

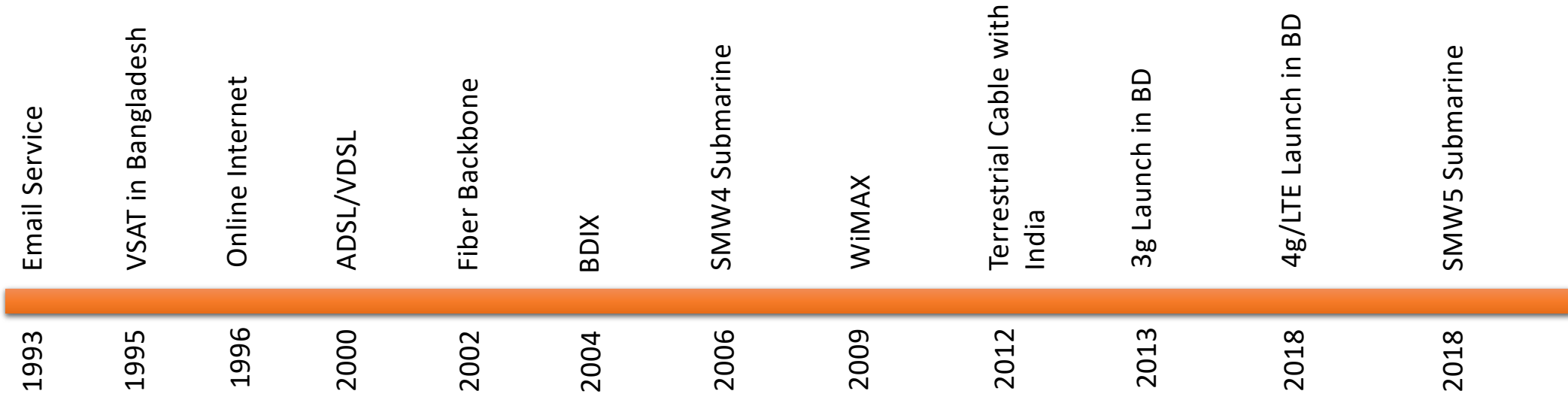


Peering a Dilemma?

Sumon Ahmed Sabir

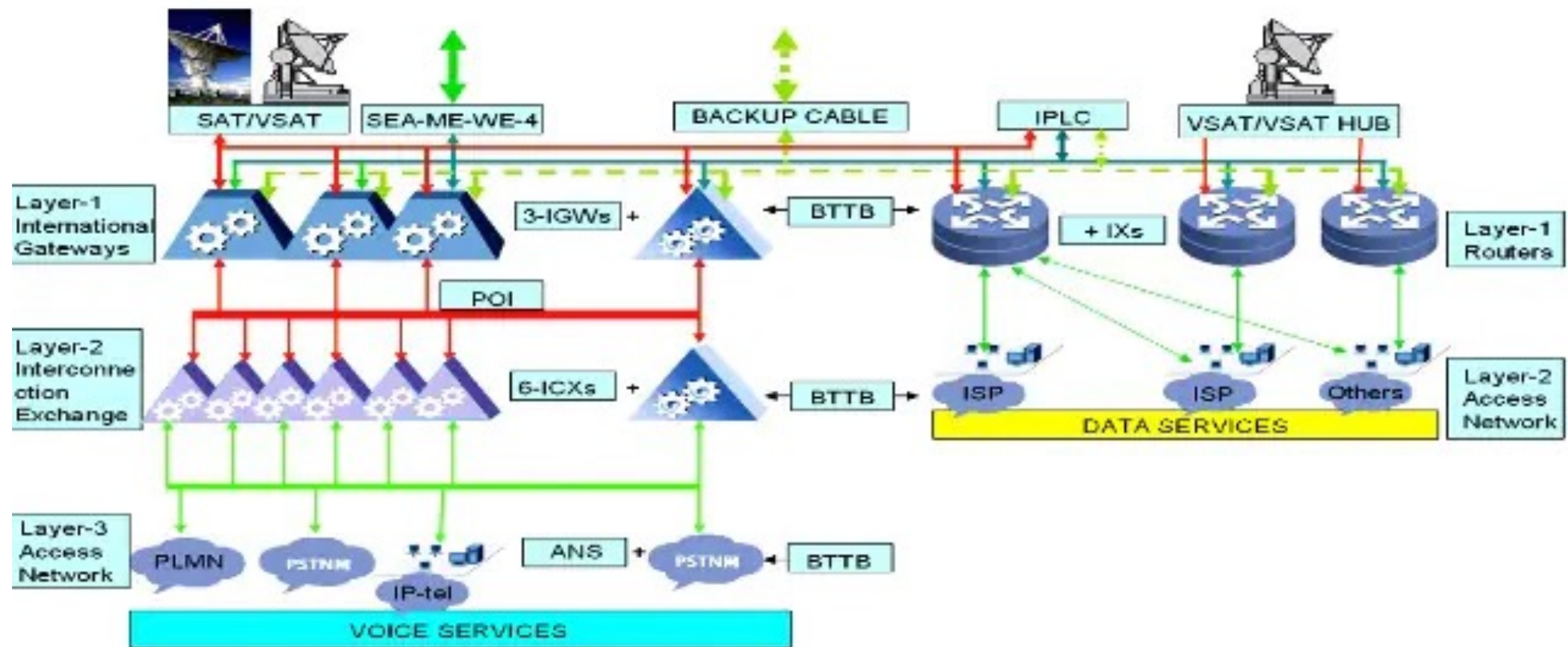
CTO, Fiber@Home Limited
Peering Forum 2021

