Mexico's IXP developments

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July 21, 2017

IXPs in the World

NONE in Mexico

January 2012

OECD Review…

- Mexico is hampered by the fact that it lacks an Internet Exchange Point (IXP). In fact, it is the only OECD country without one.

- IXPs allow Internet service providers to exchange traffic domestically more efficiently and cheaply, rather than sending traffic outside the country then returning it to terminate it.

- An IXP allows for the exchange of traffic at a single point, reduces transit costs, eliminates cross-border transportation costs, and provides an incentive to create national content.

- Most IXPs have been set up as part of a co-operative effort by ISPs.

- The government should strongly encourage ISPs to set up an Internet exchange point. Small ISPs (including cable companies) have an interest in so doing, even if the incumbent is reluctant to join.

- In comparing IP transit charges among OECD countries for which data are available (29 countries), Mexico is among the more expensive with an average of USD 60/Mbps per month for a full-port STM-1/OC-3 (155 Mbps) international IP transit port

Consorcio para el Intercambio de
Tráfico de Internet, A.C.

Mexico deserves to have an IXP

Constitución del Consorcio para el Intercambio del Tráfico de Internet A.C.

El 20 de noviembre de 2012 se constituyó el Consorcio para el Intercambio de Tráfico de Internet, Asociación Civil sin fines de lucro que manejará el IXP. Los 6 socios fundadores del IXP son: CUDI, Kio Networks, Megacable, Nextel, Redit y Transtelco.

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The Mexican Research and Education Network (CUDI) is a key player

- 3 million users

- Universities endure the consequences of high Internet prices. Opportunity to lower costs.

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CITI is organized as non profit corporation

- Pays no taxes
- Proven figure (AMSIX, CUDI)
- The corporation can organize not only a first IXP, but an interconnected network of IXP's through out Mexico.

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Financial requirements of the first IXP in Mexico City

- CAPEX:
  - 2 large capacity and fully redundant Switchs (200,000 dls.). Best offer received from CISCO for two Nexus 7009 with 48 ports of 1 and 10 Gbps.
  - Route servers and monitoring (20,000 dls.)
- OPEX:
  - Equipment lease (70,000 dls. per year)
  - Hosting (provided for free for the IXP equipment; the IXP will attract new business to the data center)

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Membership requirements

- Have an ASN (Autonomous System Number)
- Have assigned IP addresses
- Be a provider of Internet related services
- Commitment to pay its dues
- Commitment to operate by technical rules issued by CITI
- Pay for a link to the IXP
- Pay for traffic handling equipment
- Pay for hosting of its equipment

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CITI can create additional regional IXP's

- Agreement of 3 members
- Create a local Board and local technical board
- Members agree on design, equipment and hosting
- Specific quotas for each regional centers that insures sustainability.

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Modes of participation

- Multilateral peering agreements or private peering agreements
- Non member participants allowed (without corporate rights)

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Tráfico de Internet, A.C.

Governance

- <u>General Assembly: All members; one vote per member. Elects the Boards and the Chairs.</u>
- <u>Board of Directors: 11 members</u>. Sets budgets, decides investments, decides purchases, sets quotas<u>.</u>
- <u>Technical Board</u>: seven members, Chair
- <u>Regional councils:</u> up to seven members. Sets budgets, decides investments, decides purchases, sets quotas of local IXP's
- <u>Local Technical Councils:</u> up to seven members, one chair.
- <u>Management:</u> entrusted to the Chair of the Board.

Procurement

- All purchasing decisions taken by competitive, open procedures, authorized by the Board.

By Laws.

http://www.ixp.mx/documentos/
140701_compulsa_estatutos_vigenes.pdf

The Mexico city IXP was inaugurated on April 30th 2014

México D.F. a 30 de abril de 2014, Alrededor de 350 puntos de intercambio de tráfico de Internet proveen servicios alrededor del mundo para el intercambio de tráfico de internet. Sin embargo, hasta ahora, México era el único país de la OECD que no contaba con un IXP.

El Consorcio para el Intercambio de Tráfico de Internet, A.C. (CITI) presenta

KIO OPEN NETWORK ECOSY

by KIO Netw

El presidente del consejo de CITI
Carlos Casasús.

El Consorcio para el Intercambio de Tráfico de Internet, A.C., (CITI), una Asociación Civil sin fines de lucro del sector privado, anunció el día de hoy la inauguración del primer IXP mexicano (Internet Exchange Point o Punto de Intercambio de Tráfico de Internet).

