



**information
standards board**
for education, skills
and children's services

Education, Skills and Children's Services
Information Standards Board

2012-2013 Delivery Plan

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1 Introduction

1. The Information Standards Board (ISB) is jointly sponsored by the Department for Business, Innovation and Skills (BIS) and the Department for Education (DfE) as the system-wide authority for all information and data standards. Its mission is to facilitate secure information sharing across the system; develop and support information standards to aid front line delivery; improve efficiency, reduce costs and minimise bureaucracy. The ISB is designated as an Internal Advisory Committee, but has Ministerial authority to make recommendations and approve standards for use across Education, Skills and Children's Services (ESCS).
2. Our work to date has been realising the ISB's mission:
 - to create and maintain a minimum yet sufficient set of re-usable standards which support the secure sharing of data, enabling the implementation and evaluation of policy outcomes;
 - to enable the delivery of joined up services to citizens and employers; and
 - to achieve ESCS-wide efficiencies and best value for money, as embodied in the Information Strategy for ESCS.
3. The year ahead will be challenging as there is much to do with our finite resources. This high level Delivery Plan shows how we will focus our time and energy on approving those data and information standards that will make most impact. We will also continue to build on our achievements to date and, most importantly, ensure that the approved standards in place are adopted and implemented widely across ESCS.
4. ISB standards will help central government departments, executive agencies and the Arm's Length Bodies (ALBs) to meet the requirements set out in the Government ICT Strategy. Common and open information standards are an essential building block for delivering the objectives of this strategy.

2 Background

5. The ISB has been in existence for 4.5 years and at the start of each year it formulates a plan for the forthcoming year. This document is a draft plan for the year 2012-13 for ISB consideration and approval. It shows an overview picture of what has been accomplished and suggests prioritisation of the next year's work, based on:
 - a. On-going work for completion in 2012;
 - b. Trends and directions in ESCS; and
 - c. the on-going impetus to support and encourage adoption of ISB standards.

6. The mission of the ISB is to:
 - a. facilitate information sharing across the system;
 - b. agree information standards to aid front-line delivery; and
 - c. improve efficiency, reduce costs and minimise bureaucracy.
7. Full information about the ISB, its work and its standards are set out on the website.

The ISB defines the following types of ISB standard:

8. **Business Data Standard (BDS):** this defines core business information, devoid of encoding method or application-specifics. The BDS is the means by which we aim to ensure that an item of data has common characteristics, making it understandable and shareable across all Application Interfaces. It defines data in terms of data types (e.g. “text”, “numeric”, “date”, etc.), semantics (a definition of the meaning of the data item e.g. a BDS may state “this text data item defines a single name component of a person”) and length (e.g. name components may be up to 100 characters in length). A BDS also groups data items into “entities”, each of which corresponds to a business entity of interest, like “person”, “organisation”, “address”, etc. Finally the BDS defines how one instance of an entity can be uniquely distinguished from another (for example how to distinguish one Qualification record from that relating to a different Qualification).
9. **A Code List:** the set of allowed values that a “type” attribute of a BDS may take.
10. **Technical Data Standard (TDS):** an ISB TDS defines an encoding, in a defined encoding format such as XML, of a BDS. As such, it is ready to be “dropped into” an Application Interface Specification wherever that data item is needed.

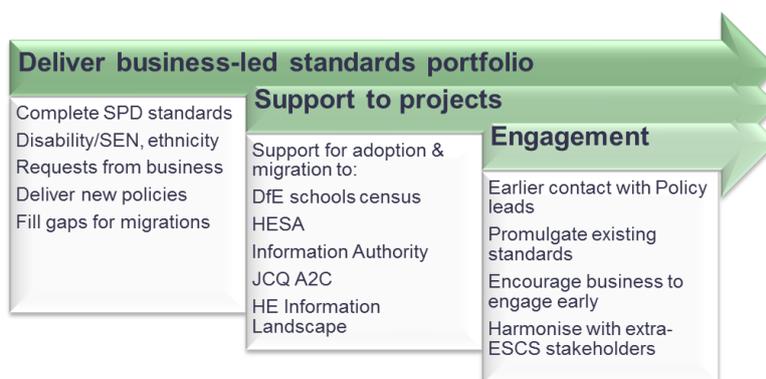
An explanation of how these standards fit into the real world of systems and applications is given in Annex C: The information landscape.