Internet in Bangladesh

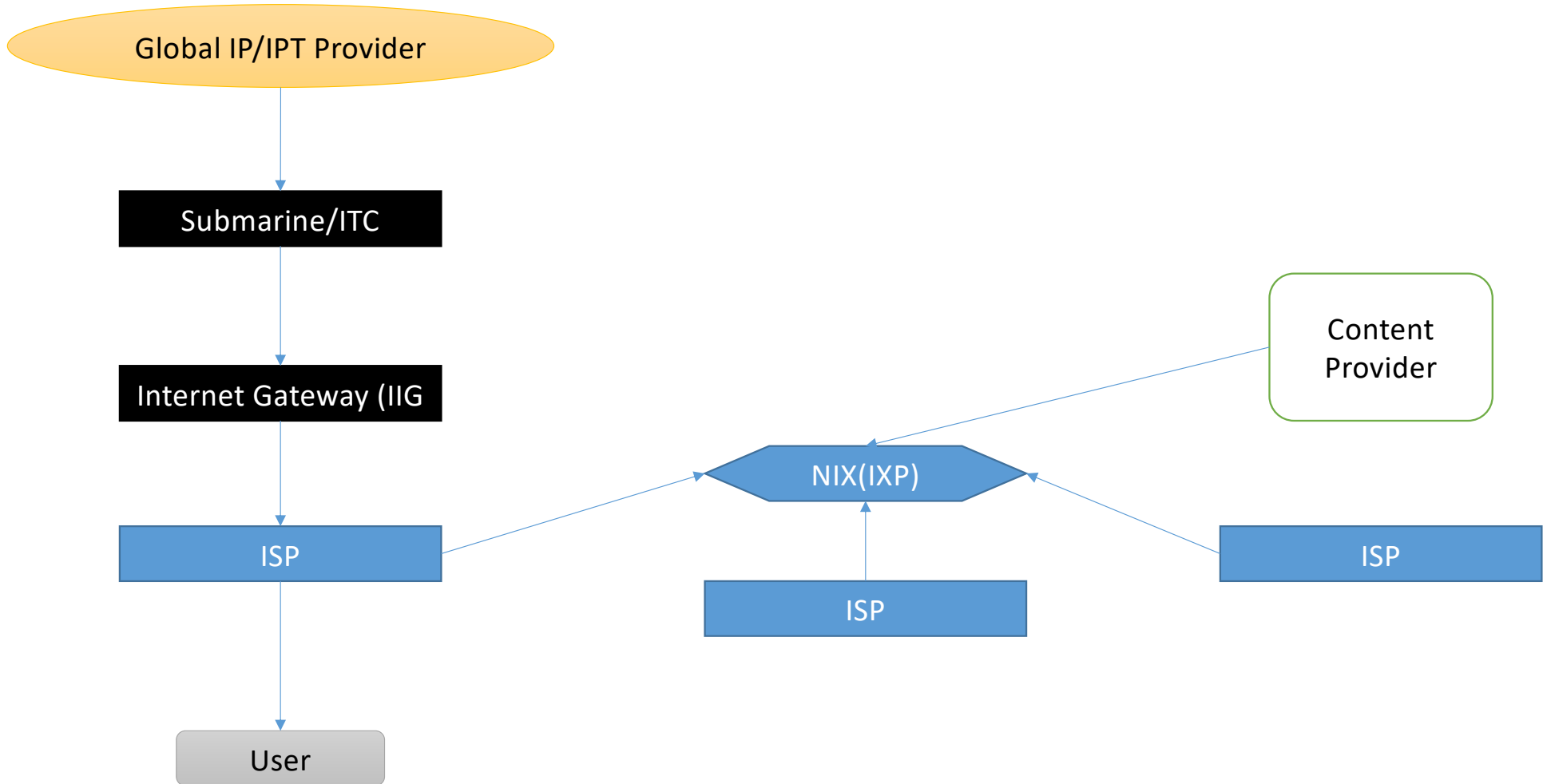


Regulatory Framework in Bangladesh

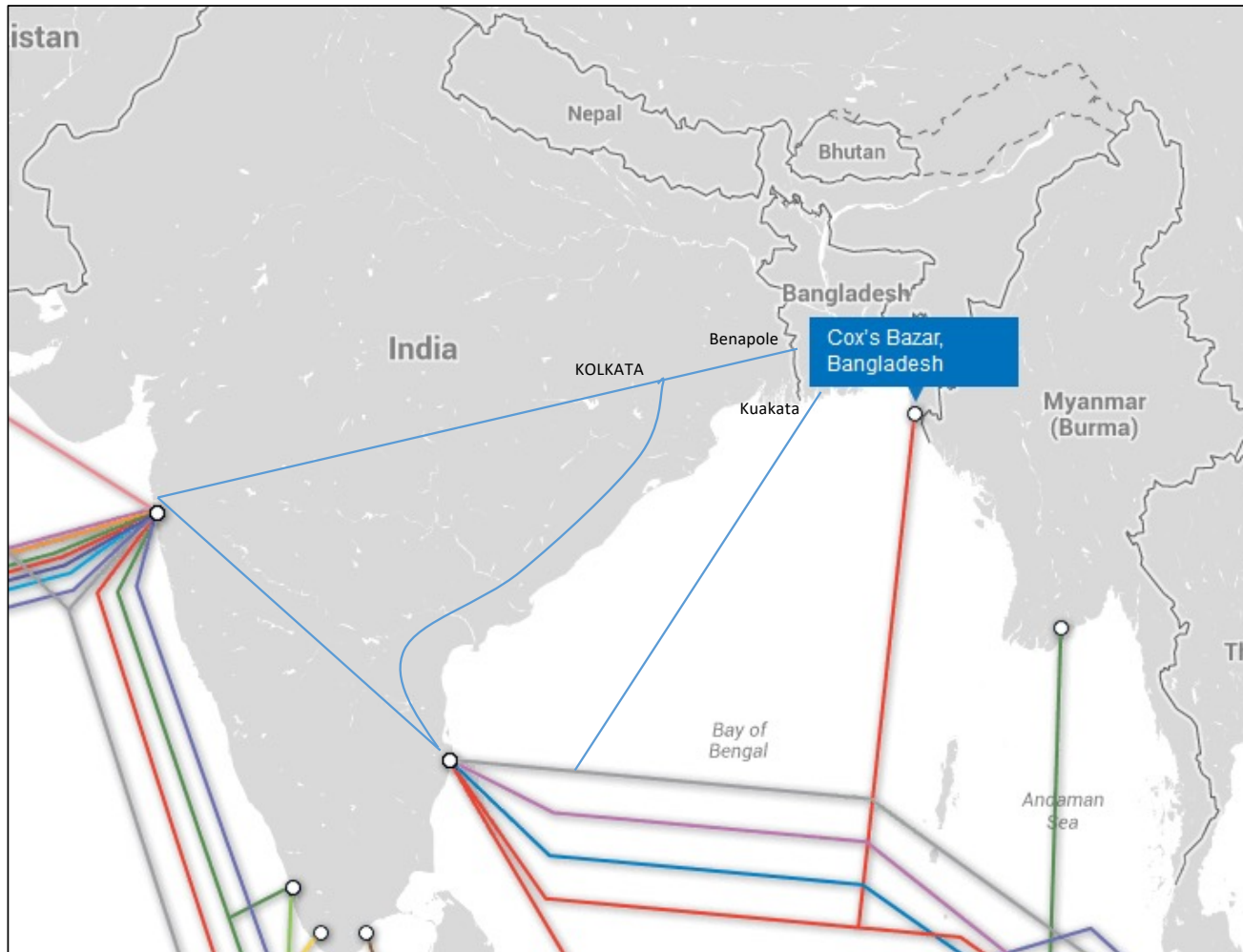
ILDTS Policy 2007



Regulatory Framework for Data Connectivity:



Connectivity with Bangladesh :



- **Submarine Cable Name :**
SEA-ME-WE 4
SEA-ME-WE 5
SEA-ME-WE 6 (RFS 2024)

- **One Terrestrial Landing Station with India.**
6 private operators are contended there

NIX(IXP) for Peering :

1. Bangladesh Internet Exchange Trust (BDIX) (2004)
2. Novocom Ltd. (2014)
3. Digicon Telecommunication Limited (2018)
4. Level-3 Carrier Limited (2018)
5. Summit Communications Limited (2018)