Hosting

- Kio Networks Data Center located on the Mexico City to Toluca highway

- Monthly hosting costs for CITI members is around 1,500 dls per month

Ubicación IXP

Data Center KIO/5.6
Instalación del Proyecto del IXP

Cómo llegar

Apnube 2977
Cuajimalpa
Ver en Google Maps

Ver mapa más grande

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Current members

- CUDI
- Kio Networks
- Transtelco
- Enlace TPE
- Megacable
- NIC México

Google

- Has installed a global cache in the Mexico City IXP.

Quotas

- $810.00 dollars per month for a 1 Gbps port.
- $2,430.00 dollars per month for a 10 Gbps port.

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Regulatory Changes from Mexico's telecomm reform

- Article 138 of the new Telecommunications law mandates the dominant provider to connect to existing IXP's:

  Los agentes preponderantes o con poder deberán contar con presencia física en los puntos de intercambio de tráfico de Internet en el territorio nacional, así como celebrar los convenios que permitan a los proveedores de servicios de Internet el intercambio interno de tráfico de manera más eficiente y menos costosa en los términos que disponga el Instituto,

- We fully expect Telmex-Telcel to be connected to the Mexico City IXP in the following months.

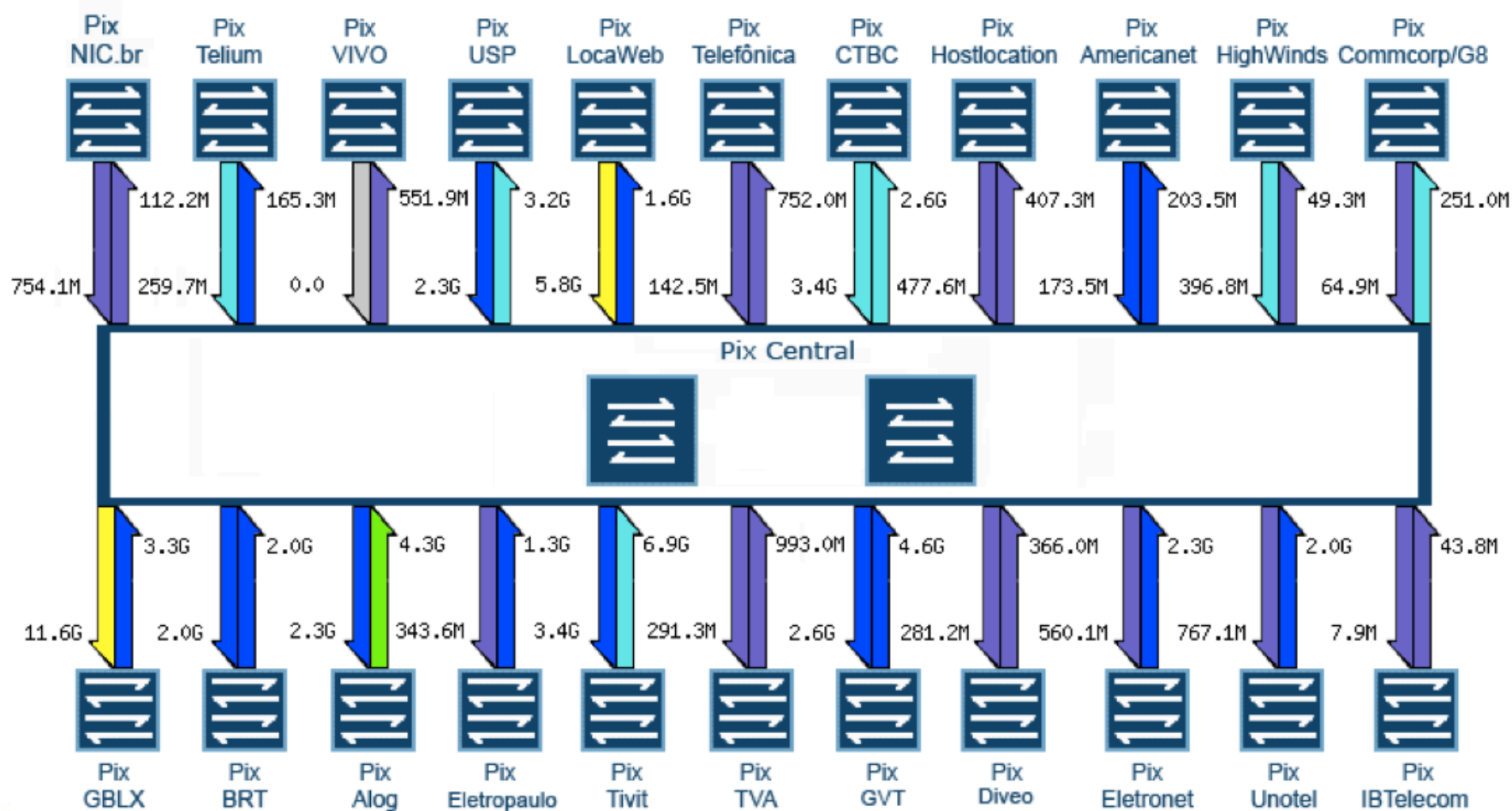Consorcio para el Intercambio de Tráfico de Internet, A.C.

