

Remote Peering at IXPs

EURONOGI - 30 Sep 2011



Some history:

1. 1995 - the first IXP in Poland/Warsaw (GIX) - NASK & GTS
2. 2000 - the second IXP in Poland/Warsaw (WIX) - ASTER
3. 2006 - the third IXP in Poland (PLIX)
4. In the meantime - small exchanges came up (LIX - Łódź, GIX - Gdańsk, KIX - Cracow, WRIX - Wrocław)
5. During last 3 years there are more and more IXPs in Poland: AC-X, KIX (KIKE), TPIX



1. We are neutral & professional IXP.
2. We use only one vendor of switches.
3. We help our members to create correct configuration for PLIX Public VLAN.
4. We assume route-servers are one of the main services our members wish to get.
5. We monitor as much as we can.
6. We provide more services than just a possibility to peer with everyone.
7. We run 24/7 NOC working on-shifts 365 days a year.

PLIX in a pill

	January 2009	March 2010	September 2011	Growth 2010 -> 2011	Growth 2009->2011
Members	90	132	185	140%	206%
Switches	11	24	28	117%	255%
Total # of ports 1/10GE	386	750	1094	146%	283%
Traffic	45	80	152	190%	338%
BGP v4 sessions on RS	200	350	392	112%	196%
BGP v6 sessions on RS	6	30	122	407%	2033%



PLIX in a pill

New members since March 2011	
100TX	9
1GE	14
10GE	1
2x10GE	1
3x10GE	4

Upgrades since March 2011	
1GE -> 2x1GE	2
1GE -> 10GE	1
10GE -> 2x10GE	2
2x10GE -> 4x10GE	2



PLIX in a pill

IPv4 prefixes on Public VLAN	>15.000
IPv6 prefixes on Public VLAN	>260

DOMESTIC TRAFFIC!!!