6. Aamra Technologies Limited (2018)
7. ZETANIX (2019)
8. Kloud Technologies Limited (2019)
9. Bangladesh Internet Service Provider Internet Exchange Trust
10. BTCL IX.

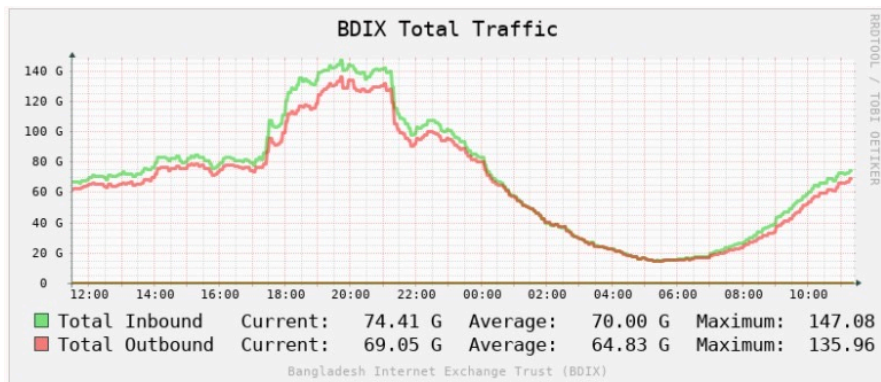
Local and International Traffic :

NIX : 150 Gbps (peak)

Local IPTV / Stock Exchange /
Movie Server
Gaming Server / FTP

International IPT
2750 Gbps

Voice / Internet / CDN
IX / IPLC



**Internet now reached at every
corner of the country.
But all the IXP's are now only
in Dhaka**



CDN/IPT/IX
@ Singapore

IPT/CDN/IX
@ Mumbai

IPT/CDN
@Chennai

Submarine/
Terrestrial Cable

International Internet
Gateway (IIG)

