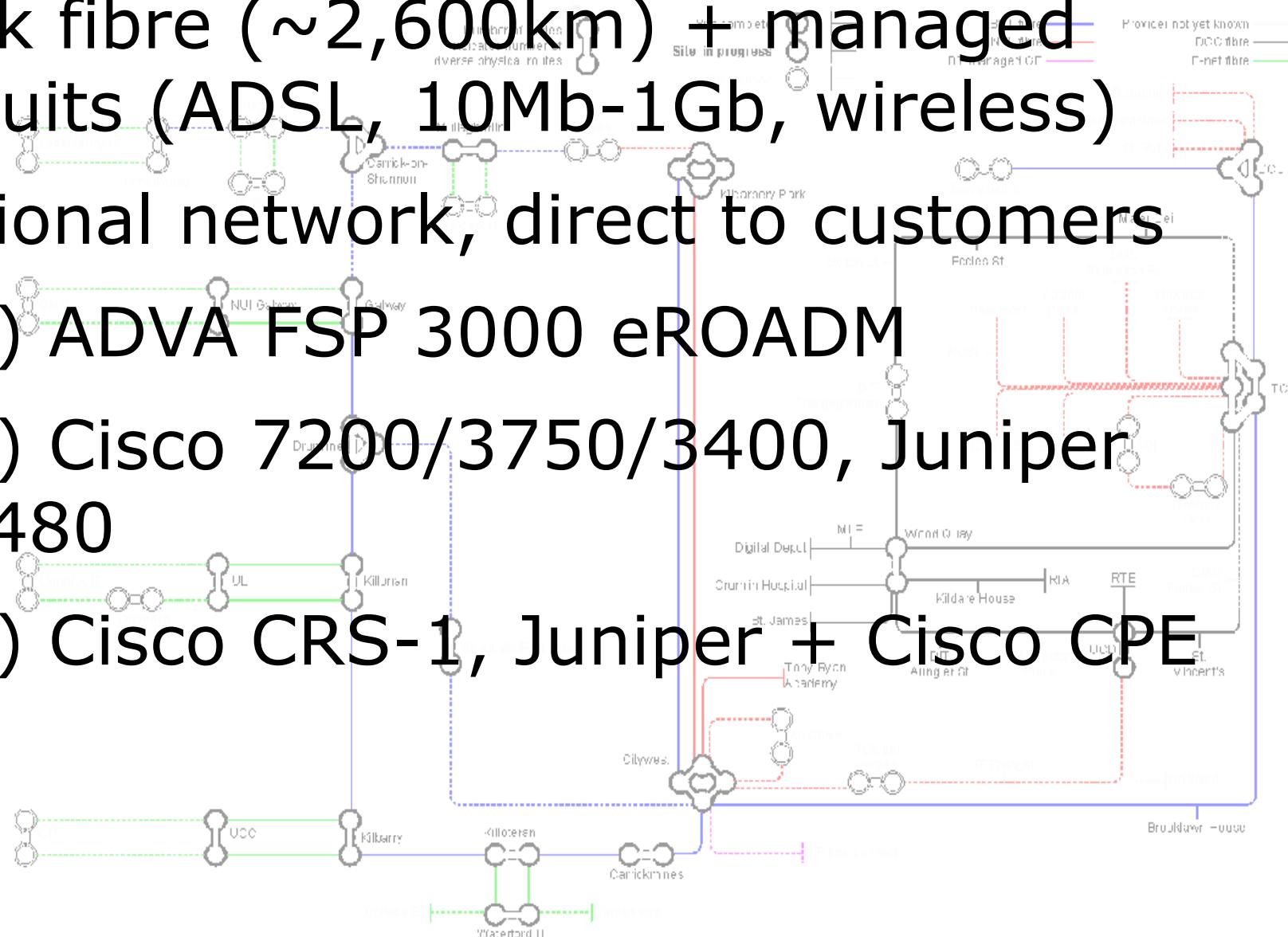# TF-NOC flash presentation

the HEAnet NOC(s)

Gareth Eason (HEAnet)

TF-NOC meeting, Ljubljana, 15th Feb 2011

the network

- dark fibre (~2,600km) + managed circuits (ADSL, 10Mb-1Gb, wireless)

- national network, direct to customers

- (L1) ADVA FSP 3000 eROADM

- (L2) Cisco 7200/3750/3400, Juniper MX480

- (L3) Cisco CRS-1, Juniper + Cisco CPE

- Connectivity (99.97%)

- IP & transit (v4 & v6)

- network value-added services

- procurement

- consultancy & advice

- …ITIL Service Catalogue

tools

- RT, Cacti, Nagios, (MRTG, Cricket, …)

- PerfSONAR, vendor specific tools

- # 24 x 7 x 365 NOC

  - 09:00 – 17:30, manned NOC

  - 17:30 – 09:00, weekends, etc., on-call with escalation paths

- # in-sourced NOC, weekly rota system:

  - 2 x primary, 1 x backup, 1 x out of hours; ~35 engineers

- # outsourced support:

  - on-site equipment replacement

  - optical transmission

- 2 x NOCs : 64 clients; ~4,000 schools

- customers

  - university IT/IS departments

  - IT personnel in research organisations

  - *(dedicated 1st/2nd line support for schools)*

- tools

  - self-built 'CRM' & ticketing system; migrating to RT + self-built system

- SLAs

  - Every service has at least one!

  - e.g. 99.97% availability; 2 hour response time; etc.

inter-noc communication

- heavily reliant on e-mail
- EduPERT : defined contacts
- GÉANT / DANTÉ / etc. communities
- providers
  - Swap ticket reference numbers – no automation
- customers
  - Client Portal (beta) : http://portal.heanet.ie
  - defined contacts (ClientDB CRM)

- ## internal wiki

  - processes, procedures, workflows, escalation paths, etc.

  - all NOC personnel can (and should) edit it

  - Replicated and available off-line (for DR)

- ## custom in-house 'CRM' system: ClientDB

  - contact information, authority, PoP addresses, etc.

  - definitive, **authoritative source** of information.

  - **integrates** with other systems

- ## working on integration of ITIL methods