Reseller programme

PLIX just started with first partners,
we will get few more till end of 2011



Atrato ip Networks
IP transit & Carrier Service



EuroTransit
global IP transit and carrier services



PLIX
POLISH INTERNET EXCHANGE



CE-Colo

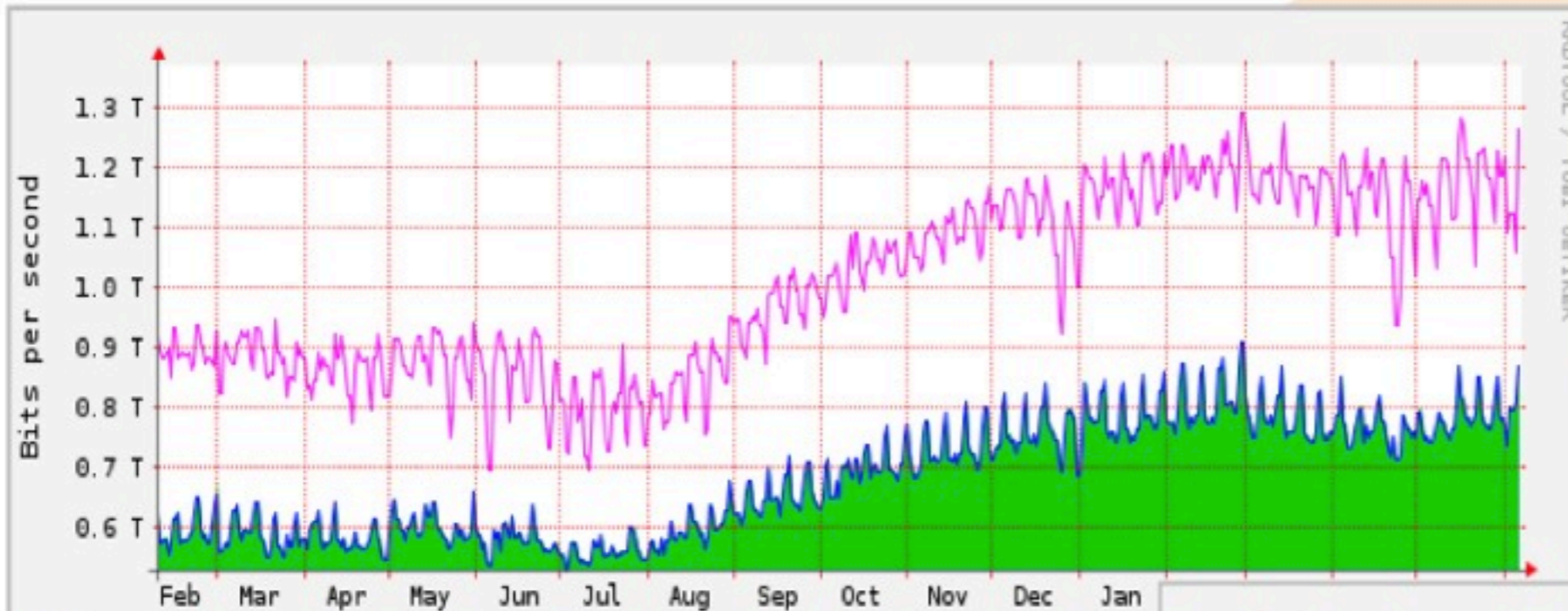
Other IXPs



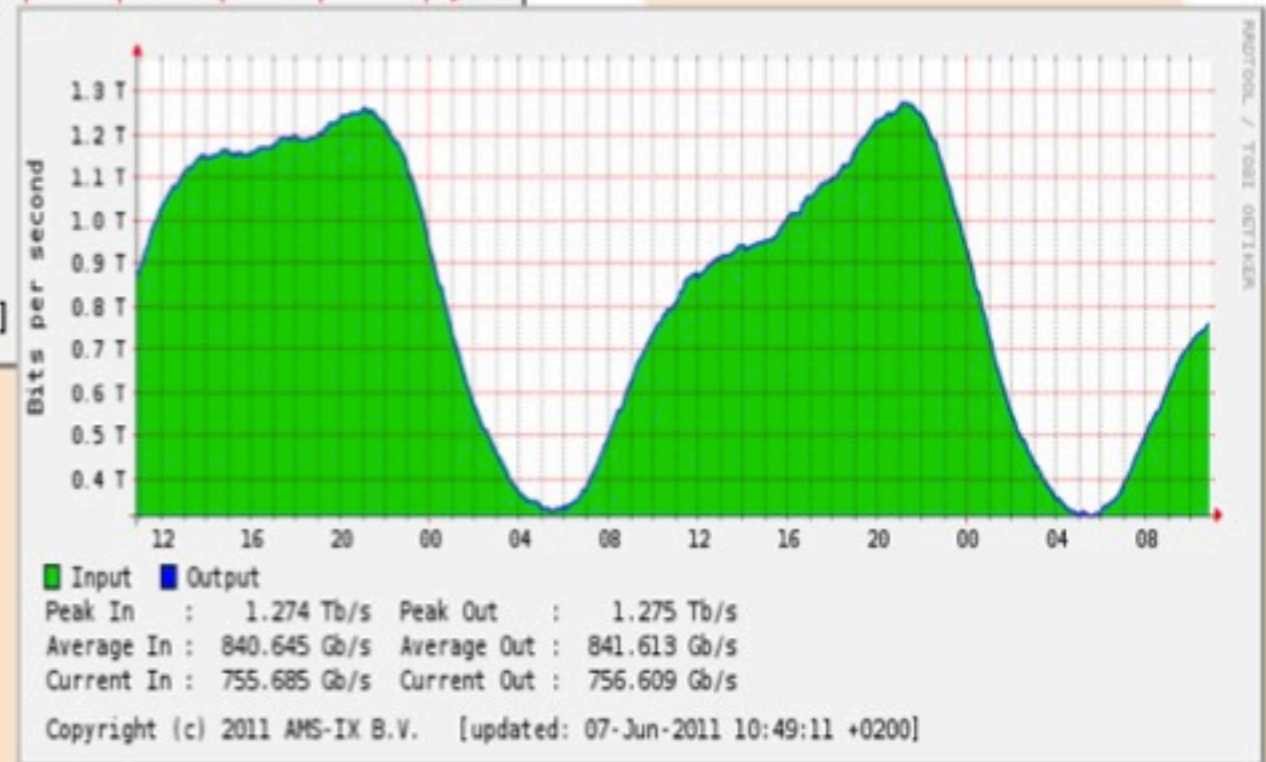
AMS-IX Actual Statistics

- 460 total networks
- 1.3Tbps peak traffic
- 75 new connections in 2011
- 100GE ports
- SLA for interconnection
- Inter-IPX (mobile IPX Interconnection)
- Neutral non-blocking Exchange

Traffic Developments



■ Input
■ Peak 5 Minute Output ■ Output
Peak In : 1.290 Tb/s Peak Out : 1.290 Tb/s
Average In : 680.412 Gb/s Average Out : 680.369 Gb/s
Current In : 808.575 Gb/s Current Out : 809.533 Gb/s
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■ Input ■ Output
Peak In : 1.274 Tb/s Peak Out : 1.275 Tb/s
Average In : 840.645 Gb/s Average Out : 841.613 Gb/s
Current In : 755.685 Gb/s Current Out : 756.609 Gb/s
Copyright (c) 2011 AMS-IX B.V. [updated: 07-Jun-2011 10:49:11 +0200]

Daily and yearly traffic

New connection Statistics

- 60% of new connections come from Partners like Atrato IP Networks
- Currently there are more than 800 active ports at AMS-IX
- 175 new ports since this time last year
- From 30% International Networks connected in 2005, AMS-IX has now over 70% of all connected parties originating from abroad
- Recent increase of connections from Eastern Europe, Middle East, North Africa and Asia (inc. Russian Fed.)
- Value for Money, Quality and resilience named reasons for connecting to AMS-IX by new connections

Survey

AMS-IX:

38 direct member connections via partners

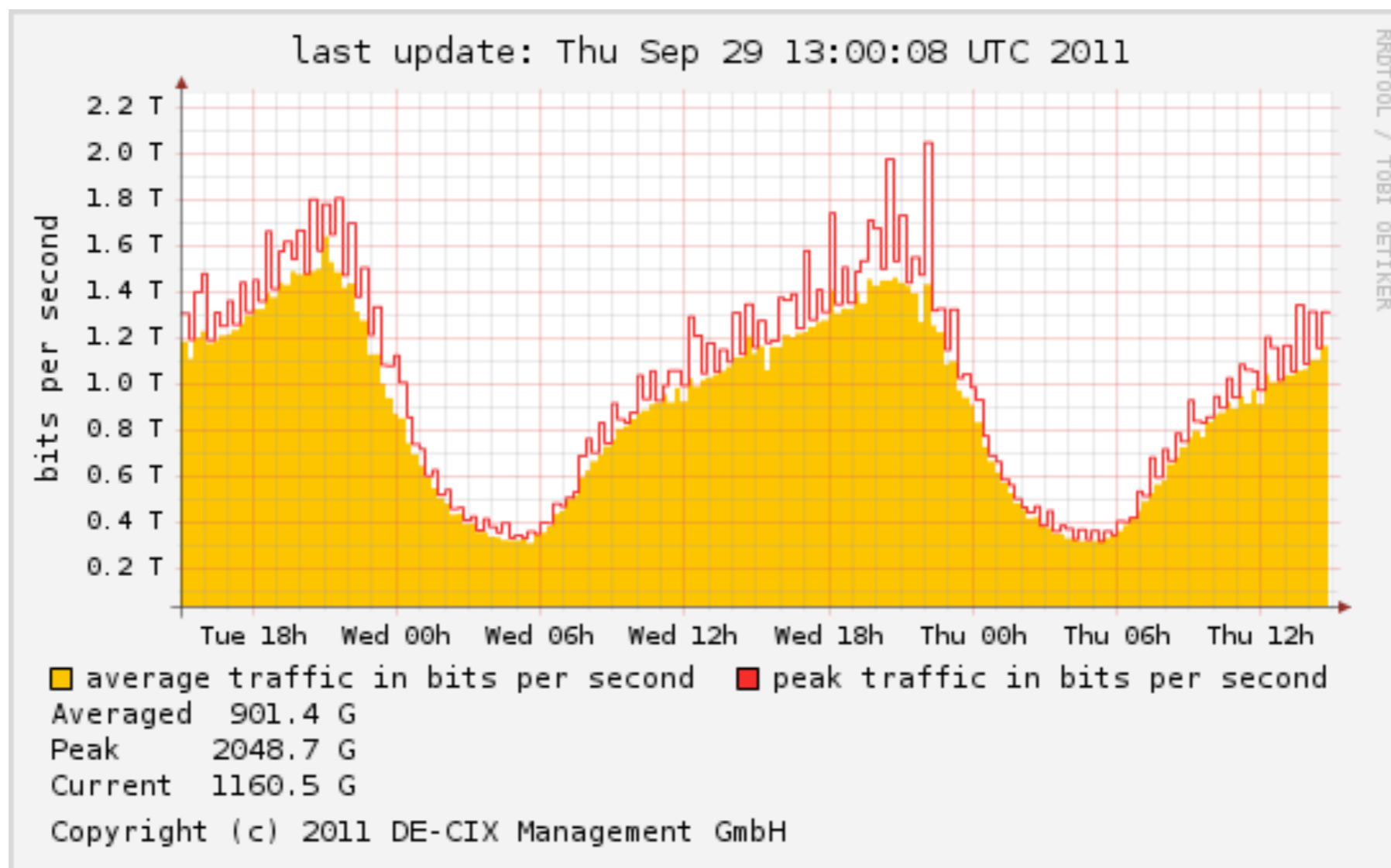
50 virtual connections via 12 partner ports