ISP

User

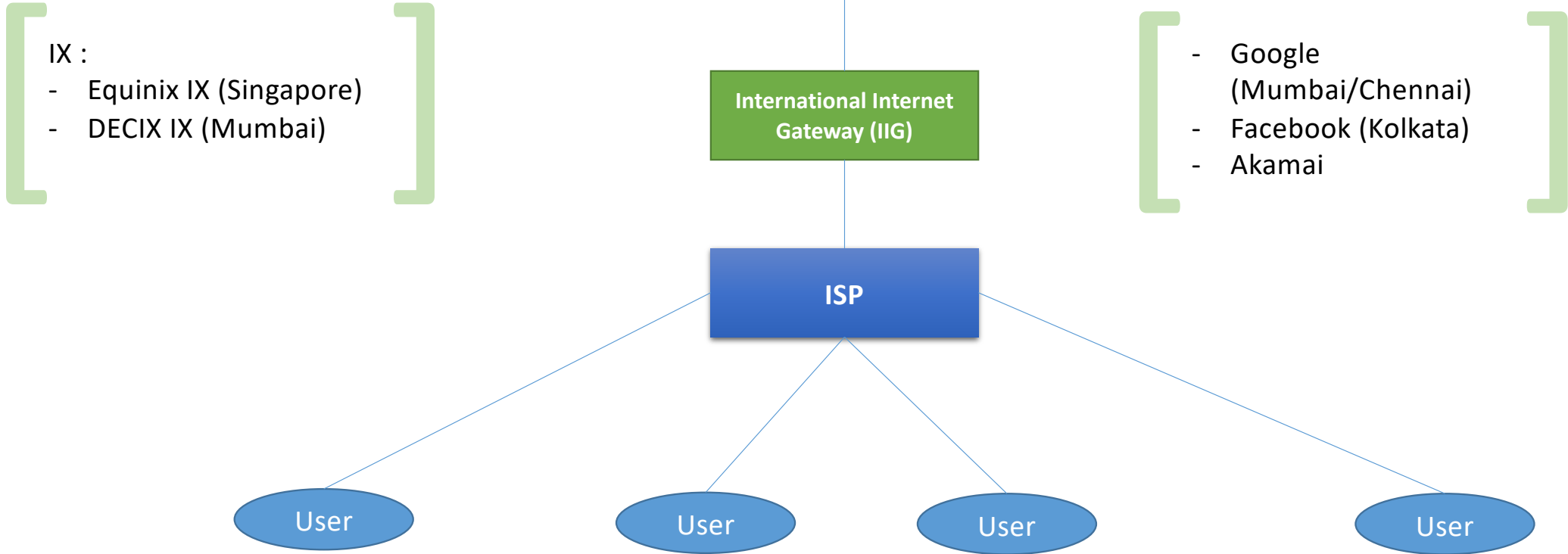
User

User

User

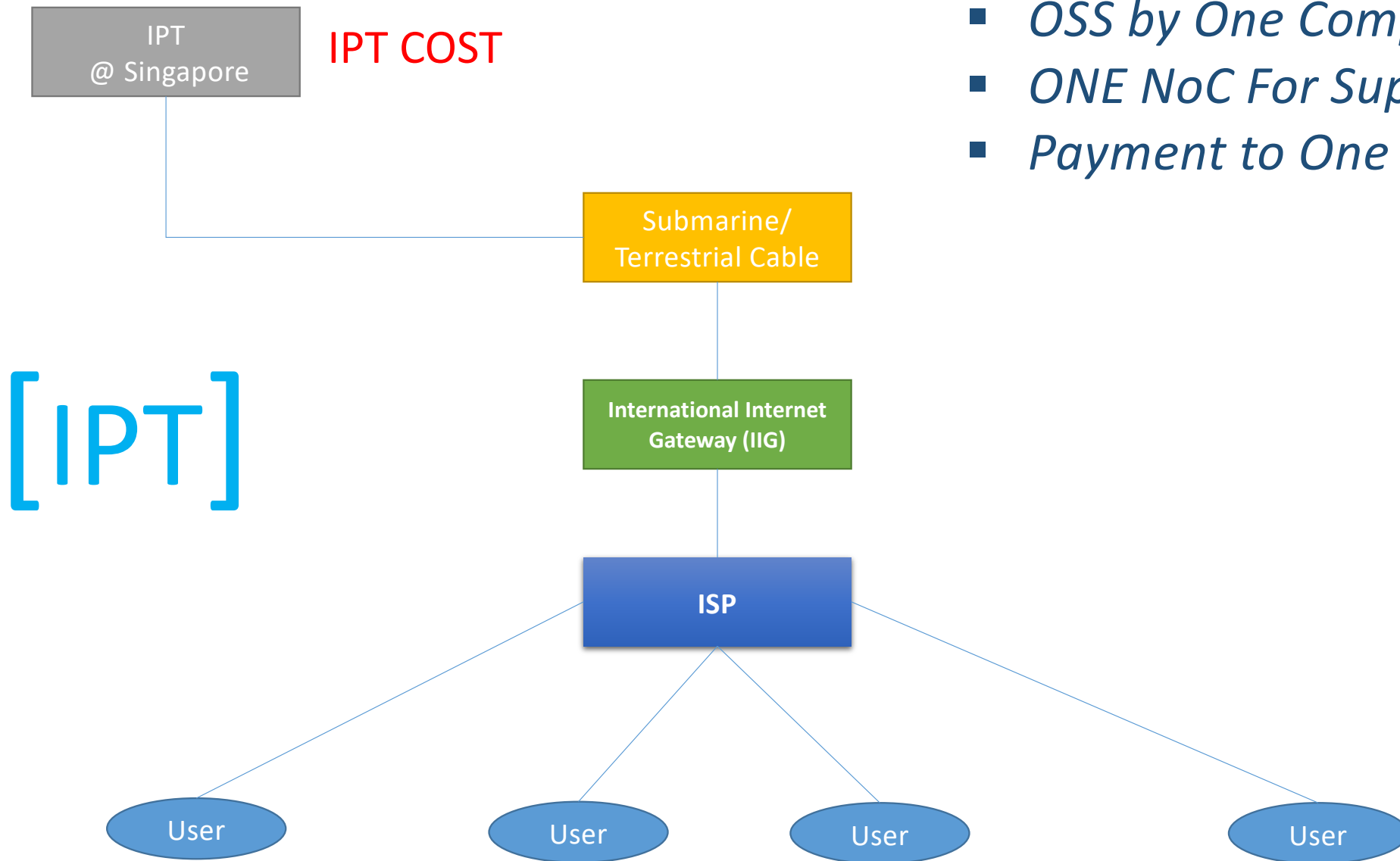
- IX :
- Equinix IX (Singapore)
 - DECIX IX (Mumbai)

