September 2010

**UK Access Management federation
for Education and Research**

**A Strategy for the UK federation
- 2010 to 2012**

1. Background

The UK Access Management federation for Education and Research (the UK federation) was established in November 2006 by JISC and Becta to fulfil the access management requirements of the education and research communities. It was founded on the principles of:

- devolved authentication - enabling institutions to take responsibility for managing access to digital resources by their users, with minimum release of personal information.
- open and international standards, allowing the development of a global access management infrastructure within the education and research sectors.

A federation is a group of institutions and organisations which sign up to an agreed set of policies for exchanging information about users and electronic resources to enable access to those resources and services. How users are identified and authenticated within their institutions and how rights of access to the resources of service providers are managed are matters for the respective parties. Federated access management is based on the exchange of authentication and authorisation information between Identity Providers (IdP) and Service Providers (SP).

The strategy of the UK federation is intended to meet the aspirations regarding access to digital resources as expressed in the strategy documents of its funding bodies. Fundamental to the successful functioning of the federation is its "framework of trust" which is predicated on the accuracy of the authentication and authorisation information exchanged among the institutions within the federation. It is a condition of joining the federation that institutions observe the Rules of Membership which guarantee the integrity of this framework.

The e-strategy of the Department for Children, Schools and Families (DCFS e-strategy "Harnessing Technology" - 2005) took a broad view of the application of ICT in education, skills and children's services to achieve a personalised approach. Becta's Harnessing Technology: Next Generation Learning (2008) describes the next phase of the strategy, with Becta providing leadership and support for policy makers, intermediary bodies and the front-line to derive better value and impact from technology investment. Becta works with national partners, challenging and supporting where appropriate, to develop an 'e-confident' system that will enable learners to access learning resources and support at any time and from anywhere. As part of this vision, the strategy paper of

the Education Network Governing Council states that the Council will: "by 2011, and working with key partners, implement identity provision for all students and staff to enable simple sign-on, secure access to local, regional and national educational resources and services".

In JISC's Strategy 2010 - 2012, the vision is: "one of easy and widespread access to information and resources, anytime, anywhere; a vision with technology and information management at the heart of research and education" and the first objective of the strategy is "to provide cost-effective and sustainable shared national services and resources."

The UK federation and developments in identity management have clear roles to play in realising both the JISC and Becta visions.

Defining and updating the federation's strategy and overseeing its implementation are the responsibility of the UK federation Policy and Advisory Board. This strategy document is to be read in conjunction with the Board's Terms of Reference.

It is recognised that the parties responsible for the federation may change from time to time. References to any funding bodies in this document should therefore be taken to cover their successors where appropriate.

2. A Vision for the federation

A fundamental aspect of the strategies of the JISC and Becta, the federation's funding bodies, is to facilitate the full exploitation of IT capabilities and digital resources by their respective constituencies. Key to this goal is the simplification of mechanisms for providing users with access to IT systems and electronic material for teaching, learning, research and associated administrative purposes. The federation's role in delivering such mechanisms is therefore wholly supportive of its sponsors' strategies. Access management will be of particular importance in extending the Business and Community Engagement activities of the federation's sponsoring bodies and its member organisations.

The vision for the UK Access Management Federation for 2010-12 is:

2.1 All users who, by virtue of their affiliation with a particular organisation in the federation, are entitled to access certain digital resources, can do so with a minimum of effort using an appropriate authentication mechanism (e.g single id and password or single id and password plus a second factor) provided through their organisations.

2.2 Those with safeguarding responsibilities are assured that all access to digital resources can be managed safely and securely and in a manner appropriate to each user's needs, whether a child or an adult.

2.3 Providers of digital resources, having concluded agreements with organisations within the federation regarding access by appropriately authorised members, can implement such access in scalable ways with minimum effort.

2.4 The UK federation enhances its national and international pre-eminence in the field of federated access and remains among the pioneers in introducing innovative services based on the concept of federated access.

2.5 Federated authentication and authorisation, within the framework of the UK Access Management federation, is the mechanism of choice by organisations in the communities funded by the federation's sponsors.

2.6 Federated access is transparent and taken for granted in users' everyday activities.

2.7 The UK federation is part of a national and global interfederation giving access to digital resources all over the world and creating global markets for UK providers of digital resources.

2.8 Robust mechanisms are in place to ensure that digital resources and IT services can be accessed only by those specifically authorised to do so.

3. Strategy

Achieving the vision requires activity by the UK federation on several fronts:

3.1 Membership
3.1.1 Expanding the membership of the federation as appropriate to best suit the requirements of the education and research community.

3.2 Development and innovation
3.2.1 Sponsoring the exploration and development of innovative ways in which federated access could benefit the activities of the federation's user communities, thereby ensuring that the UK federation remains at the cutting edge.

3.2.2 Ensuring that the technical base of the federation continues to develop in line with Members' requirements and international developments in federated access management.

3.2.3 Monitoring and responding to developments in federated access management and keeping a watching brief on the development of standards and technology for access and identity management.

3.3 Training, advice and support
3.3.1 Supporting and guiding federation members through the provision of training and advice geared to audiences at different technical levels.

3.4 Promotion and publicity
3.4.1 Publicising the benefits of federated access through outreach initiatives targeted at different audiences

3.4.2 Promoting to identity providers, content providers and user organisations (such as teachers and administrators) the importance of taking the age and maturity of users into account within user authentication and access management mechanisms

3.5 Technical standards
3.5.1 Participating in efforts to develop international standards and technologies for federated access.

3.5.2 Ensuring interoperability with other federations.

3.6 Monitoring and reporting
3.6.1 Developing, producing and reporting on relevant indicators that measure the usage, availability, membership etc of the federation.

3.6.2 Undertaking regular reviews of user satisfaction and opinions of the federation's customers.

3.7 Sustainability
3.7.1 Developing funding models for the long-term sustainability of the federation.

3.7.2 Demonstrating value for money to the federation's funding bodies.

4. Implementation of the Strategy

4.1 Delivery of the federation service
The UK federation service is delivered by a federation Operator appointed by JISC and operated in accordance with a Service Level Agreement between them. (JANET(UK) is the current Operator of the federation.) The policies of the UK federation are encapsulated in the UK federation Rules of Membership and members must agree to abide by them.

4.2 Development plans
Developments fall into two broad categories: those associated with enhancements to the operation of the federation Service and those contributing to significant advances in line with the federation's strategy. Service enhancements are concerned with rectifying inadequacies or improving efficiencies in the provision of existing federation facilities. Strategic developments are intended to take the federation into significantly new areas.

The federation operator is responsible for specifying service enhancements, integrating them into the federation service and routinely submitting a Service Enhancements Report on these activities to the Board.

Regarding developments towards the realisation of the federation's strategy, the Board is advised by a Technical Advisory Group appointed by the Board and convened by the Operator to discuss technical aspects of strategic issues and to submit proposals and options appraisals for appropriate strategic developments. In the light of its deliberations on these Plans for Strategic Developments, the Board makes recommendations to its parent bodies for the funding of approved proposals.