

	<b>Secondary Uses Service (SUS)</b>				
	Programme	NPFIT		<b>Briefing Note</b>	
	Sub-Prog / Project	Secondary Uses Services			
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	Version Date	06/04/2006		Status	Issued

## Commissioning Data Set (CDS) Inbound Migration to XML

### 1. Introduction

In October 2004 DSCN 24/2004 was released with the following purpose

"... This DSCN is to provide notification to providers and suppliers of the introduction of XML messages and Record Identifiers for Commissioning Data Set (CDS) and Mental Health MDS (MHMDS) data flows."

The DSCN included target dates that have since been withdrawn (XML Messaging update – 27 June 2005). This document provides NHS and independent organisations with an overview of the revised plan including new target dates. This plan is concerned with *inbound* messages only, from healthcare providers to SUS.

The CDS dataset provides a means of transferring information between service providers and commissioners. Hospital Episode Statistics (HES) and Payment by Results (PbR) reporting are based on the CDS dataflow.

At present CDS data is transferred from health service providers to the NHS Wide Clearing Service (NWCS) - commercially known as ClearNet - using CDS-EDIFACT. The NWCS service is being replaced by the Secondary Uses Service (SUS) which will employ XML as the sole CDS interchange data format.

This document provides a brief update on the XML plans. Further detailed information describing the migration process and submission tools will be published on the SUS website: [www.connectingforhealth.nhs.uk/delivery/programmes/sus](http://www.connectingforhealth.nhs.uk/delivery/programmes/sus).

Some important items described in this briefing are:

- The XML migration will be linked to support of the Critical Care Minimum Data Set (CCMDS), this means
  - Data submission must use Version 5.0 of the CDS-XML Schema (SUS will not support version 4.2a).
  - Target dates are based on DSCN 13/2005, i.e. SUS accepts XML data from October 2006, EDIFACT submission support ends in March 2007.
- The mechanism for transferring XML files to SUS has been updated. The XML Transfer Service (XTS) is replaced by "External Data Transfer" (EDT) a machine authenticated, locally installed and locally scheduled application.
- All systems that connect to the spine in order to send data to SUS (or any other NHS Connecting for Health (NHS CfH) system) must undergo compliance (see section 5), this includes both proprietary systems from suppliers and locally developed solutions. Queries about compliance should be addressed to the ESP team (see contacts in section 13).

### 2. Mental Health Minimum Data Set (MHMDS)

Support for the MHMDS will be described in a separate document that will be made available via the SUS website.

### 3. Who is Affected?

All organisations that submit CDS data to the English NHS are affected. This will include all organisations providing health care services to the NHS in England for example:

- NHS trusts that provide any commissioned services.
- Independent Healthcare Providers commissioned by the NHS.
- NHS in the home countries.

Also affected are those helping support the CDS data flows, for example:

- Local Service Providers (LSPs).
- EDIFACT/XML Translation Service Providers.
- NHS Shared Service Centres.

### 4. Sending XML Data to SUS, External Data Transfer (EDT)

XML is a text based mark-up language for encoding structured information, it allows consistent error checking based on a data definition expressed in an XML *schema*. XML is replacing the existing EDIFACT messaging system in order to meet Government standards in line with the e-Government Interoperability Framework (e-gif) requirements.

Following consultation with the service, the SUS XML transfer tool functionality has been revised and it has a new name. The XML Transfer Service (XTS) will be replaced by "External Data Transfer" (EDT). EDT will provide the facilities to send XML data to SUS, including CDS-XML and MHMDS-XML.

EDT is a locally installed application that must be scheduled (e.g. called to invoke a data send) by local data transfer services, for example proprietary CDS extract and translation applications. Under normal operation EDT takes its input from a pre-configured set of folders on the local system, validates the file against the XML schema and (following successful validation) transmits the files to SUS, operational information such as application or validation failures are written back to local folders.