21 partners





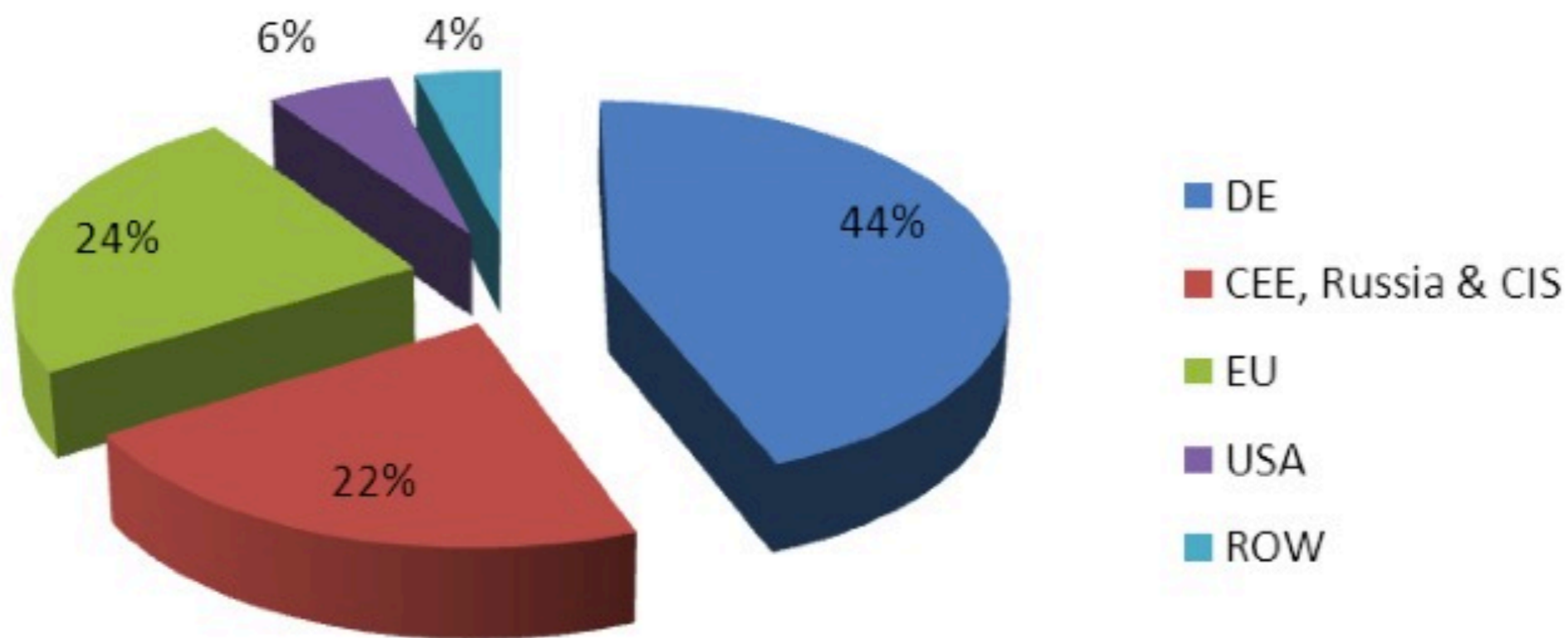
DE-CIX





DE-CIX

450+ members



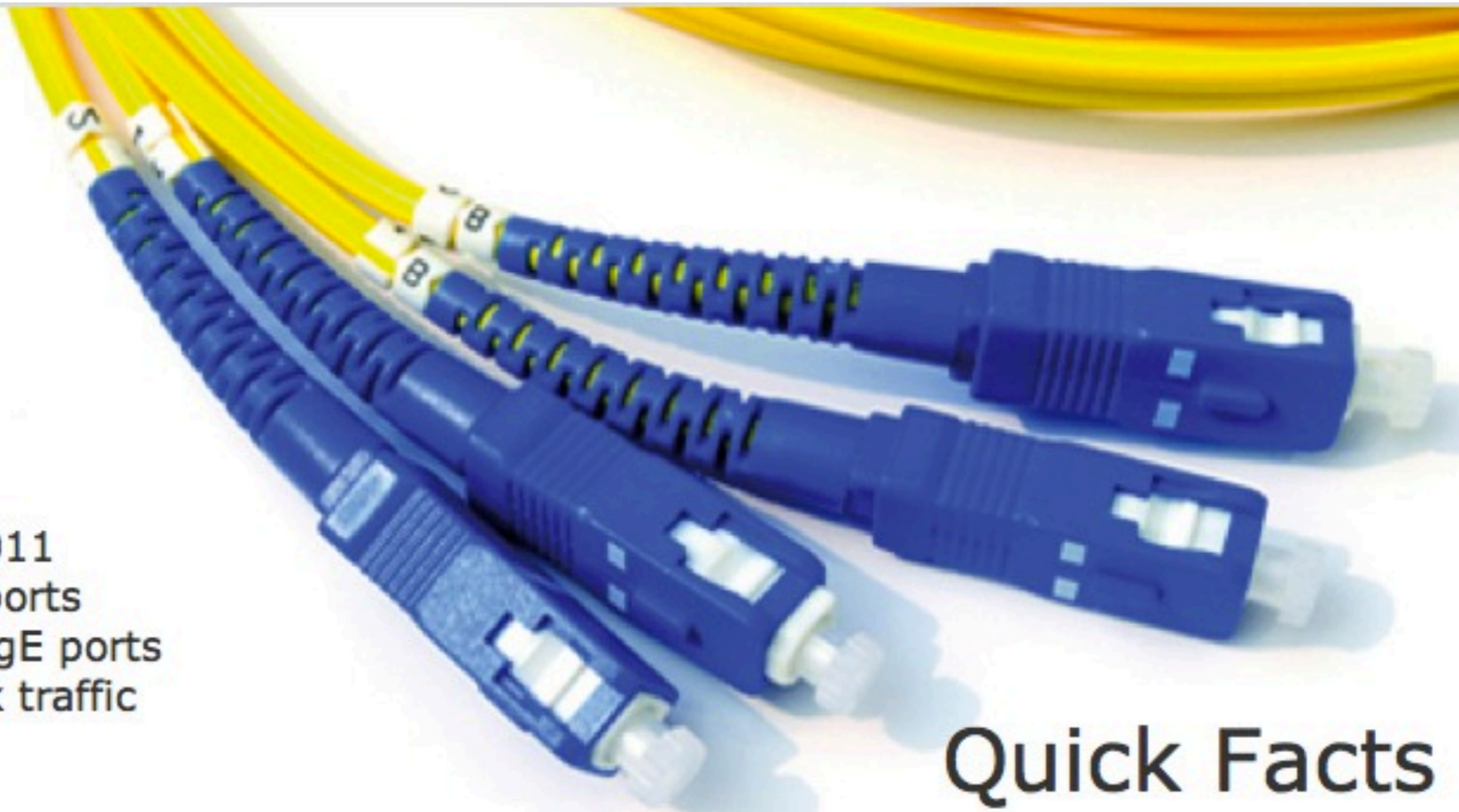
Survey

DE-CIX will start Reseller Program in Q4 2011.

30 to 40 new customers until end of 2012 is expected.



LINX



- 388 members
- 38 new applications in 2011
- 851 connected member ports
- 367 member-facing 10GigE ports
- over 1112 Gb/sec of peak traffic
- 51 member countries

Quick Facts



Survey

LINX:

Reseller programme starts in Q4

40 direct 10GE member connections via partners

40 direct 1GE member connections via partners



Expectations on reseller programmes

DE-CIX: small prospects (100-200Mbps)

AMS-IX: small and mid-size far away prospects (100Mbps up to 5Gbps)

LINX: small and mid-size prospects



Expectations on reseller programmes

3 out of 10 networks will become standard members in 12 months

6 out of 10 networks will become standard members in 24 months



Number of partners

AMS-IX: 21 partners

DE-CIX: 10-20 partners expected at the end of 2011

LINX: more than 10 at the end of 2011



Resellers programme - is it worth?



Market knowledge

In most cases resellers know local market much better than IXP sales forces - they can find and attract new members



Resellers programme - is it worth?

Speed

Resellers are often faster than IXP (selling, connecting)...

ok...