3 Delivery Plan

11. The delivery plan overview is summarised under three headings:
 - High Level Goals
 - System wide engagement with stakeholders
 - The delivery of a business led standards portfolio
12. We anticipate that the delivery plan will be updated on a quarterly basis to reflect emerging policy needs, system-wide change initiatives and new developments in standards.

3.1 High level goals

13. The high level goals are shown in the figure below:



3.2 Deliver a business led standards portfolio

14. The ISB aims to be driven by business priorities, for example, in support of policy initiatives or business change initiatives.

15. The standards included in the portfolio to be developed have been identified as priorities by ESCS stakeholders, principally via the Board itself, ISB Special Interest Groups (SIGs) and the Standards Implementers' Working Group. They are consistent with the high level goals set for 2012-13, focusing the ISB's work on the standards that will bring the greatest and earliest benefits to the Education, Skills and Children's Services system.

16. Note that the plan, as presented in Section 3.5 below, may need to be revised over time to support emerging priority needs, such as the ALB reform programmes.

3.3 Support to Projects

17. The goal of the ISB is to contribute to the delivery of benefits into ESCS. The ISB recognises that standards only deliver benefits when used, and their usage is introduced through projects and programmes. Hence the ISB attaches importance to supporting projects in their use of standards.

18. The ISB plan includes the following project support activities:

- a. engaging with the ALB reform programme in order to support integration of ALBs around common ISB standards. Within the DfE this will include the ISB becoming part of the programme approvals process to ensure that the DfE policy of mandating the use of standards is upheld;

- b. continuing to work with DfE's Data and Statistics Division (DSD) on the migration of Schools' Performance Data and collections schemas to ISB standards;
- c. working with HESA, HEFCE and a range of strategic partners including UCAS and SLC to achieve the aims of the HE White Paper, including supporting the Information Landscape Project;
- d. working with the Information Authority (The IA) and the Skills Funding Agency (SFA) as they move their Individualised Learner Record (ILR) collections towards compliance with ISB standards; and
- e. continuing to work with the Joint Council for Qualifications (JCQ) on their new "A2C" system for entering learners for assessments and distributing results.

3.4 Engagement

19. The aims of stakeholder engagement are to:

- a. ensure that stakeholders always make appropriate use of available standards because they are aware of the existence of ISB standards;
- b. ensure that gaps in available standards are identified, so that they can be filled in time to meet business needs; and
- c. ensure that appropriate and fully representative expertise is located and engaged in the development of ESCS standards.

20. Stakeholder engagement includes promotion to and working with stakeholders.

3.4.1 Promotion

21. Specific promotion activities will include:

- a. setting up regular information sharing sessions for key policy officials in DfE and BIS;
- b. identifying the main data systems that can make an early transition to ISB standards and map them in a transition plan with a clear schedule and explanation of process covering 2012-2014;
- c. working with DfE'S Chief Information Officer Group senior management team to promote ISB standards to the new Executive Agencies;
- d. engaging with BIS' relevant bodies in the education and training sector (see Annex B), and work on common identifiers within ESCS;
- e. close contact with Ofsted, Ofqual and the Office of the Children's Commissioner to introduce ISB standards at the earliest opportunity, for example when systems are due for refresh, or when plans are being developed for changes covering the next 2/3 years; and

- f. building links with Department of Health on areas of common interest, including standards describing social workforce and standards that support social work.

3.4.2 Engagement Methods

22. A variety of methods will be used to engage with stakeholders as described below.

Communication Channels

- 23. ISB SIGs and Standards Implementers' Working Group; regular meetings and use of Huddle collaboration space will provide a channel for two-way communications.
- 24. Suppliers' SIG; providing a two-way channel for communications, as well as a forum through which to reach supplier expertise for the development of standards.
- 25. ISB's collaboration space; users will be invited to join via a Special Interest Group or specific working groups set up to help take forward standards development and implementation.
- 26. ISB's website: the content is being migrated from the previous website, as part of the Government's rationalisation of websites.
- 27. ISB's quarterly newsletters: these will give regular updates on our work.

