

# The Status of National Mobile Services in Ireland

Mike Norris
Head of Research and Innovation



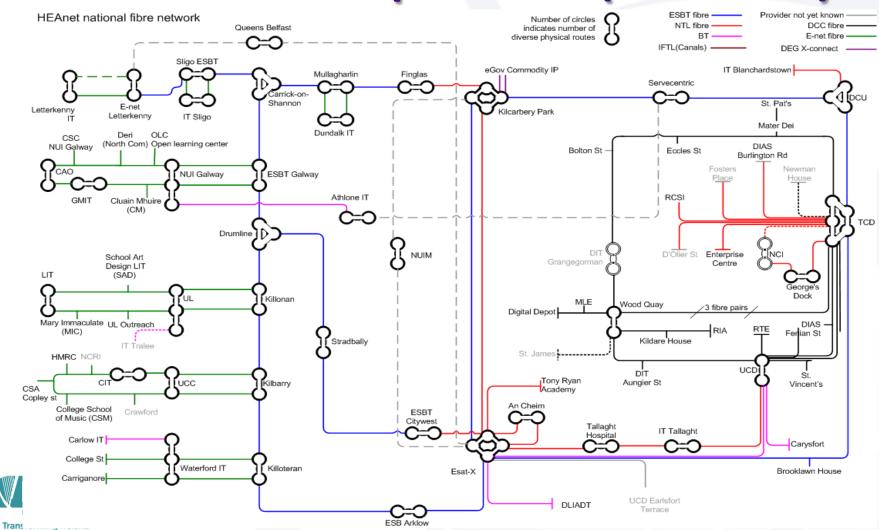


#### **Agenda**

- HEAnet background, fixed network
- Mobility Strategy v1
- Intervening changes
- Mobility Strategy v2
- Highlights
- Roles of NREN