- Google (Mumbai/Chennai)
- Facebook (Kolkata)
- Akamai

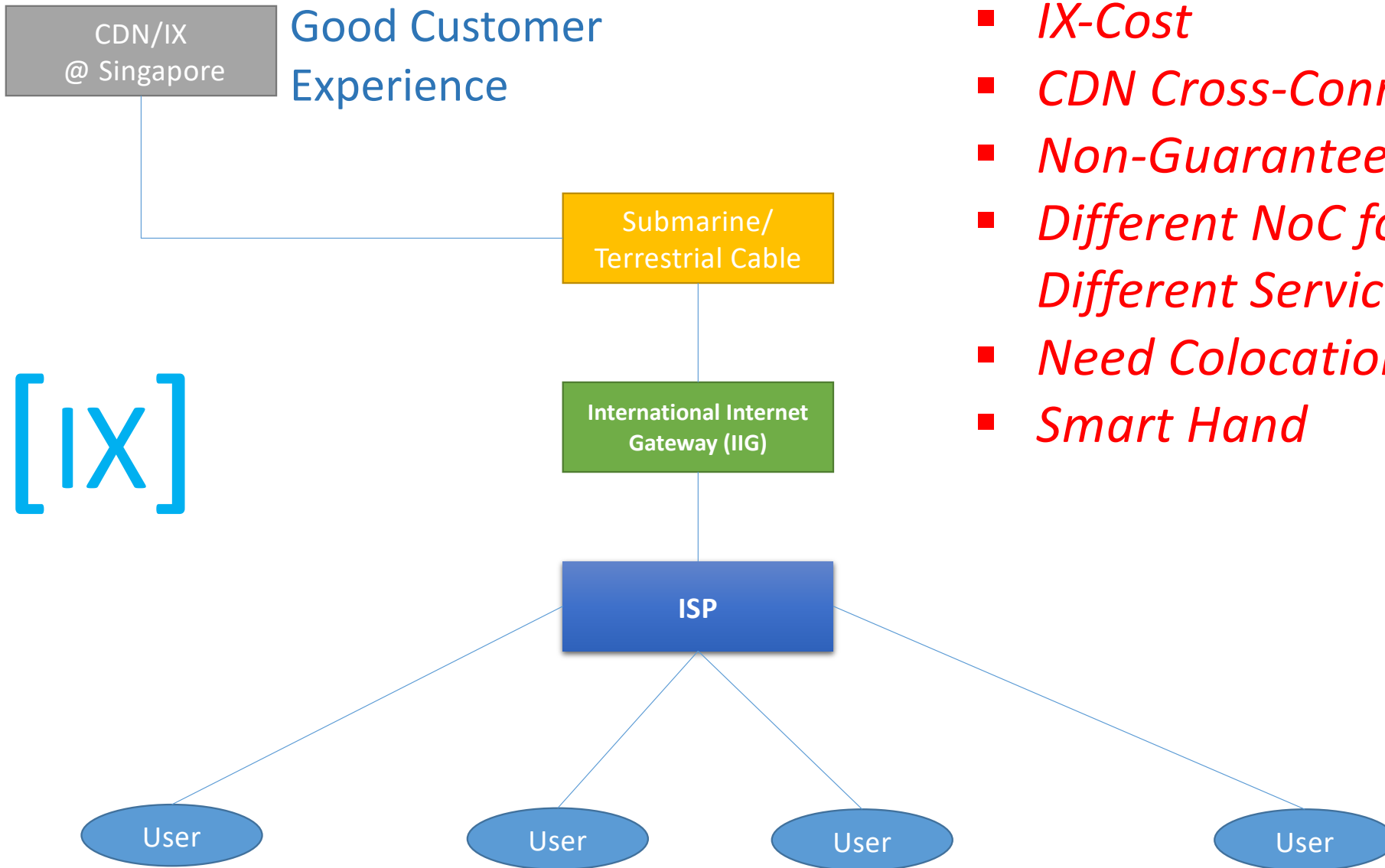


Situation of Global Peering vs. IPT vs. CDN





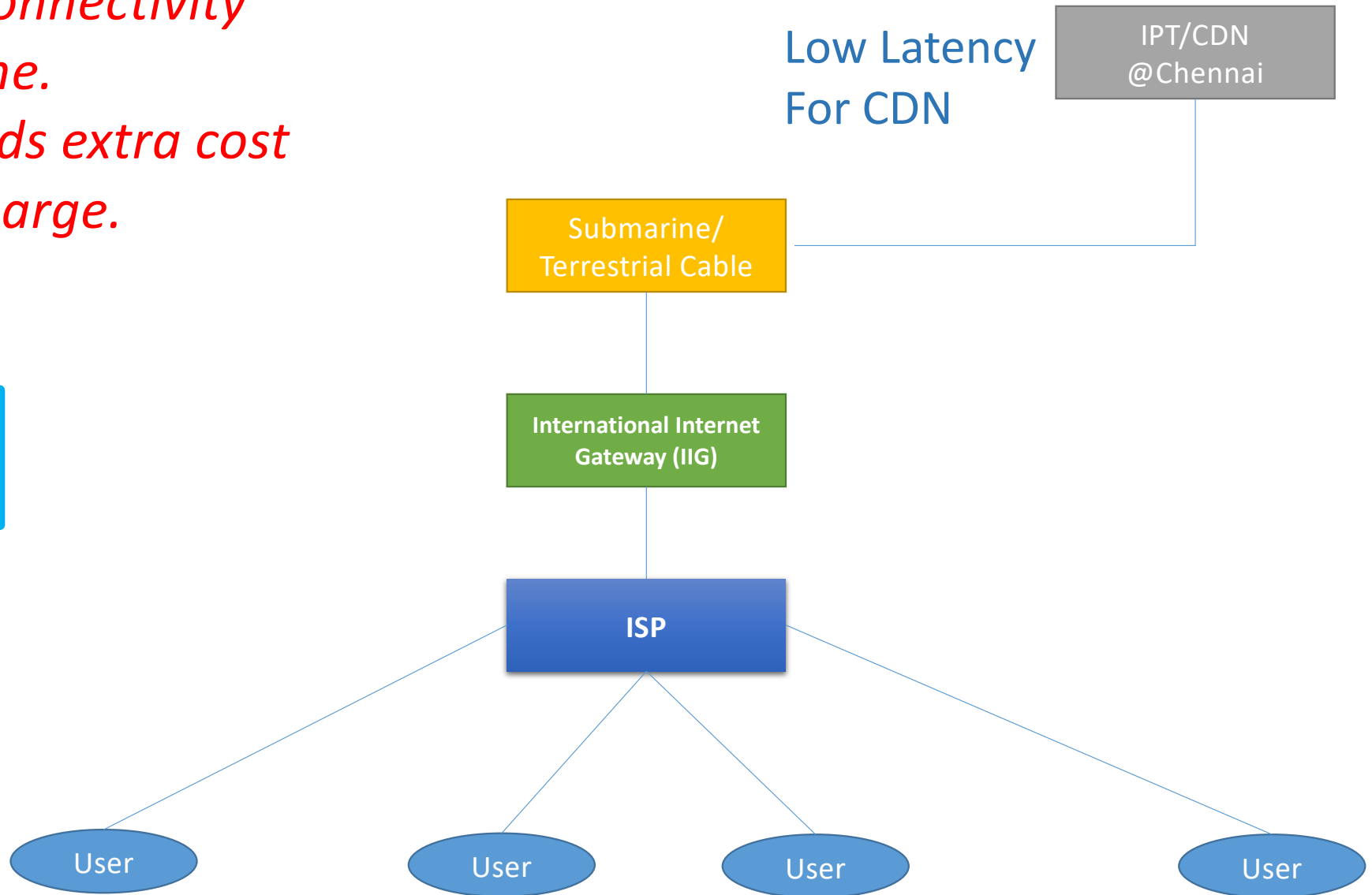
- *OSS by One Company*
- *ONE NoC For Support*
- *Payment to One Company*