Enterprise Architecture

28. The ISB and TSS will continue to work closely with the DfE's Enterprise Architecture Unit who are developing an Enterprise Architecture on behalf of the whole of ESCS. This work is approved on behalf of ESCS as parts of it become embedded into approved ISB standards. Through this approach we will ensure that ISB standards and the new architecture are fully aligned. This alignment will ensure that adopting approved data and information standards will embed the new architecture across the system.

Cross-Government Engagement

- 29. In 2008-09 the ISB agreed a 'ways of working framework' with its counterpart for Health and Social Care. The intention is to reduce duplication, increase re-use and improve interoperability. Standards in the areas of Child and Adolescent Mental Health and Religion have already been identified as areas for collaboration. Regular quarterly meetings between the two bodies will continue, and will be reported to the ISB.
- 30. The TSS will continue to engage at a cross Government level through the cross government Open Standards Board and its Data Panel. Updates on progress will be reported to the Board as appropriate.
- 31. The ISB and TSS will continue to facilitate quarterly meetings with the devolved UK Nations with the objective of agreeing ways of working and

identifying areas for collaboration. Reports will be made to subsequent ISB meetings.

32. The ISB and TSS will continue to seek to work closely with: the Systems Interoperability Framework Association (SIFA); the Strategic Content Alliance (SCA); the Suppliers Association for Learning, Technology and Interoperability in Schools (SALTIS) and Learning-Education-Training Systems Interoperability (LETSI).
33. Continue to support the Special Interest Group for suppliers to continue engagement with Management Information Software (MIS), in-house and other suppliers.
34. Quarterly meetings with the Information Management Partnership for Schools (IMPS) supplier group will continue.
35. The TSS will continue to engage with standards making organisations like BSI, CEN, ISO and LeGSB. This engagement will come through the relevant British Standards working groups and through engagement on specific standards issues.

3.5 Proposed Plan

36. The plan below shows the new standards development, project support and stakeholder engagement activities scheduled to fit within the resources available. This shows work items scheduled according to priority as identified by the Standards Implementers' Working Group and the ISB.
37. If these timescales do not meet emerging business needs, then some re-prioritisation may be needed or consideration must be given to expanding the resources available to deliver the work.

	2012												2013		
	Q2				Q3				Q4				Q1		
Leavers destinations															
Contact															
Qualifications + Results/Awards/Outcomes															
Ethnicity (learner,wforce)															
Disability (learner,wforce)															
Information Object															
Workforce															
Party relationships															
Service - updates															
LP Types															
Code Lists															
SPD data															
Address															
DSD Migration															
Engage Policy teams															
HE Landscape support															

38. A description of each activity is provided below.

Activity	Description
Leavers destinations	This relates to where a Learner goes next after completing a Learning Opportunity. Mostly this is covered by existing standards where the Learner goes on to more education or is employed within ESCS, however there are some situations (unemployed, voluntary work, etc.) that are not covered.
Contact	The association between a Stakeholder and an address/telephone number, etc. We have a standard, but the code list describing the recognised relationship types (home, work, vacation, etc.) is not defined.
Qualifications	These two items are the standards that will result from working with JCQ, plus extended to fit the wider needs of ESCS e.g. Key Stages and HE.
Results/Awards/Outcomes	
Ethnicity (learner,wforce)	Approved work item, in progress
Disability (learner,wforce)	Approved work item, in progress
Information Object,	Used to hold a record of evidence (e.g. passport, birth certificate, etc.) inspected and verified. This has come out of the work on Immigration and Vetting and Barring.
Workforce	As needed by Data and Statistics Division, HESA and employers
Party relationships	We have a general data structure and approved standards, but need to define code lists and give guidance on usage. Additional forms of relationship requiring new standards may also be found.
Service update	Some updates to the approved ISB standards have been found to be necessary following the Immigration and Vetting and Barring work.
LP Category Types	Approved work item, in progress
Code Lists	Code lists, other than mentioned above, are needed to complete the foundation standards we already have. This work was recognised as needed when standards were developed to support the 14 – 19 policies, but has been overtaken by other standards-creation priorities.
SPD data	An approved work item, this includes many new items of data needed to underpin the Schools Performance Data arrangements from 2013.
Address	Approved work item, in progress
Data and Statistics Division Migration	The DfE Data and Statistics Division has announced its intention to migrate schools collections to become compliant with ISB standards. ISB and the TSS will work closely with

