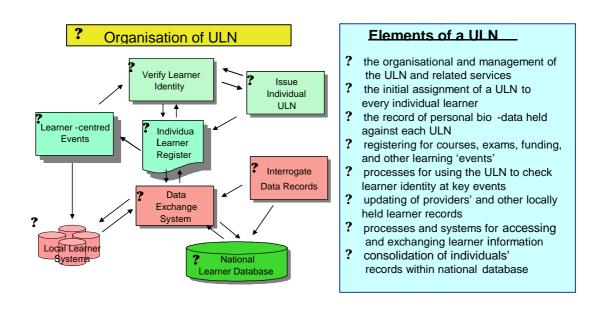
The Unique Learner Number: The Proposition

- A1.1 This Annex aims to articulate a workable model for a unique learner number service to help partners and stakeholders to consider where such a service might impact upon their business. It also aims to help us to identify and consider the potential implementation costs and user benefits at a more specific level than has been possible so far.
- A1.2 The proposition is presented in a diagrammatic form below, and in a more detailed one-page summary form, at Table 1, with detailed supplementary endnotes to help explain key points, issues and linkages.



Please Note – Table 1 – next page.

Table 1 on the attached page, includes Roman Numerals and endnotes. When viewing the Table in Microsoft Word, these numerals allow you to access related endnotes from within the table by simply clicking on the appropriate numeral. In PDF format, or with some versions of Microsoft Word, it maybe necessary to consider the Table alongside the appropriate endnotes.

Table 1: ONE PAGE OVERVIEW OF UNIQUE LEARNER NUMBER PROPOSITION

1. ORGANISATION

- ? A central ULN issuing body
- ? A central body responsible for maintaining a National Learner Register ? providing learner and provider services
- supporting data sharingmaintaining Record Of
- Learning.

2. ISSUE PROCESSES

- ULN as new numberⁱⁱ
- ? Assign to all Y10 state pupilsⁱⁱⁱ
- ? Issue for non-state pupils at GCSE entry^{iv}
- ? Issue at first registration for others including overseas students (on individual application)^v
- ? Issue number, PIN/password and card at 16^{vi}

3. NATIONAL LEARNER REGISTER

- ? Basic bio-data for each ULN^{vii}
- ? Name(s)
- ? Gender
- ? DOB
- ? Place of birth
- ? Address (with date)
- ? Password/PIN, photo or other biometrics?viii
- ? Listing of providers holding records against each ULN^{ix}
- ? Central ULN issuing body protects external access to NLR data^x

4. LEARNER REGISTRATION

? Used by schools and awarding bodies to register candidates for GCSEs^{xi}? Used by post-16 providers to register learners on funded programmes^{xii}? Used by individuals to claim financial support, fee remissions, etc. ^{xiii}? Used by providers and others to provide targeted advice to learners^{xiv}

5. LEARNER AUTHENTICATION*V

- ? Onus on individual to have and provide ULN (for post 16 registration events)^{xvi}
- ? Central body contact centre for learner queries (e.g. forgotten or new numbers)^{xvii}
- ? Providers confirm valid ULN/bio-data link when registering learners^{xviii}
- ? More secure verification processes can be added where warranted*ix

6. MAINTAINING LOCAL RECORDS

- ? Providers use ULN for all individualised returns and reports^{xx}
- ? Up to system owners how they hold ULN vs. local records^{xxi}
- ? Local systems need search/reporting capability by ULN^{xxii}

7. INTERROGATING LEARNER RECORDS

and reports using lists of ULNs and data sought^{xxiii}? Standard checks can be automated?? Cental body could offer data exchange service for registered members^{xxiv}? Learners can check their

NLR entry and advise

changesxxv

? Members request checks

8. NATIONAL RECORD OF LEARNING***

- ? Abstracts from NPDB, LSC's ILR and HESA, plus awarding bodies/QCA^{xxvii}
- ? Record of institutions, courses, awards, dates for each ULN^{xxviii}
- ? Summary of CAT account, NVQ Levels attained, etc.?
- ? Option for free form PLP record?***

9. INTEGRATED SINGLE SYSTEM FOR LEARNERS****

- ? 'one stop' registration for all publicy-funded learning and related support***
- ? 'real time' enhanced record of learning (e.g. including attendance)***
- ? 'route map' for convergence with National Identity scheme, Citizen Information Project and other JUG developments^{xxxiv}

1. ORGANISATION

There will be a need for a central body or organisation which is responsible for issuing and verifying numbers. This body might also be responsible for maintaining a National Learner Register, supporting data sharing, and providing learner and provider support services in relation to the number.