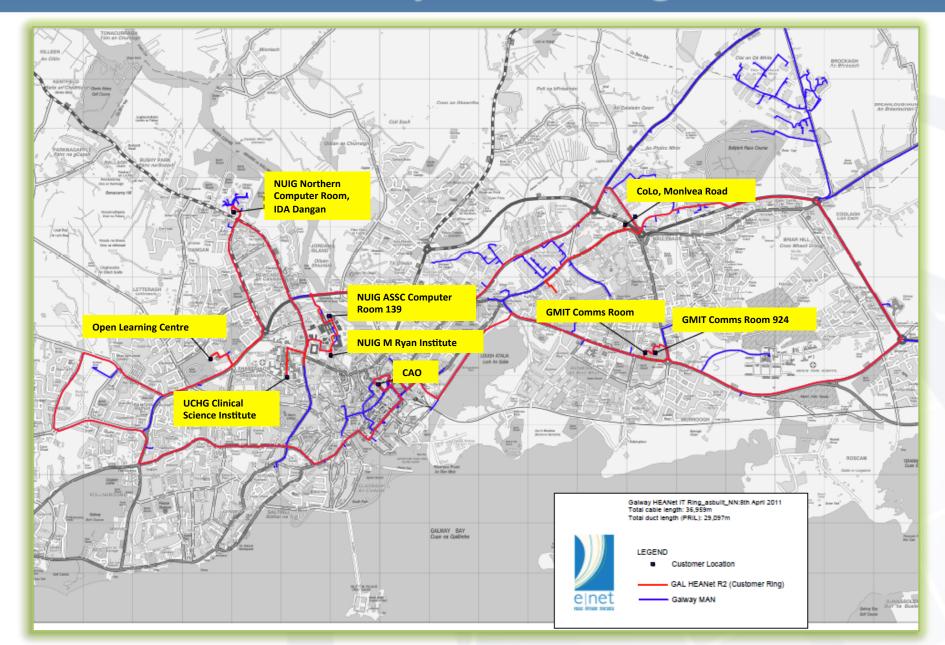


#### Fibre network April 2008 (~2300km)



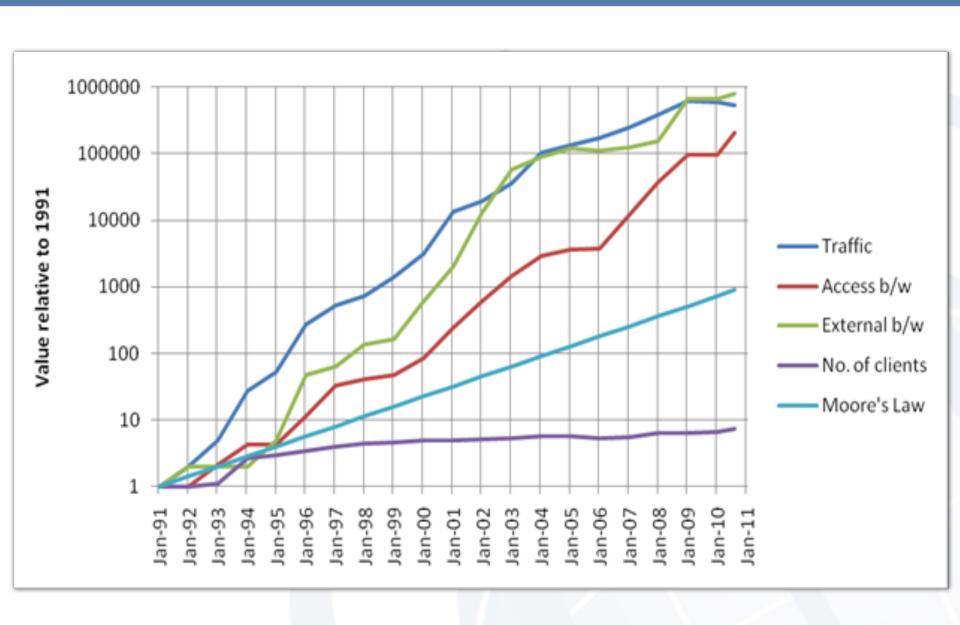


#### **Galway Access Ring**





#### Network Trends, since 1991





#### **Status of Fixed Networks**

- Dark Fibre
- Bluenet, Rednet, Greennet...
- IP, p2p
- IPv4, IPv6
- Campus LANs
  - Multiple devices per person

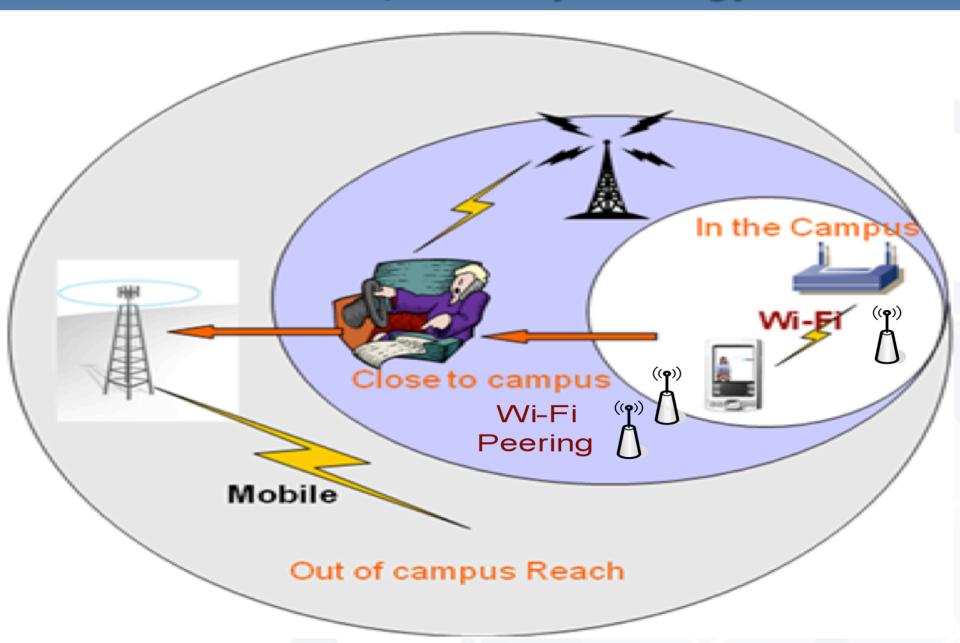


#### **E-Learning in HEAnet**

- VLEs
- Mobility
- Student as a content provider
- Context and location dependency
- Apps for everything (including project outputs)



#### Wireless/Mobility Strategy





#### **Mobility Strategy v1 (2008)**

- NREN support for Education & Research
- Ubiquitous service
- eduroam deployment
- 3G service
  - below market price
  - pre-pay and contract
- No to WiFi off campus
- WiMax trials
- Engage with regulator