	Data and Statistics Division to support this migration.
Engage Policy Teams	ISB will proactively seek engagement with BIS and DfE Policy Teams to ensure that potential demands for new standards in support of new policies are identified in sufficient time to develop the standards before they are needed.
HE Landscape	Following the HE White Paper, the ISB and TSS will be available to provide support to the Information Landscape transformation programme of work.

3.6 Implementation

Through 2011-2012, the ISB has developed and maintained a chart showing stakeholder intentions to migrate to adoption of ISB standards. Below shows migration plans as recorded at time of publication of this document (May 2012). The ISB will continue to encourage and support migration plans and to update this chart:

KEY: Commitment to adopt, planning Some compliant data exchange All data exchanges compliant

Standards area	Organisation	2012				2013				2014				2015			
		Q1	Q2	Q3	Q4												
Person: Identity	DfE DSD																
	HESA																
	Information Authority																
	LRS																
	JCO																
	Ofoval																
	Ofted																
Person: other •Ethnicity •Disability/special needs •Nationality •Language •Religion	DfE DSD																
	HESA																
	Information Authority																
	LRS																
	JCO																
	Ofoval																
	Ofted																
Organisation	DfE DSD																
	HESA																
	Information Authority																
	LRS																
	JCO																
	Ofoval																
	Ofted																
Locator: •Address •Telephone •email	DfE DSD																
	HESA																
	Information Authority																
	LRS																
	JCO																
	Ofoval																
	Ofted																
Qualification	DfE DSD																
	HESA																
	Information Authority																
	LRS																
	JCO																
	Ofoval																
	Ofted																
Schools																	

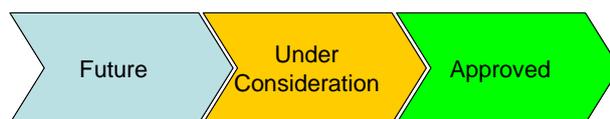
KEY: Commitment to adopt, planning Some compliant data exchange All data exchanges compliant

Standards area	Organisation	2012				2013				2014				2015			
		Q1	Q2	Q3	Q4												
Outcome	DfE DSD																
	HESA																
	Information Authority																
	LRS																
	JCQ																
	Ofqual																
	Ofsted																
	Schools																
Event: Learning opportunity enrolment	DfE DSD																
	HESA																
	Information Authority																
	LRS																
	JCQ																
	Ofqual																
	Ofsted																
	Schools																
Event: Service supply, incl employment	DfE DSD																
	HESA																
	Information Authority																
	LRS																
	JCQ																
	Ofqual																
	Ofsted																
	Schools																
Event: assessment	DfE DSD																
	HESA																
	Information Authority																
	LRS																
	JCQ																
	Ofqual																
	Ofsted																
	Schools																
	DfE DSD																
	HESA																
	Information Authority																
	LRS																
	JCQ																
	Ofqual																
	Ofsted																
	Schools																

Annex A: Outline lifecycle and process

Stages

39. A standard will typically go through the following lifecycle stages:



- a. **Future** - Standards that fall within this category are those for which development is yet to start but have been identified as areas of high impact and high importance for the ESCS system. Although an initial assessment has been completed of these standards it is recognised that that further work is required to define their scope
- b. **Under consideration** - These are standards for which development work is ongoing and those under review.
- c. **Approved** - These are standards that have been approved by the ISB for use within the ESCS system and given the status of Adopted, Recommended or Inherited.

