

LHCOPN update

Cambridge, 9th of February 2015
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Update



US-T1-BNL and US-FNAL-CMS

- Three new connections to CERN via ESnet's new transatlantic 100G network. 40Gbps guaranteed bandwidth for each sites.

CH-CERN

- Connected with 2x100G to ESnet and 1x100G to Geant, in Geneva

Dismissing T1-T1 links

Few Tier1s has decided to dismiss their T1-T1 links and use LHCONE for T1-T1 connectivity and LHCOPN backup

Please check your back up connectivity!

Update



[Input from the Tier1s in the audience]

Update



TRIUMF

Upgrade of CERN 5G primary link to 10G.

Due to insufficient link capacity of backup CERN 1G link, it will be decommissioned and LHCONE will be used for backup.

Decommission SARA link and redirect its traffic to LHCOPN primary link, also use LHCONE as a backup link for SARA.

Redirect OPN traffic from BNL to LHCONE through Seattle Pacific Northwest Gigapop's Pacific Wave Exchange to TRIUMF.

Monitoring



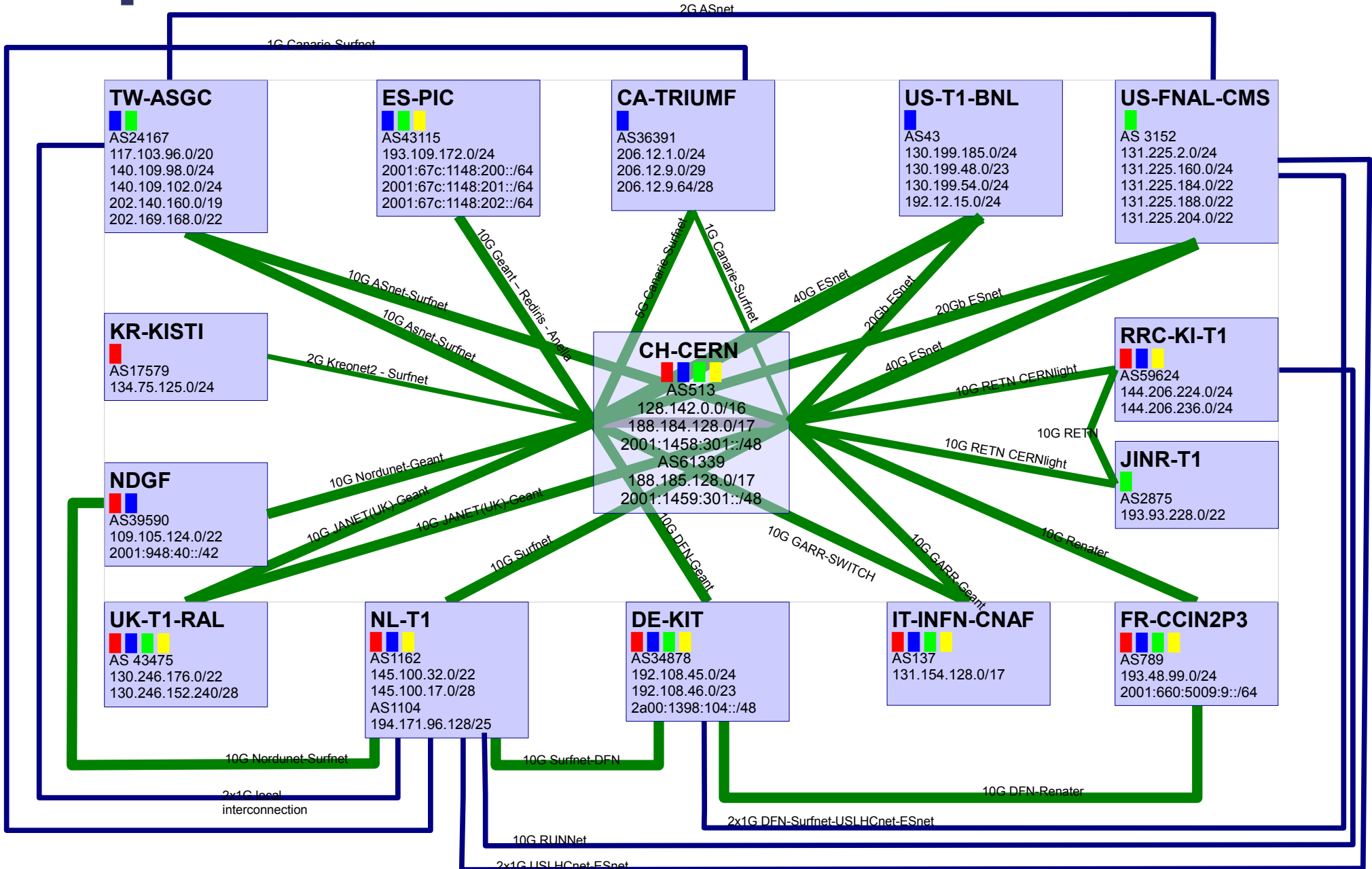
Verify your pingable hosts:

https://twiki.cern.ch/twiki/bin/view/LHCOPN/LhcopnIpAddresses#Pingable_hosts_in_the_LHCC