2. ISSUE PROCESSES

Options for issuing the ULN

The logic for proposing a new numbering system for the ULN runs as follows:

- ? since the ULN is required for all learners and potential learners before entry into post-compulsory learning (and to link to earlier records), no existing post-16 identifiers can easily satisfy our requirement;
- ? carrying forward the UPN would be attractive in some ways, but it might not meet the functional requirements of a ULN (e.g. non-hackable format) and would not resolve the requirements for non-state pupils and allocations to the significant 'stock' of existing post-16 learners and to other learner groups such as overseas students, immigrants, etc.;
- ? existing non-learning identifiers such as the NINO or NHS numbers could provide a basis for a unique individual number, and would reduce proliferation of id's, but would need to be held in two separate registers – the original DWP or NHS systems, and the ULN system. There is a risk of records moving out of synch and we would need to ensure effective links:
- ? new national citizen identifiers are being considered, but are still some years off and subject to resolving even bigger policy and political issues than the ULN. Clearly we would want to keep open options for future convergence with the Citizens Information Project and other national identifiers.
- A separate design exercise is needed to specify the final format, taking account of emerging EU conventions. The number should carry no personal identification information, and should be kept securely separate from such information. A digital format for the ULN may be preferred to keep open options for telephone-based user services (IVR, SMS, etc.). The Student Loans Company has proposed an 11-digit hashed (scrambled) numbering system as adequate to hold the expected number of records.
- Strong stakeholder preference is for ULN-based data links to start with GCSE, i.e. at 14-15, but learners will not need to know or use their entitlement number until 16+. Initial assignment for 14 year-olds could be based on UPNs, accepting schools/LEAs' confirmation of identities, on batch basis, perhaps using the National Pupil Database. The ULN would be assigned at the beginning of Year 10, also capturing Year 11/12 pupils in the initial round

^{iv} It should be possible for DfES or the central body to assign ULNs to non-state school pupils in Year 10 through modifications to independent schools' current processes for registering pupils for GCSE, and to notify both schools and exam boards of the numbers issued

^v Until the scheme has been running for 5-10 years, we cannot assume that every UK learner over 16 has a ULN. We therefore need a process for issuing ULNs to the stock of learners in FE, WBL, HE and other (publicly-funded) learning. To minimise the burden on providers, we propose doing this through direct learner application to the central body, perhaps linked to financial assistance schemes (EMA, student loans, hardship funds, etc.) Learners (including overseas students) will be told that they need a ULN in order to register for their entitlements to publicly-funded learning or related support, and will be offered easy and accessible options for obtaining the number. Processes will be needed for verifying the identities of such 'post-school' applicants, possibly linked to existing provider procedures.

vi The central body will issue every 16 year old (before they leave school) with a ULN and invite them to apply for a PIN, and to register for a password and/or 'secret question'. One option might be to incorporate the ULN and PIN into specified existing smart cards, such as Connexions Card, to reduce duplication. The card will not be mandatory but will save holders from having to verify personal details and could carry other 'perks' or benefits. Similarly 'post school' applicants (as above) will be offered a ULN card.