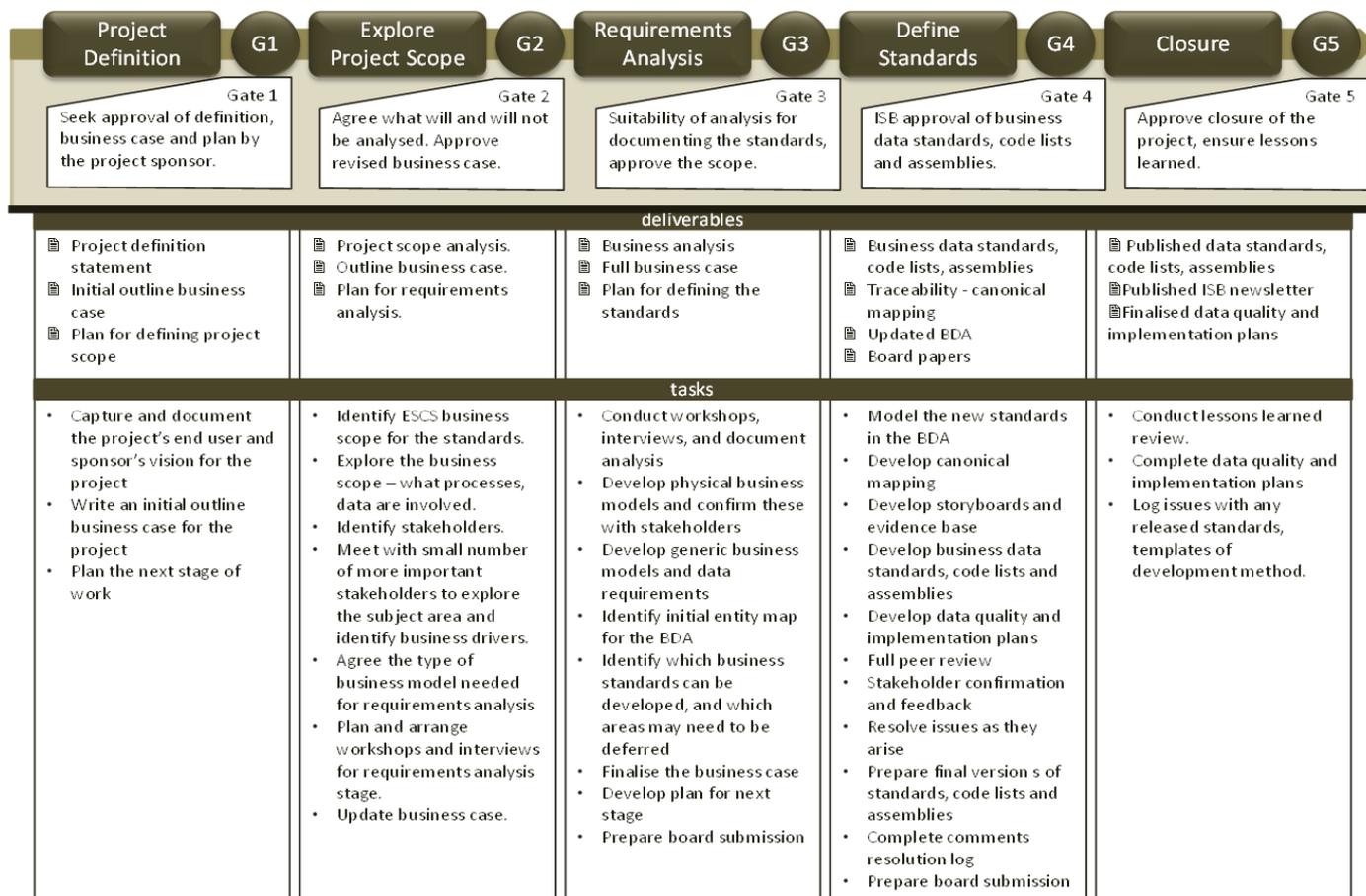
Standards Approval Definitions

40. When the ISB approves a standard it is given one of the following statuses:

- d. **Approved Status 'Adopted'** - the standard is approved by the ISB, ready for unconditional adoption across the system and should be used freely.
- e. **Approved Status 'Recommended'** - the standard is approved by the ISB, ready for adoption across the system and should be used freely. Some fine tuning may be necessary based on user experience and the standard will be reviewed after an agreed period before the ISB confers the status of 'Adopted'.
- f. **Approved Status 'Inherited'** - the ISB recognises that there are many standards that pre-date current arrangements and are in widespread use. Such standards will, in time, become superseded by a number of Business Data Standards. The importance of such standards is recognised by the ISB through conferring 'Inherited' status.