A network of distributed IXP's

- CITI is currently analyzing the installation of several IXP's through out Mexico :

México	Monterrey
Querétaro	Guadalajara
Ciudad Juárez	Tijuana
Puebla	Mérida

- We expect that the regulatory reform will have a major impact on the price of interurban high capacity links. The dominant provider is obligated to sell capacity at long run incremental cost. This should make possible to operate all IXP's as distributed IXP's
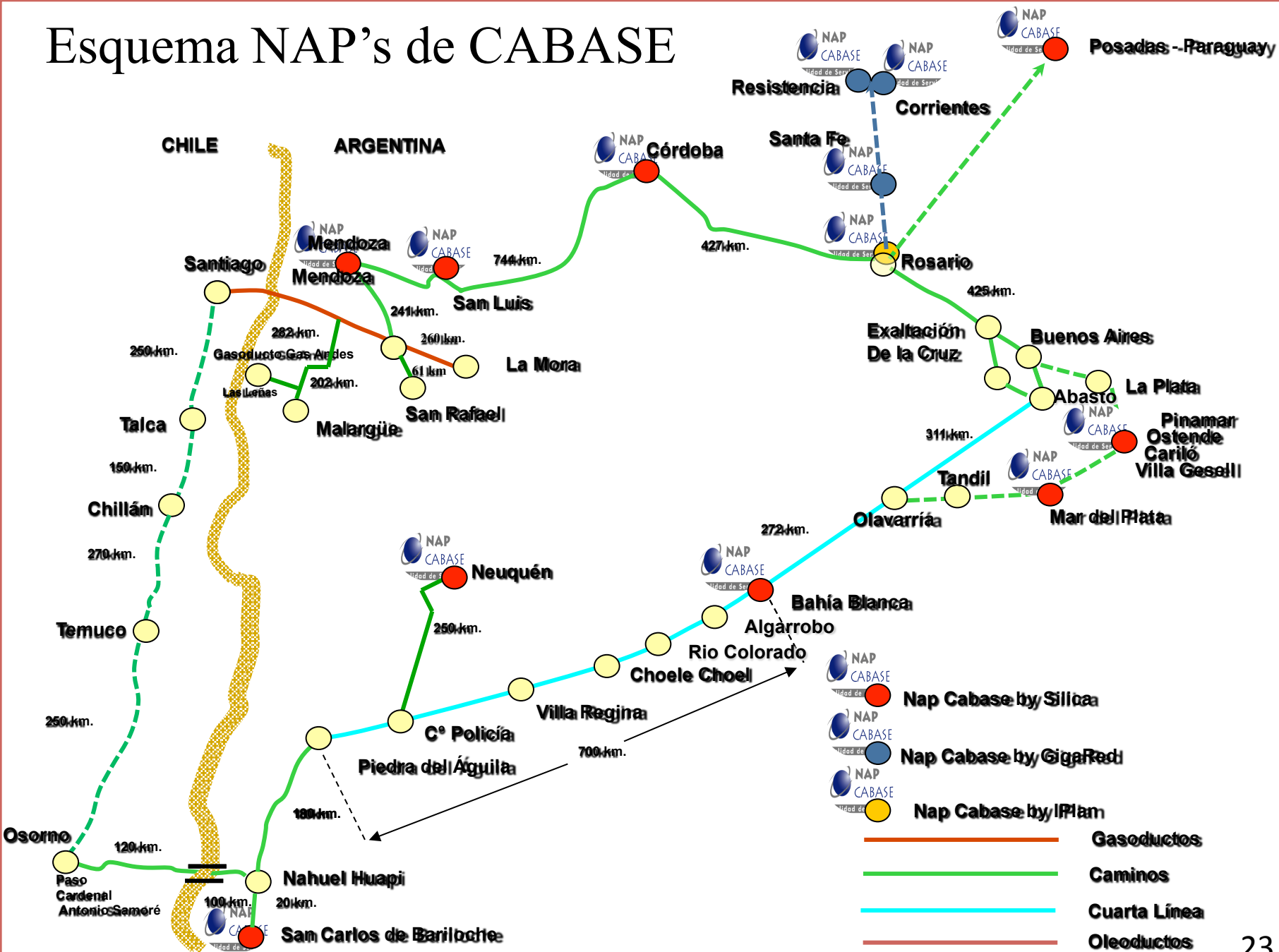
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PTTMetro/PTT.br – São Paulo – PIX Topology

Esquema NAP's de CABASE

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PTT Metro

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