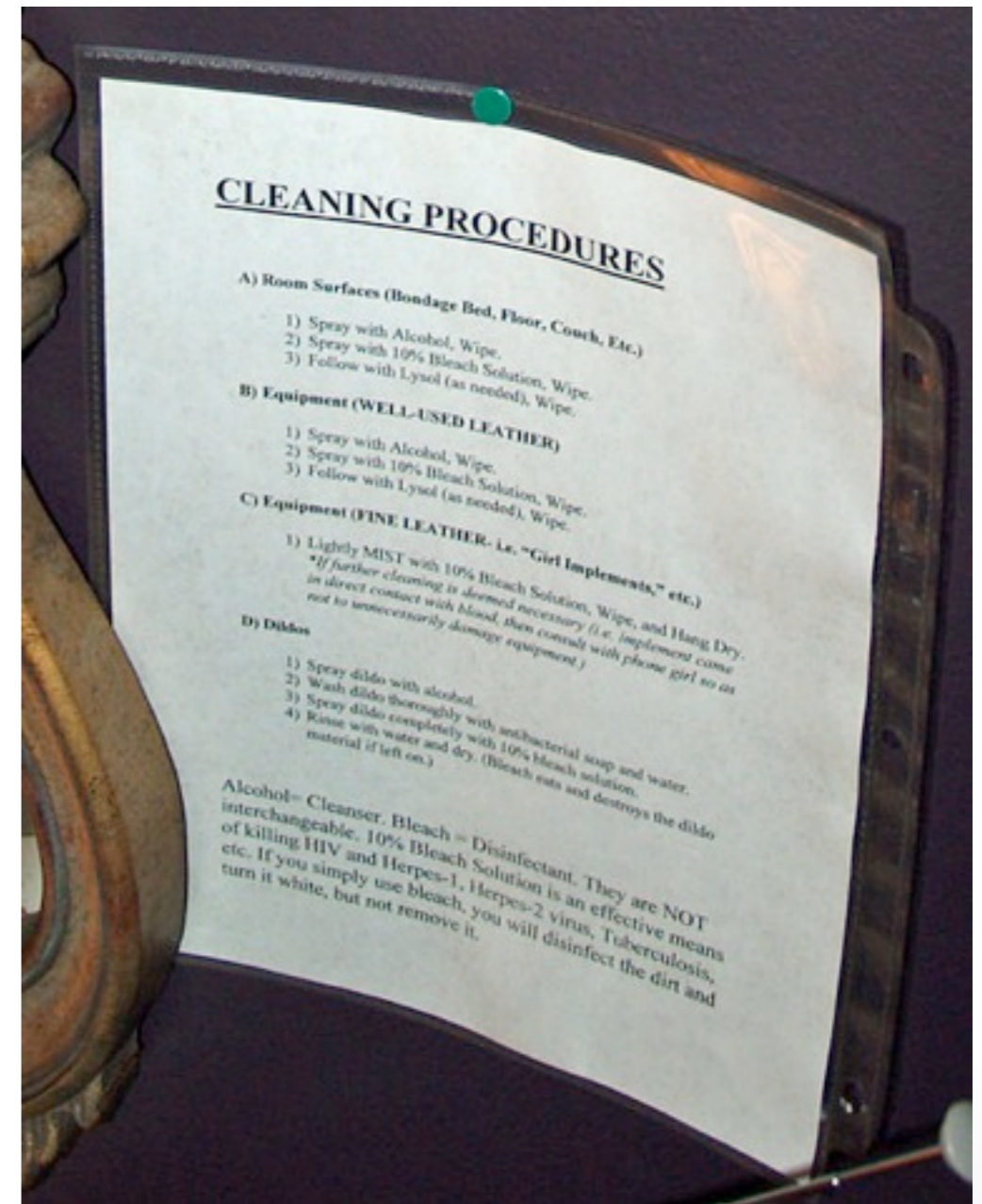
sometimes ;-)



Resellers programme - is it worth?

Organisation

Small players are often not familiar with procedures in IXP, they don't know what to do, how to configure equipment - resellers know it much better



Resellers programme - is it worth?

Language barrier
Small companies buy upstream from national telcos - they do not need to speak in foreign language (ie. call to Amsterdam or London and speak to NOC engineers)



Resellers programme - is it worth?

Help in day-to-day operations

Resellers work on daily basis with this companies, in most cases they are their first line of support.

HELP !



Resellers programme - is it worth?

Resellers are not taking over IXP customers

Main goal of resellers is to make money on statistic effect
- many members oversubscribed on one port

There is also market around connection to IXP



Resellers programme - is it worth?



Partners are connecting small parties and acts as a “kindergarten” - IXPs don’t have staff and time to teach companies how to grow :)



Conclusion

Reseller programmes are
good for all parties

it's a win-win game



**The last but not
least...**

**remember to
come to our stand
and grab one PLIX
t-shirt :)**



Thank you :)

If you are interested in becoming a partner of PLIX or any listed IXP please contact us

e-mail: sales@plix.pl