3. NATIONAL LEARNER REGISTER

vii National Learner Register

The National Learner Register will hold the minimum data needed to verify unique identity against a given ULN. Given the over-arching emphasis on inclusiveness and accessibility, security levels need not be high, and even photographs (with encoded measurements) may be considered too expensive and cumbersome to administer. However, a 'low security' register of this kind may not provide the levels of identity assurance needed to protect against risks of fraud, where these are judged material. There should be no need to hold sensitive personal data (such as ethnicity) on the National Learner Register since details of ethnicity are held on the UPN and could be accessed on strict 'need to know conditions' (subject to satisfying Data Protection and Human Rights criteria)

- The National Learner Register would also hold the agreed PIN and/or password for each ULN entry, which would be used to check identities when individual learners and/or authorised providers contact the central body.
- The third element of the Register would be a listing, by provider number, of the local records held for each ULN entry. This would simply be a running log of the provider systems (including awarding bodies and financial support services) which have registered that they have individual records for the given ULN, probably held in the form of provider reference numbers and (perhaps) dates. This log could be used to facilitate and possibly automate data checks and exchanges using the ULN, and could in due course be used to generate a consolidated record for each learner.
- ^x Only central body staff would be able to link a ULN record to a named individual, although providers would of course have their own local links of names to numbers (which they would need to keep secure within existing data protection requirements)

4. LEARNER REGISTRATION - Level 1 Uses of the ULN

- xi Schools would use the ULN instead of UPN for registering pupils as GCSE candidates. Exam boards would also use the ULN alongside or preferably instead of their candidate number (UCI). This would enable subsequent linking of learners' Key Stage 4 achievements to their later registration applications (if relevant) and to their later learning records something many stakeholders have identified as a requirement
- Providers would be able to register learners onto courses without a ULN (e.g. if learner has lost or forgotten their number, or needs a new one) provided they are subsequently able to attach ULNs to individuals at the point when they have to confirm their learner rolls (e.g. HEIs' HESIS returns). Since learners will require their ULN to secure their entitlements to financial assistance see below most should have their ULN when they register
- times that higher levels of security will be required for some applications for financial support (e.g. for student loans and grants), in which case simple presentation of a ULN with/without a PIN or password may have to be supplemented by other documentation (e.g. for student loans and grants)
- xiv The ready availability of verified information about a learner's prior achievements or learning experience is seen by many stakeholders as potentially important for advising on appropriate courses and learning routes, and also (at an aggregated level) for assessing workforce skills and achievement levels as a basis for local and sectoral skills planning

5. LEARNER AUTHENTICATION

Authentication of learner identities

This design of this function is critical to the impact and effectiveness of a ULN Level 2 service and beyond. The balance struck between simplicity and security will determine the level of user confidence in the ULN as an enabler for data sharing and learner-centred services, and hence the ultimate benefits of the scheme. It has been well argued that the governing principle might be that the verification of learner identities using the ULN should give an extremely high level of confidence (say, 95%+ in the association of relevant data records for each learner, without imposing counterproductive authentication requirements that would defeat the purposes of simplifying learner-centred systems. This would equate to Level One of the Government's proposed "Authentication Framework", at which *on the balance of probabilities* the registrant's true identity is verified. However, others have argued that the level of confidence should be as high as 99.9%.

Placing this requirement on individuals is compatible with positioning the ULN within a learner entitlement service, to be presented in order to secure entitlements to publicly-funded learning and related support. For learners emerging from compulsory schooling, the requirement in practice is simply that they remember and present their

ULN when needed. For 'post-school' learners during the early years of the scheme, there will be a once-off imposition of having to obtain a ULN from the central body, but this need be no more onerous than obtaining a photocard to purchase a weekly train or bus pass (for example). Most providers are likely to want to help learners to obtain and/or verify their ULN, and the central body's processes must support this.

- their ULN, and for those needing a new ULN, will be essential to the success of the scheme. It should offer telephone, SMS, e-mail and letter-based services, available 18/7 with high service response standards. This might represent a significant operating cost, which needs further working through, but should provide valuable benefits for learners
- name, date of birth and ULN and to verify the matches with the central body (e.g. through EDI links). The same procedure will serve to add the provider's identifier to each applicant/candidate's National Learner Record entry. Where the central body check throws up exceptions, the provider will need the applicants/candidates concerned to make contact with the central body help service to resolve the mismatch. Providers would be expected to provide verified ULNs in their returns to funding bodies and any other individualised accountability reports.
- xix For some learner services, for example student grants and loans, the simple matching of names to ULNs may not provide the required level of assurance. It would be reasonable to require additional verification information for such services (such as sight of a birth certificate or passport). The ULN would still enable simplified data links in support of post-registration elements of such services, for example to verify attendance and changes in course or institution for student support