They could be replaced by the perfsonar probes

Map

LHCOPN



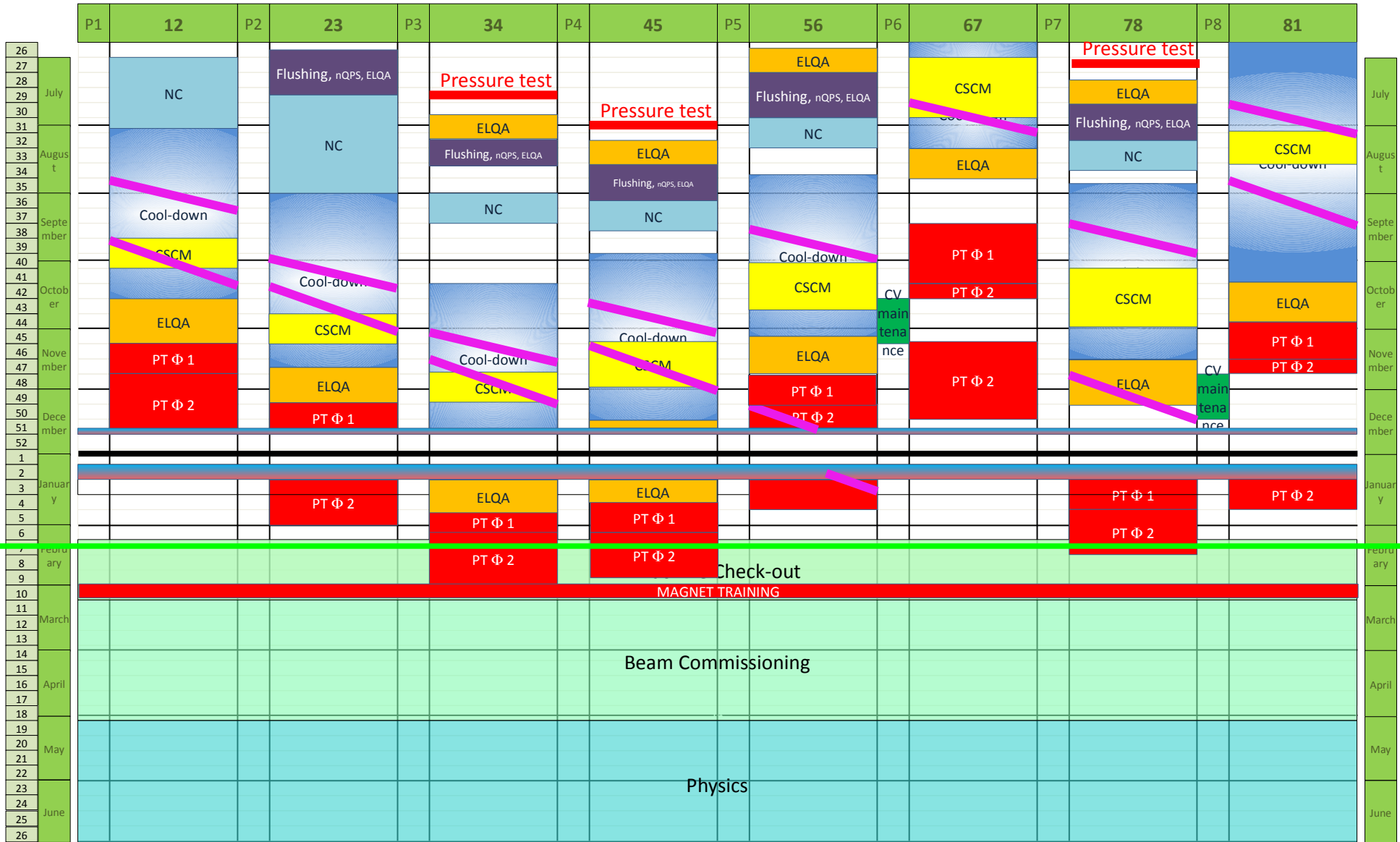
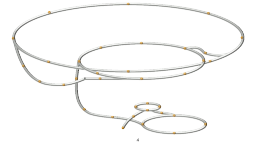
— T0-T1 and T1-T1 traffic
— T1-T1 traffic only
— Not deployed yet
 (thick) >=10Gbps
 (thin) <10Gbps

■ = Alice ■ = Atlas
■ = CMS ■ = LHCb

p2p prefix: 192.16.166.0/24 - 2001:1458:302::/48
 edoardo.martelli@cern.ch 20141212