- *IX-Cost*
- *CDN Cross-Connect Cost*
- *Non-Guaranteed Service*
- *Different NoC for Different Services*
- *Need Colocation*
- *Smart Hand*

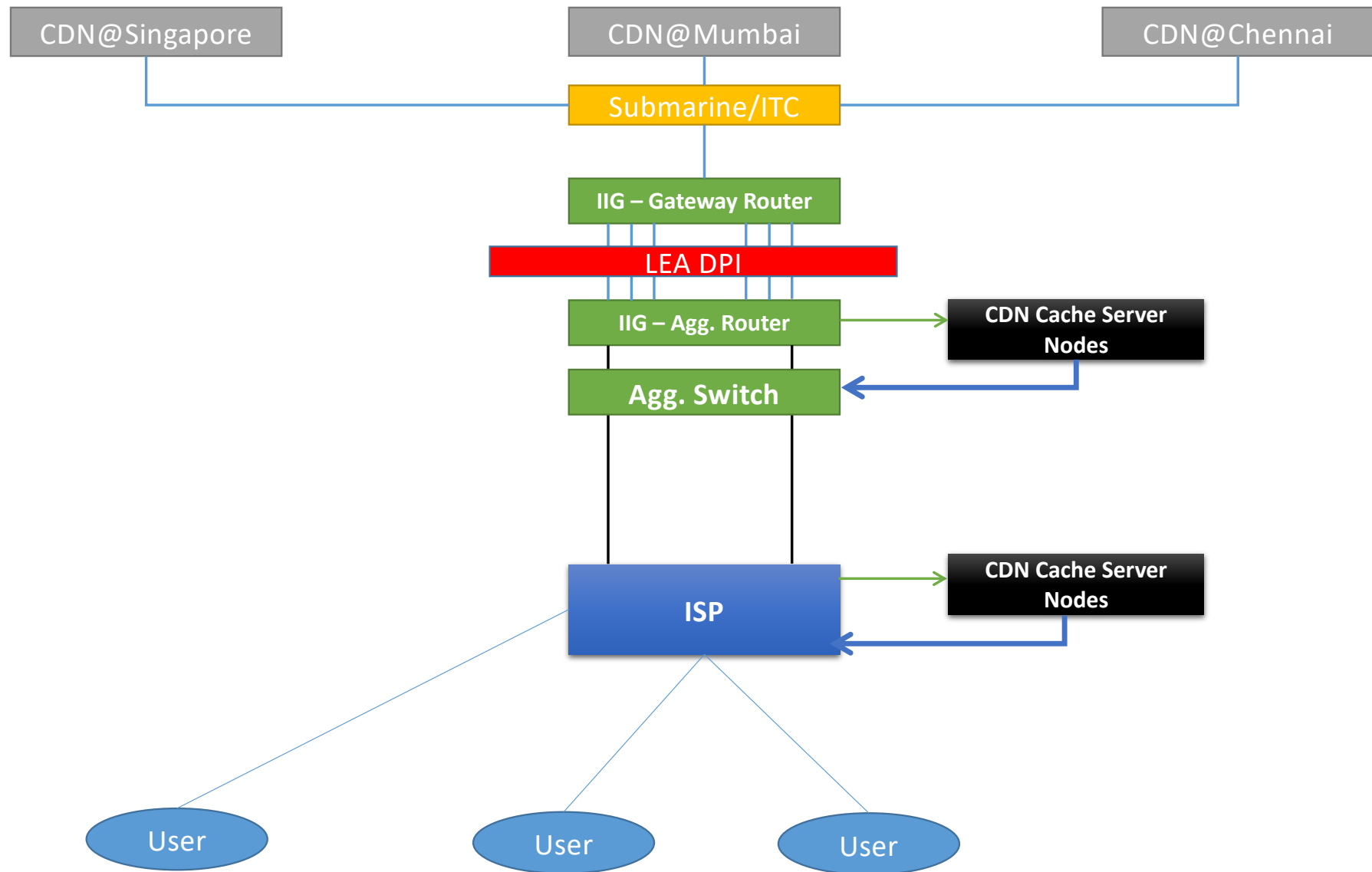
- *IPT/CDN Connectivity Cost is same.*
- *For IX, needs extra cost for port Charge.*

