

Strategy area: mobility of access

Mission: to support the company and community in their responses to trends in pervasive connectivity, any time access to resources and 'bring your own device' support.

The mobility development team aims to coordinate the approaches taken in achieving more unified access to resources through different edge network technologies.

Context

Decentralised provision of education (both new teaching practices on the campus for those in full time education, and distance/lifelong learning) is creating an appetite for connectivity unconstrained by geography or temporal concerns. The 'always connected' user is in turn driving adoption of portable devices such as smartphones and tablets and creating the need for new security and support models for their more pervasive network access. In many organisations, the BYOD (Bring your own device) movement in particular is gaining momentum, leading to a need to provide access to online resources on a wide range of technology platforms, in an ever expanding set of locations served by wired and wireless (both enterprise Wi-Fi and cellular networks).

In meeting this need outside the campus, 3G connectivity in the UK has traditionally been seen as a last resort for mobile workers when wired or Wi-Fi networks are not available due to its limited bandwidth. 3G has held more of a role for international travel, but is an expensive solution despite EU-wide charging cap initiatives. By contrast 4G technologies, principally LTE, offer the promise of a true mobile broadband experience and more integrated crossover between future cellular networks and existing campus networks.

Customer requirements

- To provide connectivity for personal devices whatever the platform simply and with minimal support overhead (the BYOD movement);
- A consistent and high quality user experience irrespective of platform and transmission medium being used for access;
- Infrastructure capable of delivering current and future core needs whilst retaining manageability and delivering value for money;
- Capability to meet secondary business requirements such as guest and public access, conference trade etc.;
- Integration with national and international roaming federations to support collaboration and new enterprise business models.

Strategic response

- Improve the mobile user experience both through addressing connectivity technology and supporting applications (e.g. tools to assist users in locating roaming hotspots);
- Support deploying organisations in realising value for money and best practice implementations of future proof mobility infrastructure;
- Pursue partnerships with mobility stakeholders such as telephony data providers, Ofcom etc. to represent the needs of the education sector and where possible develop collaborations to deliver services that meet our community needs;
- Trial and understand performance, functionality and limitations of next generation mobile network technologies;
- Seek new ways to improve and extend network access for use by the research and education community, and to bring in new communities of users;
- Extend and enhance the scope and coverage of key Janet mobility services such as eduroam and Janet 3G.

Current programme 2012-13

Project	Description	Priority
4G trials	Issue an RFI to find interested partner(s) to trial 4G in UK education and research communities	High
Development network	Maintain a functional and flexible platform for mobility development	High
eduroam app development	Merging back-end databases from iOS and Android mobile apps to enable joint development	High
Commercial Wi-Fi partnership	Explore possibility of extending eduroam coverage to commercially provided wireless through publication of an RFI.	Medium
eduroam on public transport	Extending trial of eduroam on coaches to larger UK footprint	Medium
Improving coverage	Exploring repeater technology to extend the reach of commercial wireless data coverage	Medium
eduroam centralised service	Investigate deployment of a centralised system for allowing sites to join eduroam without any of their own infrastructure	Low
Remote scan	Investigate development of a centralised service to scan devices before joining campus networks	Low

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