LHC Long Shutdown 1 completed



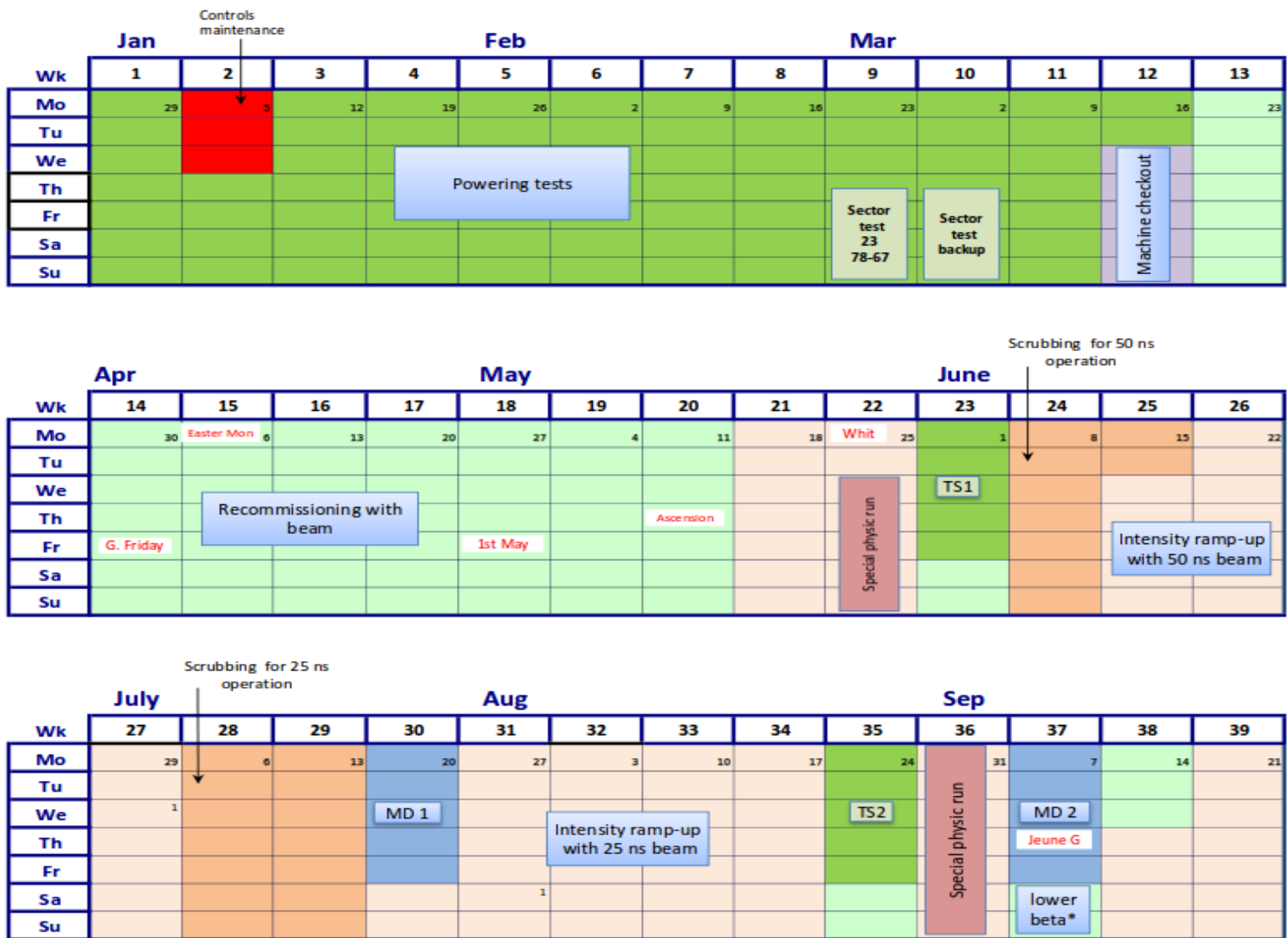
LHC Schedule 2015



ML

January 28, 2015
V1.1

LHC Schedule 2015
Approved by the Research Board, December 2014



LHC Schedule



Links:

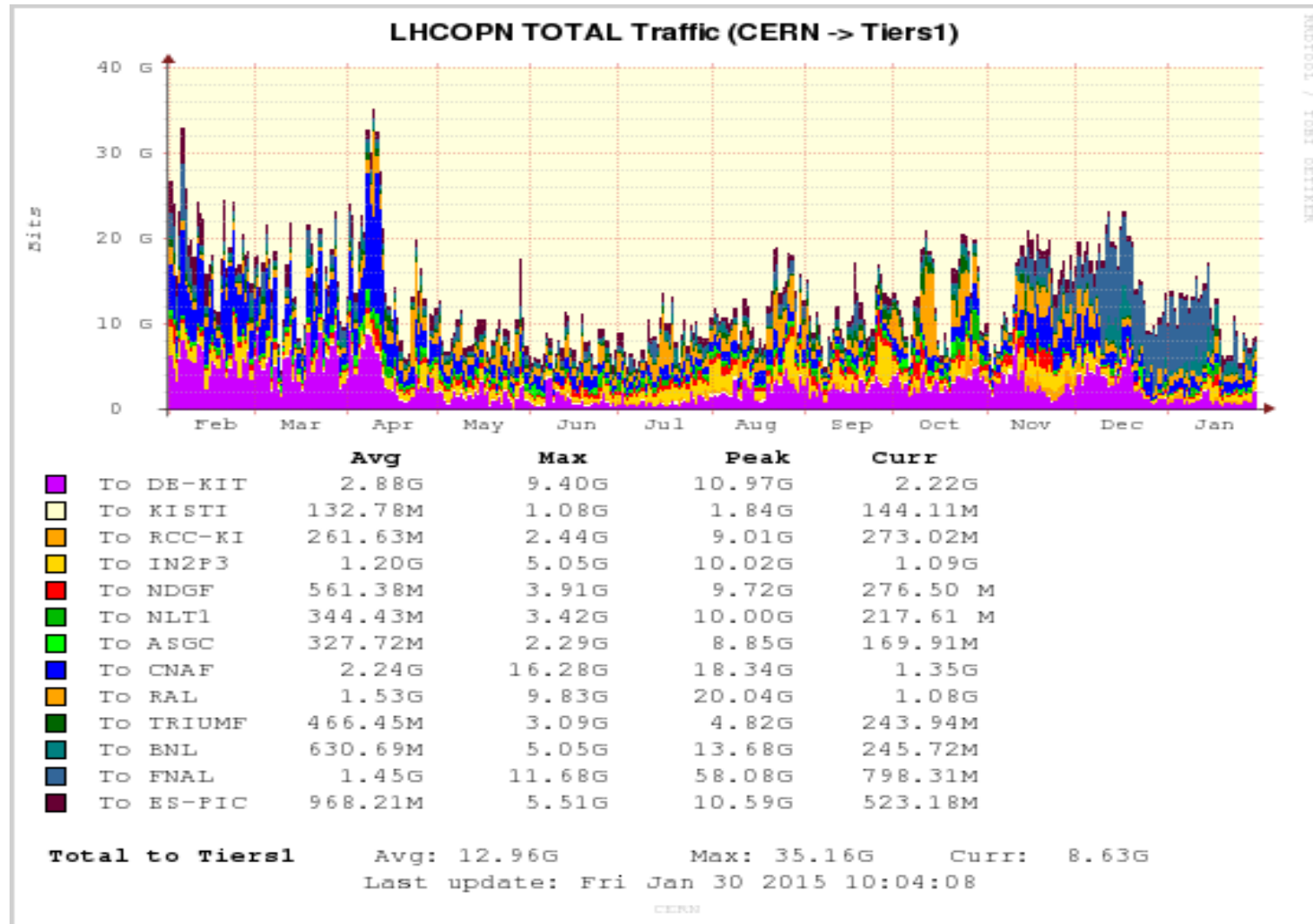
<http://lpc.web.cern.ch/lpc/>

https://espace.cern.ch/be-dep/BEDepartmentalDocuments/BE/LHC_Schedule_2015.pdf

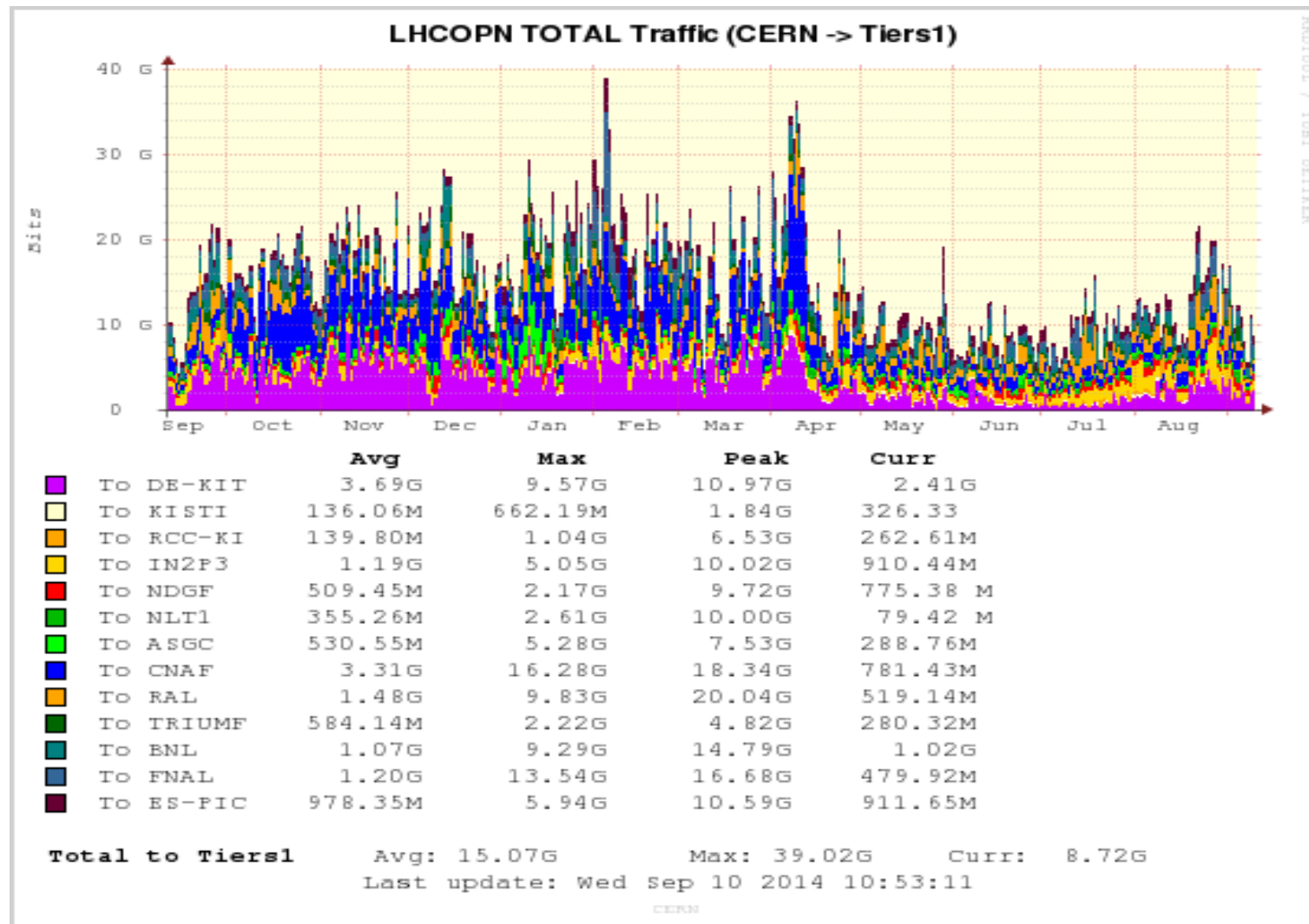
Long term planning



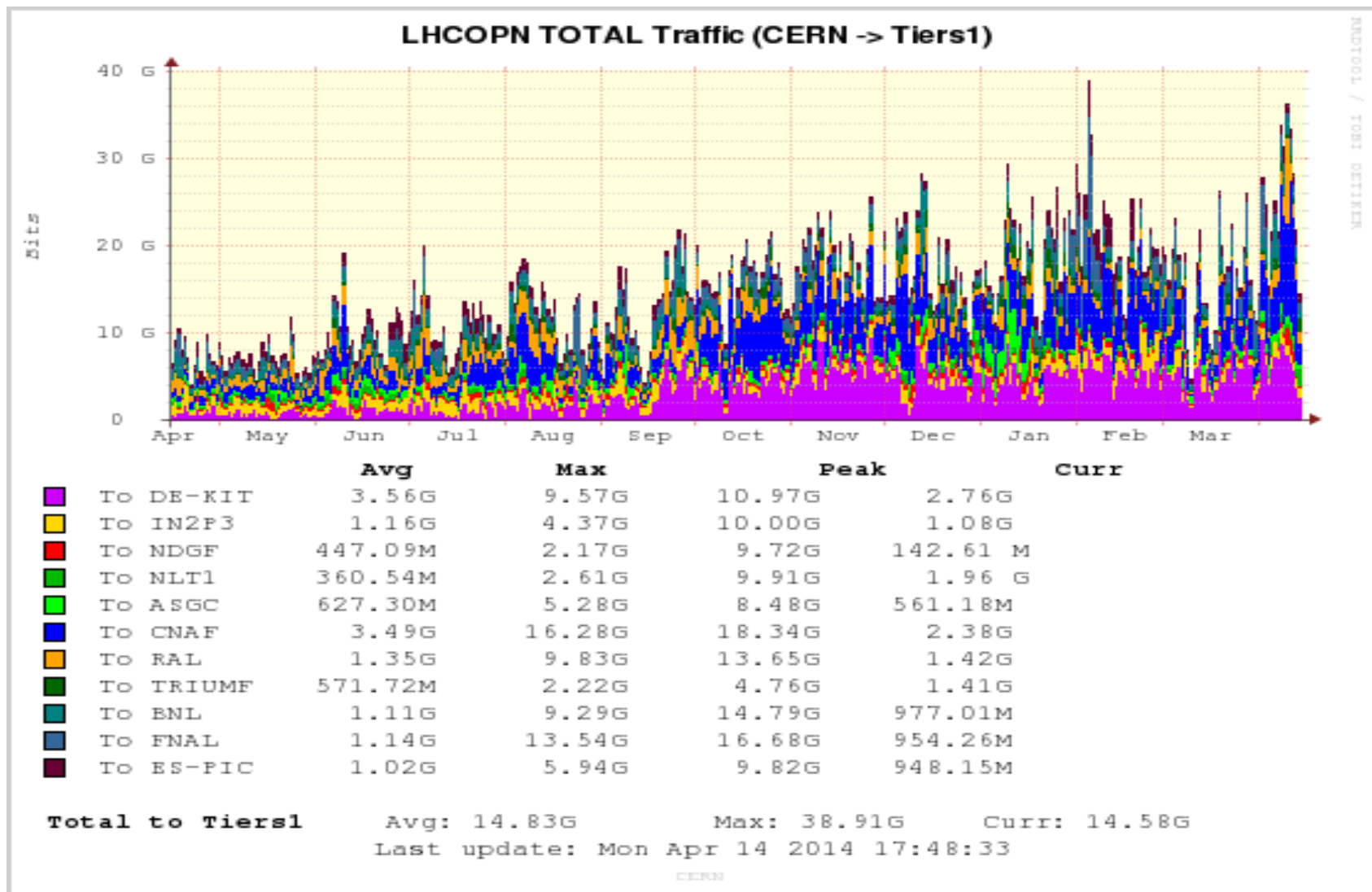
