address space, and an eyeball network, WHY are you not at the IX?
 - Leave out the transit networks, but all access networks should peer at the IX!

3. Value Added Services?

- Root servers?
- ccTLDs (PCH node)
- RPKI Validators?
- NTP server/clocking as a service?
- Content Caches?

4. Basic Etiquette?

- IXP Website with relevant info
 - Looking glass (what routes will I learn?)
 - Traffic Stats?
 - Member details?
- PeeringDB entry accuracy
 - IX and members!
 - Necessary for CDNs/content, RouteViews, etc



The screenshot shows the PKIX website header with a navigation menu and a table titled "IXP LOCATIONS". The table has four columns: S#, City, Location, and Status. It lists three IXP locations: Islamabad (powered by Huawei), Karachi (powered by ISOC), and Lahore (in process).

S#	City	Location	Status
1	Islamabad (Powered by Huawei)	HEC/PERN	Inaugurated by Ms. Anusha Rahman, Minister for IT & Telecom on 27th Jan, 2017
2	Karachi (Powered by ISOC)	HEC/PERN	Operational since February 2019
3	Lahore	In process	In process

Thoughtful Issues?

5. Mandating IX peering?

- Dictate/mandate someone to peer at PKIX ~ force people to announce their routes?
 - you dictate their routing Policy!
 - NIXI comes to mind
 - Tanzania - the only working example!
- Might be better to distinguish between
 - Transit vs Provincial vs Access providers
 - We need access to folks to localise traffic!

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6. (Inter)Connecting the IX Locations?

- It has failed in all places!
- WHY?
 - You compete with national transit and long distance bandwidth providers.
 - Instead focus on every eyeball ASN in each province/region peering at the IX?

7. DEC-IX in PK?

- So what is actually happening?
 - Questions will depend on the answer to above ;-)