[CDN]



Local Cache Servers





Cache Server in the Network

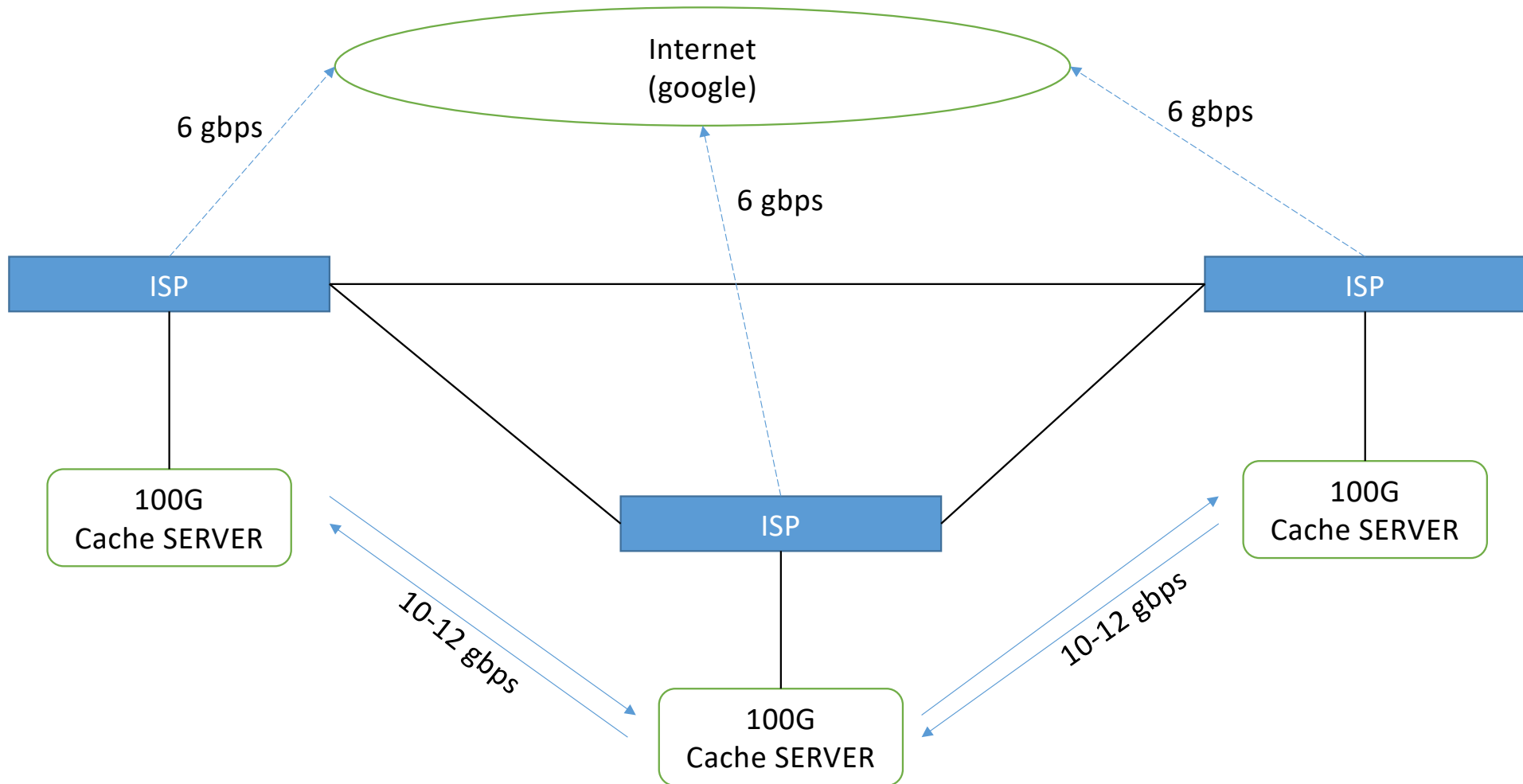


CDN's Cache Server available in Bangladesh :
Google, Facebook, Akamai, CloudFlare etc...