LHCOPN traffic trend



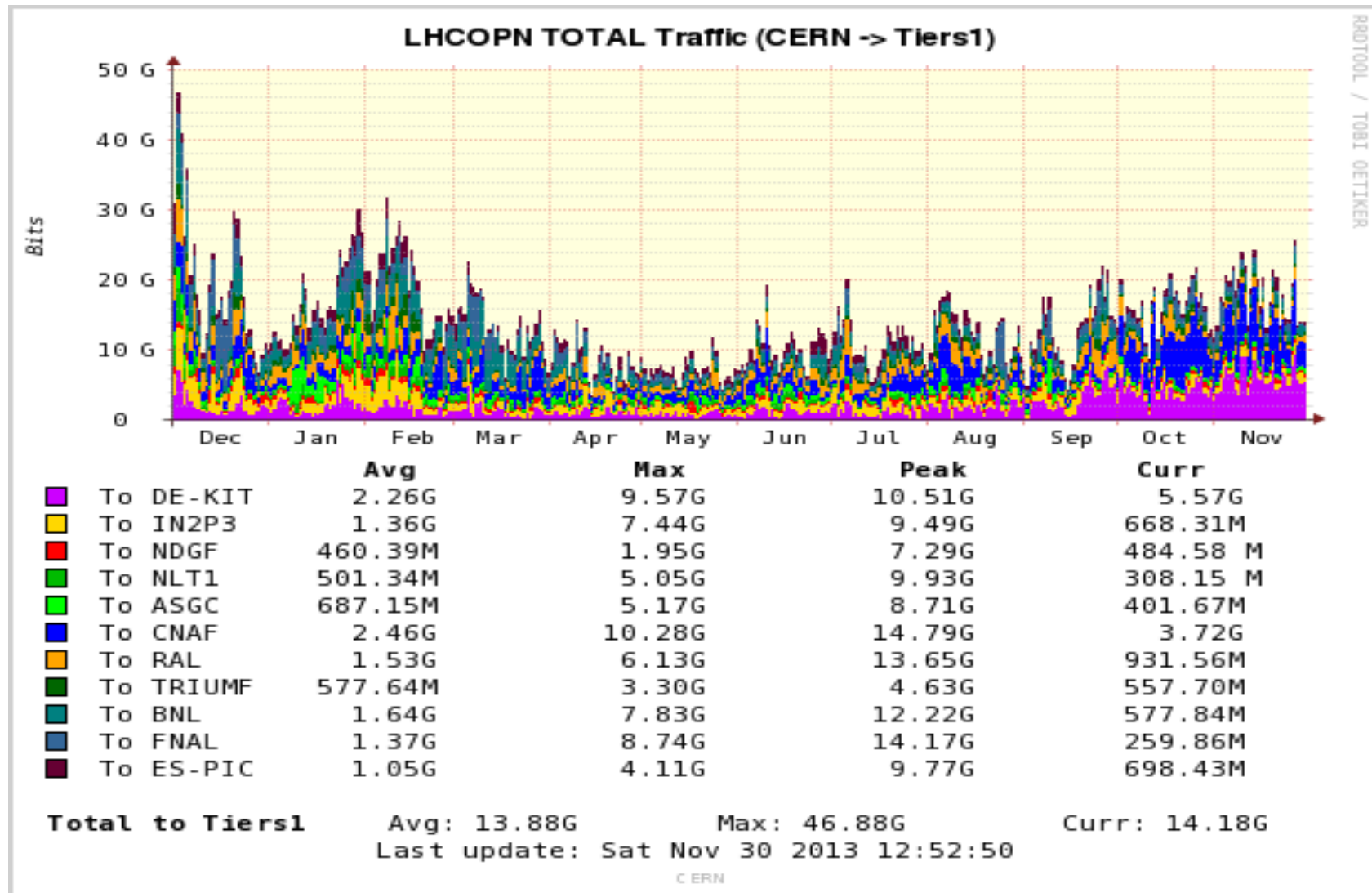
(previous graph, September 2014)