6. MAINTAINING LOCAL RECORDS

- All providers of publicly-funded learning services would be expected to use the ULN in their external data exchanges. This requirement would be incorporated into MIAP protocols and also into the regulations of public funders. This assumption is on the basis that such an imposition would be justified because the collective benefits, and specific benefits to learners, depend on universal use of ULNs
- compatibility. Options will be either to adopt the ULN in place of existing identifiers, or to create one-to-one look up tables between existing local identifiers and the ULN for that learner. It is recognised that adoption of a new learner identifier may impose once-off costs for established provider systems, many of which would also arise from other MIAP initiatives such as common data standards.
- to streamline data reporting and responses to verification checks, it is highly desirable that providers and others can produce reports from their systems using the ULN as the access key. Again, this will entail once-off costs for many system operators.

7. DATA SHARING USING THE ULN

Most current requirements for individualised data sharing are predictable and can be systematised on a pro forma basis. This would support automation of most data sharing transactions, possibly through a ULN-users intranet to manage security.

wiv We envisage that all MIAP members, and all schools and 'official' post-compulsory providers would become user-members of the ULN service, and would sign up to MIAP data sharing framework including use of ULN (as above). The central body could act as the information exchange for data sharing requests between members, on a hub and spoke model. To support this, the central body would issue identification numbers to all member data owners (something already being considered within MIAP), which would be used within the National Learner Register.

Learners have a right in law to see their record on the National Learner Record, and also (using ULN) to see information held about them on provider and other local systems. We would therefore need facilities for learners to query or update their National Learner Records off-line, via the learner support centre (with appropriate checks, e.g. proof of new name or address), with appropriate documentary checks where these are not possible through existing sources

8. NATIONAL RECORD OF LEARNING

use of ULN to Support National Records of Learning

Note that this function/service – extending the ULN to a Level 3 service - is subject to further specification of user and learner requirements and assessment of feasibility.

pecisions would be needed on whether to assemble individual records of learning from 'original' sources or from consolidated sector resources like NPDB, LSC and HESA records

This would be a simple, factual record of formal, publicly-supported learning activity and related awards. More extensive options are possible

xxix The record of learning could serve to support a national Credit Accumulation Transfer system – and would probably be a prerequisite for any such system - and could also help individuals to determine and record whether their learning achievements satisfy, e.g., NVQ level 2 or level 3 requirements

This would be a 'nice to have' feature of the record of learning, enabled by the ULN (to link Personal Learning Plans from different stages/periods of learning), but it does give a sense of what might be possible in the future

9. INTEGRATED SINGLE SYSTEM FOR LEARNERS

Towards a Level 4 Service – ULN within a Single Learner Information System

- This might be a logical development from an integrated national record of learning, using the ULN to enable the integration of provider systems and processes for registering and progressing learners, possibly within the cross-sector Virtual Learning Environment currently being explored by JISC and others. Implementation would depend on many factors out with the current project, including common data standards, on-line links between intermediary systems, alignment of providers' business processes, etc.
- Just as a single national system is being introduced for the administration of student support in HE, it is possible to conceive single system(s) being used to integrate learner applications and registration for places, financial support and other administrative aspects of learning programmes, even through the delivery of those programmes may remain distributed among many different providers
- A number of learner services require but do not necessarily obtain 'real time' linkages between centralised registration and entitlement systems and the local systems maintained by providers. The verification of course registration and continued attendance for student support, and in future EMAs, is an example. An integrated Level 4 ULN service could support these links
- The ULN feasibility project is taking place in parallel with several important Government projects which could transform the sharing of individualised information across different public services. The most important of these are the Home Office project for national identity cards, the Treasury/ONS project for holding Citizen Information, the Office of the e-Envoy's project for single sign-on facilities for on-line services, and the Every Child Matters Green Paper proposals for local information database. If and when these projects come to fruition and most are on longer prospective time scales than the ULN project it will clearly be desirable to converge the ULN with any wider national identity and information-sharing schemes.