Standards Development Process

41. The ISB has approved a process for the creation and maintenance of standards. A summary is shown in the figure below:



Annex B: Glossary

ALBs	Arm's Length Bodies
BDA	Business Data Architecture
BDS	Business Data Standard
BIS	Department for Business, Innovation and Skills
BSI	The British Standards Institution
CBDS	Common Basic Data Set
CEN	The European Committee for Standardization
DfE	Department for Education
DSD	Data and Statistics Division
ESCS	Education, Skills and Children's Services
FE	Further Education
HE	Higher Education
HEFCE	Higher Education Funding Council for England
HESA	Higher Education Statistics Agency
(The) IA	The Information Authority
ILR	Individualised Learner Record
IMPs	Information Management Partnership for Schools
ISO	International Organization for Standardization
JCQ	Joint Council for Qualifications
LeGSB	Local e-Government Standards Body
LETSI	Learning-Education-Training Systems Interoperability
LPs	Learning Providers
LRS	Learning Records Service
Ofqual	Office of Qualifications and Examinations Regulation
Ofsted	Office for Standards in Education, Children's Services and Skills
QCDA	Qualifications and Curriculum Development Agency
SALTIS	Suppliers Association for Learning, Technology and Interoperability in Schools
SCA	Strategic Content Alliance
SFA	Skills Funding Agency
SIF	Systems Interoperability Framework
SIFA	Systems Interoperability Framework Association
SIGs	Special Interest Groups
SLC	Student Loans Company
STA	Standards and Testing Agency
SIWG	Standards Implementers' Working Group
TDS	Technical Data Standard
TSS	Technical Support Service

Annex C: The information landscape

In this section the key features of the ICT landscape relating to ISB standards are described. The landscape is complex:

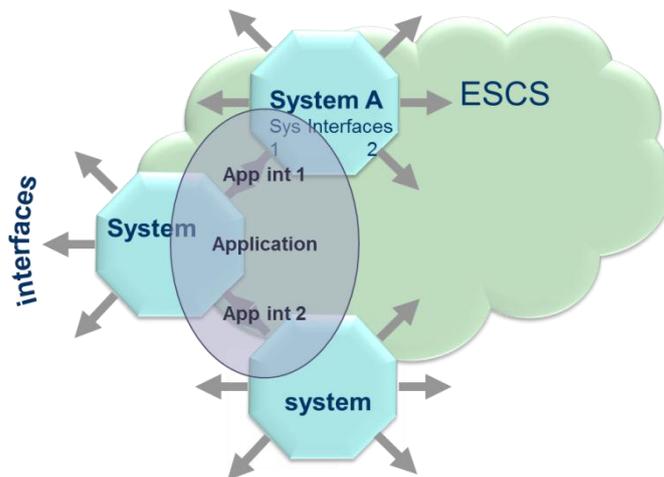


Figure 1: the landscape

Figure 1 Key:

- **System:** ICT software instance. For our purposes we are interested in systems that communicate through one or more interfaces
- **System Interface:** part of a system that exchanges information with another system
- **Application:** collection of communicating systems fulfilling a business objective
- **Application Interface Specification:** a specification of data, formats and behaviours required to achieve communication between two System Interfaces within an Application

ISB standards are concerned with data exchange, which takes place between two “System Interfaces”, and with data linkage, where data from two or more systems are matched together. A group of Systems may be designed to exchange or link data for a particular purpose and such a group is called an “Application”. To ensure that the Application achieves communications between systems, or linking of data from across several systems “Application Interface Specifications” are produced defining what communicating systems must do when communicating.

Historically, Application Interface Specifications have been produced in (relative) isolation. The net impact has been that systems are able to exchange data consistently within an application but there is no consistency between applications. This hampers future integration between applications and limits the utility of the information across ESCS.

The aim of ISB standards is to achieve commonality of information across all ESCS Applications. This in turn leads to a more complex conformance environment than hitherto: the need to ensure that Application Interface Specifications themselves conform to ISB standards.

So, in the past *systems* were required to conform to *Application Interface Specifications*. Now, in addition, *Application Interface Specifications* are required to conform to *ISB standards*.