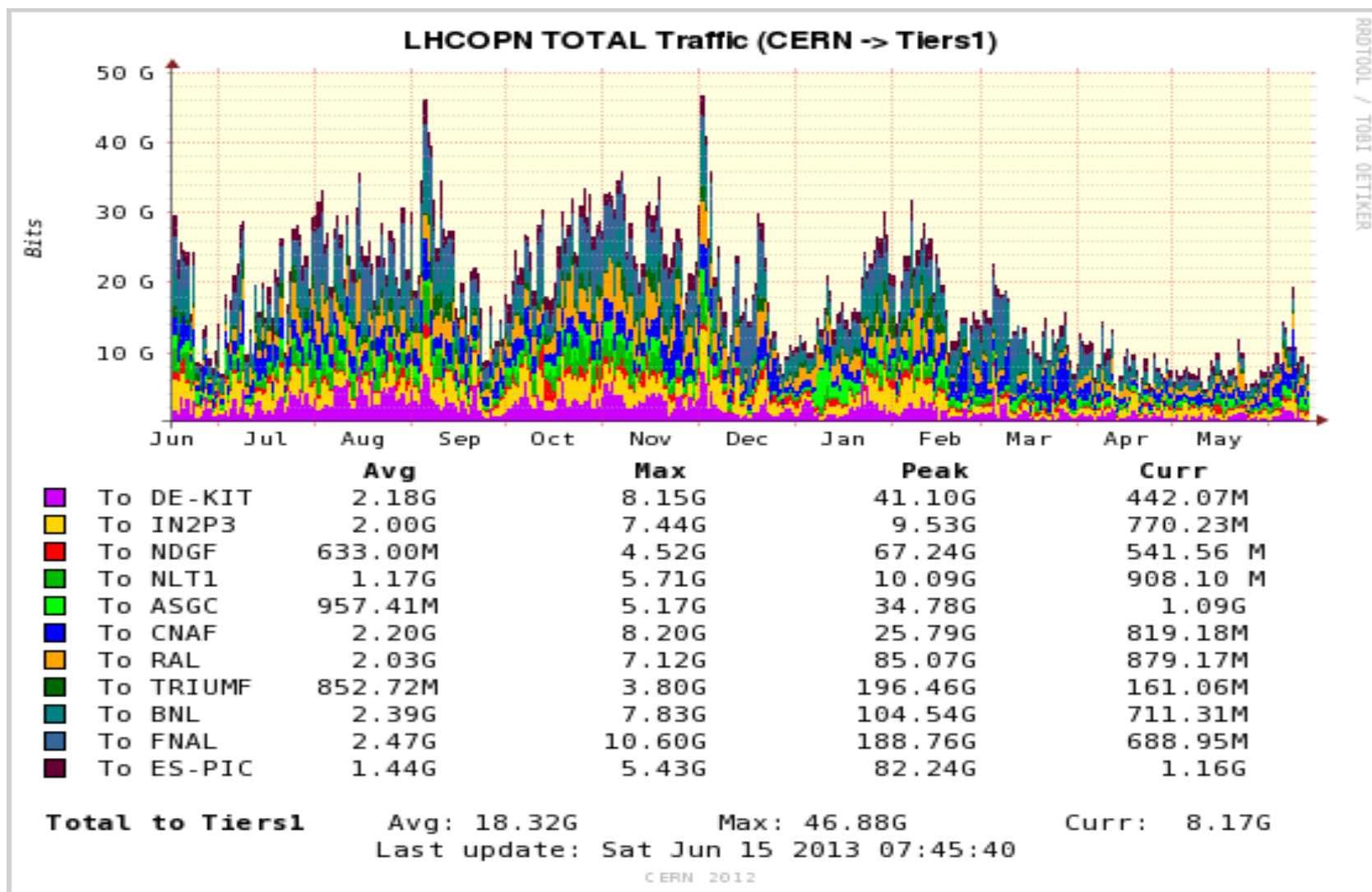
(previous graph, April 2014)



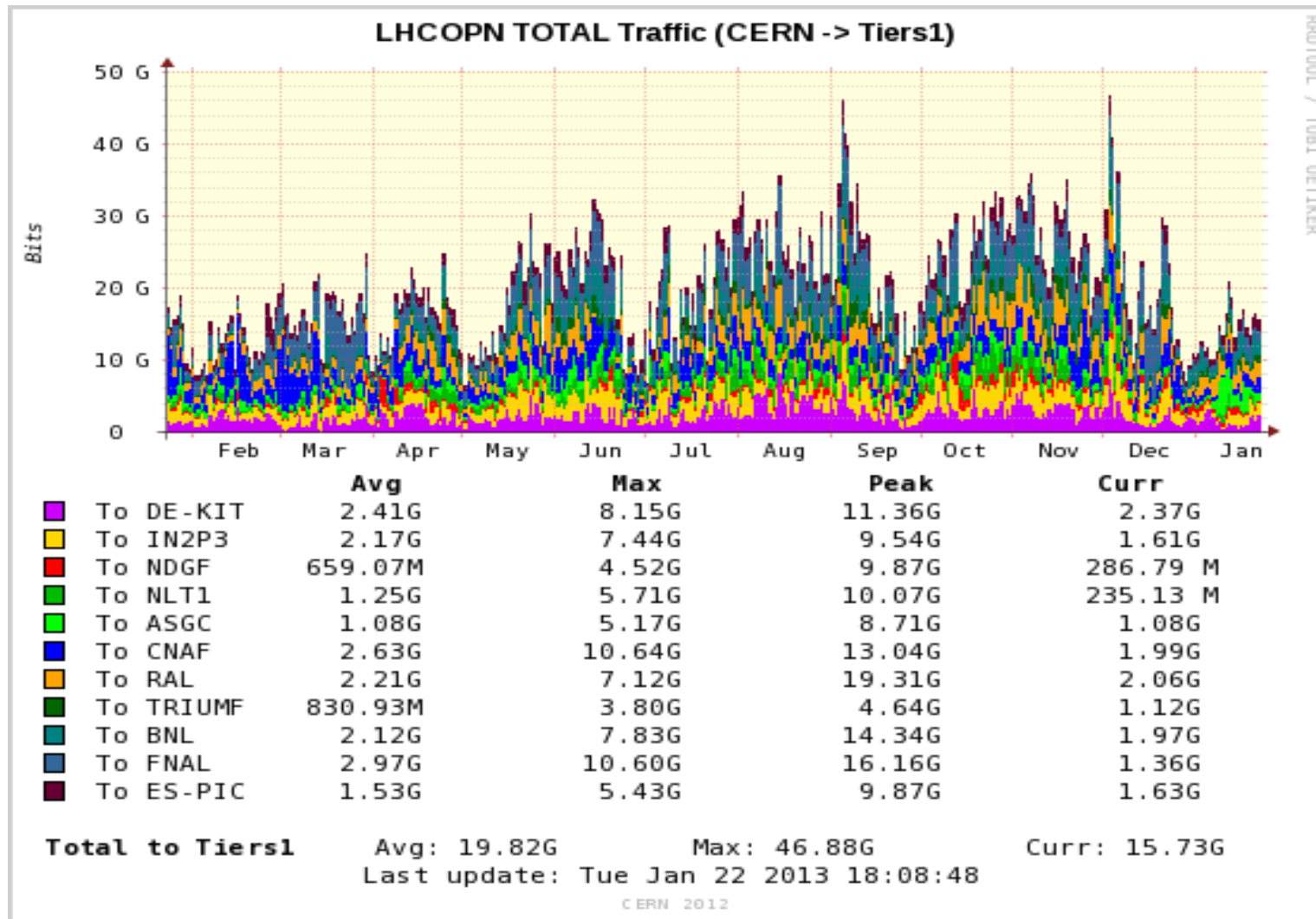
(previous graph, December 2013)