500+ CDN Nodes Are
working inside Bangladesh



Cache-to-Cache Peering :



International and Local Peering :

IXP : 150 Gbps (peak)

Local IPTV / Stock Exchange /
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Gaming Server / FTP

International IPT
2750 Gbps

Voice / Internet / CDN
IX / IPLC

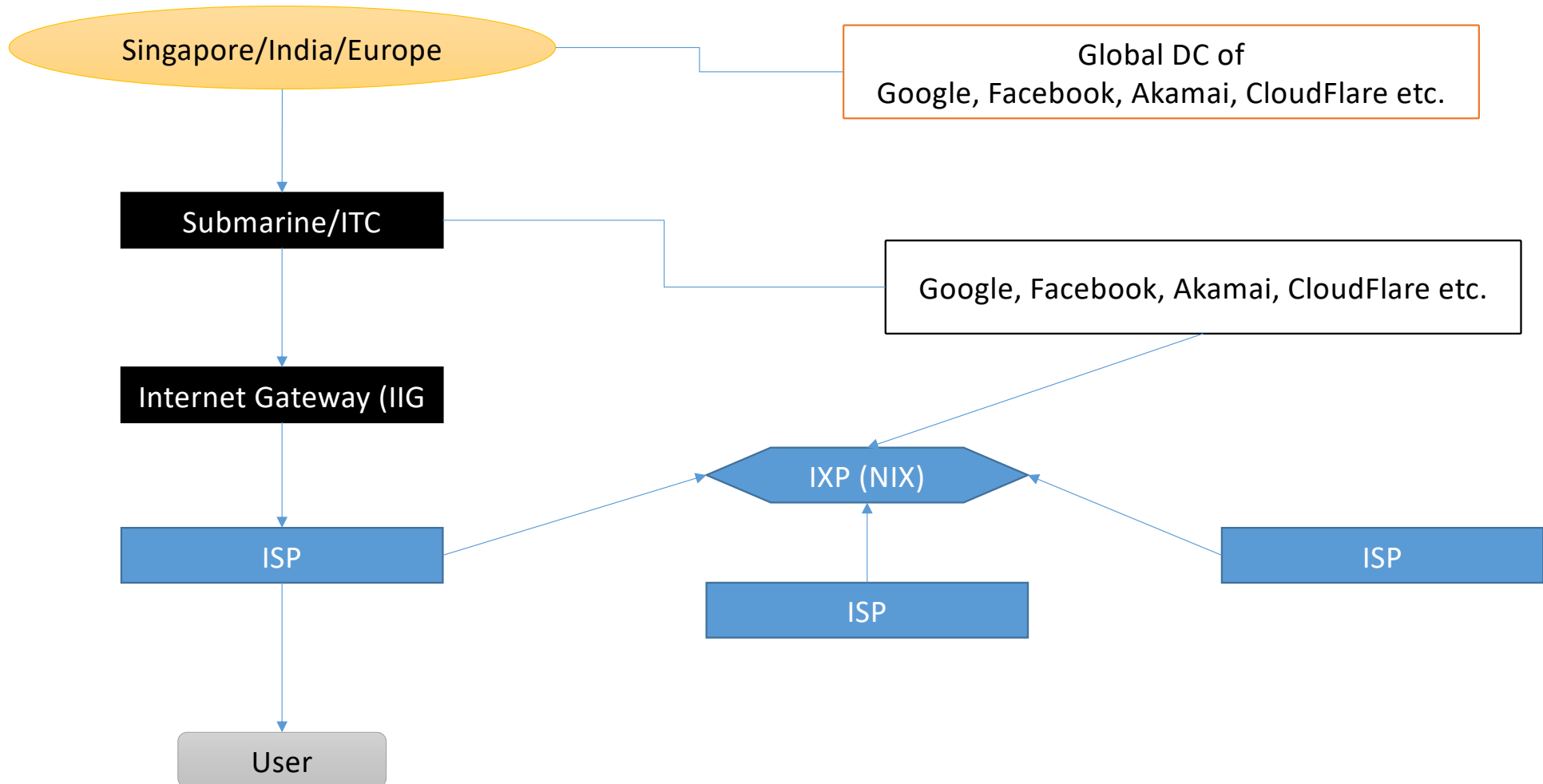
Cache Peering

- Cache to Cache Peering
- 500 Nodes in Bangladesh

Where is the Dilemma ?

- Digital Security ACT :
 - CDN's are not comfortable with some clauses to have physical presence in Bangladesh
 - Transit is preferable than Peering in terms of costing and ease of provisioning
- Legal Framework :
 - Centralized Cache/miniPOP
- Infrastructure :
 - IDCs

Centralized Cache/miniPOP :



Carrier-Neutral Data Centers :



BDCCL
Tier - 4



Felicity IDC Limited
Tier - 3

Peering Environment and Future Possibility:

- Government should amend the Digital Security Act.
- Encourage Global CDNs to come Bangladesh and give them a legal framework.
- Even can encourage CDNs to build/part of the submarine cables to Bangladesh.
- Local Entertainment industry should focus more on digital platform.
- IXP PoPs in other major cities.



[Thank You]