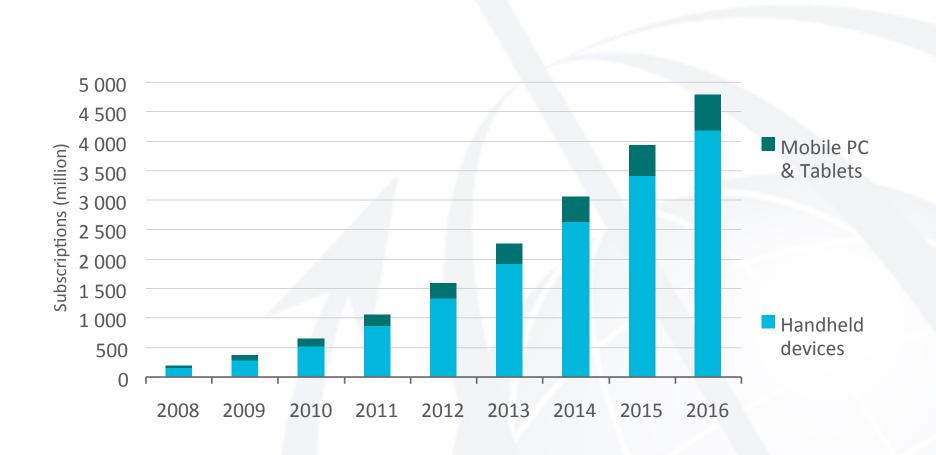


#### eduroam service

- Available in:
  - 6 out of 8 universities
  - 7 out of 13 institutes of technology
  - 2 out of 4 other third-level institutions
  - 3 other client institutions
- See <a href="http://www.eduroam.ie">http://www.eduroam.ie</a>
- See also <a href="http://www.edugate.ie">http://www.edugate.ie</a>
   as eduroam and Federation are loosely coupled

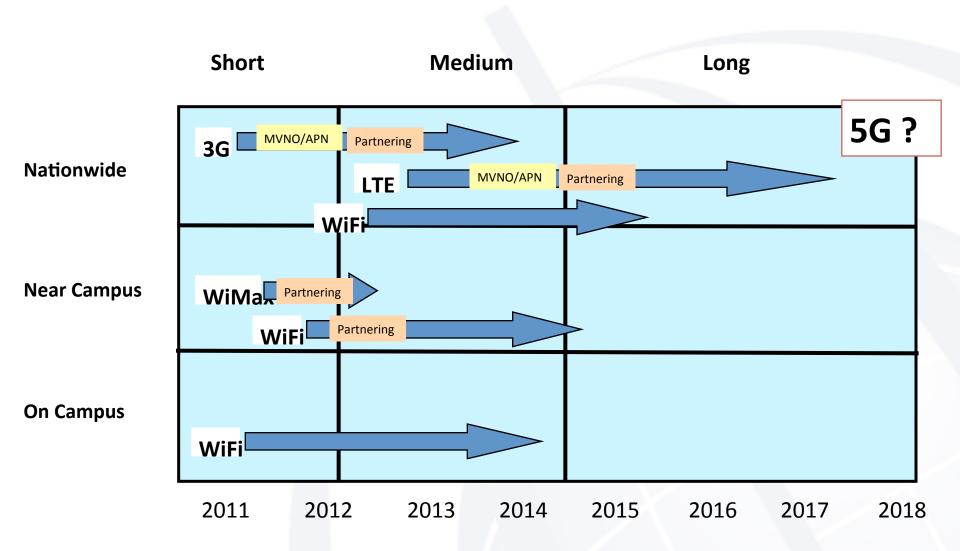


#### Mobile broadband growth





# **Technology Trends**





### **Mobility Strategy v2 (2011)**

- 3G service
  - added value
  - range of devices
  - framework agreement
  - pre-pay and contract
- WiFi + eduroam off campus
- 5 x provide, 3 x advise, 1 x (facilitate, ensure, develop, promote, evolve, drive)
- Engage with regulator