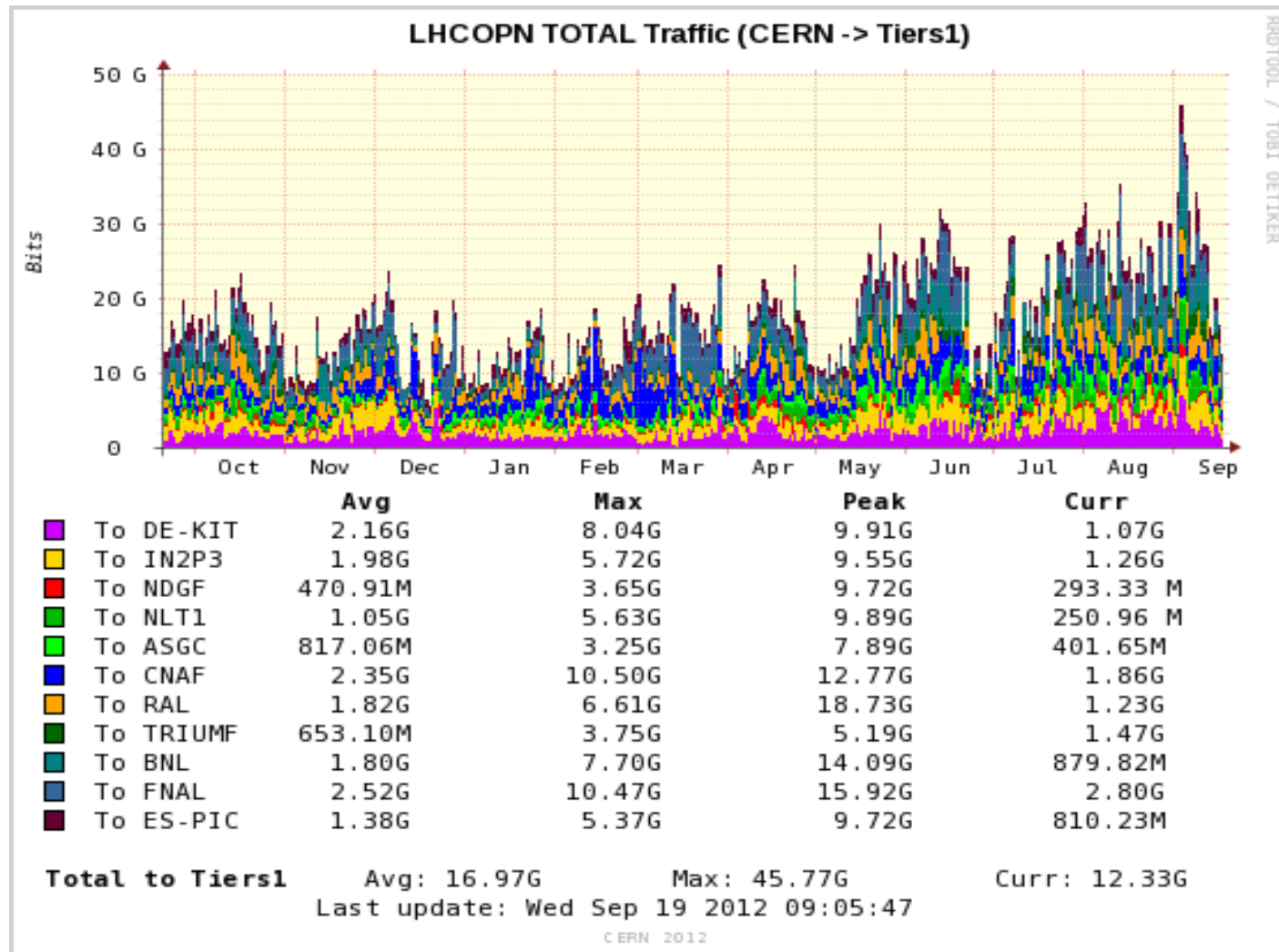
(previous graph, June 2013)



(previous graph, January 2013)



(previous graph, September 2012)



Questions?