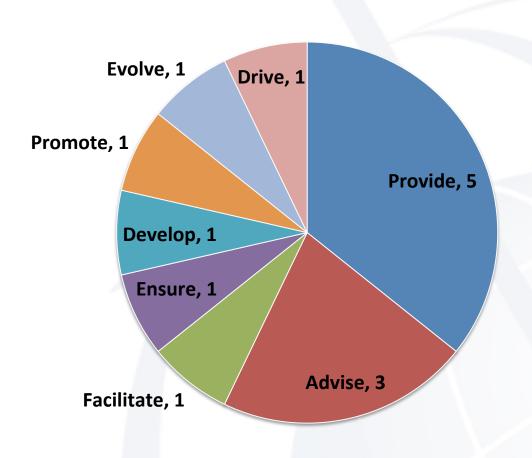


#### Mobility update, Oct 2011

- Mobile broadband service
  - more than 1700 subscribers in first month
  - over 90% go for 1-year contract
  - range of devices, dongle most popular
  - collaboration on federation
- Extracts from other strands of strategy
  - off-campus WiFi/eduroam being explored
  - APN for schools successfully trialed
  - promote e-learning, options to support



#### **HEAnet strategy directives**





# **Roles of NREN**

- Broker
- Advocate
- Technical Advisor
- Provider
- Other ...

#### **GÉANT 2020**

"GÉANT 2020 needs to be much more active in the wireless domain and the NRENS may even wish to consider delivering such services themselves."

Report of the GÉANT Expert Group
October 2011



#### Spectrum for education & research

- In the USA, the FCC has the <u>Educational Broadband Service</u>
- In Ireland, the Communications Regulator acknowledges the case for spectrum reserved for education purposes



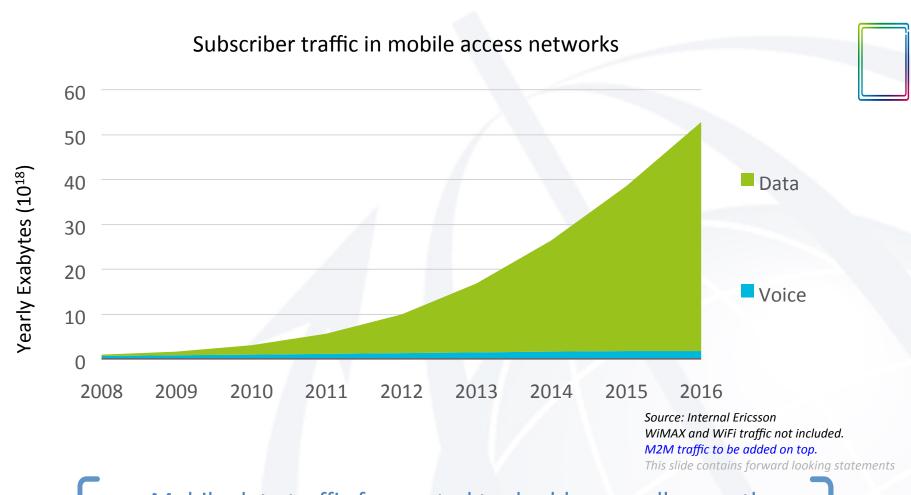
# Thank you







#### Mobile data growth



Mobile data traffic forecasted to double annually over the coming years due to Smartphones, laptops and tablets



#### **Strands of Strategy**

- Mobility
- E-learning
- Security
- Organisation
- Innovation



#### **HEAnet mobility strategy**

- Mobile broadband service
  - more than 1700 subscribers in first month
  - over 90% go for 1-year contract
  - range of devices, dongle most popular
- Extracts from other strands
  - off-campus WiFi/eduroam being explored
  - APN for schools successfully trialed
  - promote e-learning, options to support
  - lead NREN call for "E&R spectrum"



#### 200 Million Facebook Mobile Users



#### Facebook Mobile

Take Facebook with you wherever you go.

- There are millions of stories, pictures, videos & events shared everyday on Facebook
  - 30 Billion pieces of content (weblinks, news stories, blogposts, notes etc.) are shared per month
  - Facebook launched 'Messages' service (IM, SMS, email)
  - Facebook positioning as a communications hub (messaging, voice, document, content hubs)
- Out of 500 Million users on Facebook, 15% (75 Million) of them are doing it on their mobile phone.

Source: Facebook (Jan 2011)

# HEAnet Wireless/Mobility Strategy