EDT is a simple application with no user interface. Local trusts and their suppliers will be responsible for installing EDT, keeping up to date with new versions, scheduling EDT to make data transfers and for the security of the local EDT host. The security model of EDT is based on the Transaction Messaging Service (TMS), it uses system to system authentication (it does not employ smartcards) the EDT host must be registered as a secure, 'authenticated endpoint'.

EDT will offer an offline "Validate Only" option, allowing suppliers to test local applications without the use of an NHSNet connection. It will also provide a connected test mode where messages marked with a test flag will not update the SUS database, but results will be reported through Service Management.

It is recommended that trusts employ their LSP or XML translation suppliers to help them with EDT configuration and operation; and data extraction and translation; for example:

1. EDT configuration control and security.
2. Data extraction from local operational systems.
3. XML encoding of the data.
4. Scheduling EDT to transfer the XML data to SUS.

All local applications that employ EDT must be compliant; this includes services from XML translation suppliers (see section 12) and any locally developed solutions from trusts or shared services.

Data submitted to SUS in XML format will continue to populate the NWCS database whilst it remains in operation. However NWCS will not process any CCMDs data.

## 5. EDT Service Management

Communications with data senders regarding issues found once data has been sent to SUS will be via EDT Service Management. Issues may include validation check failures and data quality problems. Further details of EDT Service Management including how to register as an XML data supplier will be provided on the SUS website. (Note that XML validation errors will be detected at source, i.e. within EDT before submission, and thus will not be subject to service management).

## 6. The Compliance Process

In order to submit data to SUS via EDT, any system wishing to connect must undergo formal compliance testing, undertaken by NHS CfH Existing Systems Programme (ESP) teams.

The ESP within NHS CfH is responsible for ensuring that any non-LSP systems connecting to the NHS Care Records Service (NHS CRS) meet the requirements specified by NHS CfH. These requirements cover both system requirements and service requirements. Including:

- Controlled publication of requirements to suppliers engaged in the programme (via NHS CFH secure extranet facilities).
- Management of software design, build and integration test activities in NHS CfH National Integration Centre (NIC) sandpits.
- First of type testing on initial live deployment into a trust, prior to authorisation of full roll out by supplier to multiple trusts.
- Formal registration of compliant systems/supplier support desks with NHS CfH Service Management, to establish effective in life support arrangements.

The Existing Systems Programme team work directly with suppliers to assist them in the rapid and effective development of their systems and to ensure the systems safely and effectively integrate with the NCRS.

The Existing Systems Programme facilities required to work with suppliers to create SUS Compliant systems are both finite and used to support other programmes of work (e.g. Choose and Book, ETP). As a result it is not anticipated that it will be possible to progress systems other than those provided by LSPs, or as listed within Section 12, prior to the closure date of NWCS. Contact details for the ESP Compliance team are included in section 1312.

## 7. The Deployment Process

Once compliance is achieved, suppliers or developers must enter the deployment processes currently managed by the ESP Deployment Support team. The team provides access to and support for the following areas:

- Pre Deployment Testing (for Local User Acceptance)
- End Point Registration Processes
- Live Commissioning
- Deployment Issue Resolution

Contact details for the ESP Deployment team are included in section 13.

## 8. CDS-XML Support

The XML migration will be based on version 5.0 of the CDS-XML schema (SUS will not provide any support for CDS-XML version 4.2a). CDS-XML V5.0 includes DSCNs to (and including) 13/2005. Therefore it includes support for the Critical Care Minimum Data Set (CCMDS). CDS-XML V5.0 withdraws support for CDS type 210 Ward Attenders which was decommissioned by DSCN 32/2004.

There will be no support for CCMDS in EDIFACT format so trusts must move to XML before CCMDS data may be submitted.

Definitions of the CDS data set can be found on the web as follows:

- The CDS manual (version 1.7) available from [www.nhsia.nhs.uk/datastandards/pages/cds\\_manual.asp](http://www.nhsia.nhs.uk/datastandards/pages/cds_manual.asp)
- The data dictionary description are available from [www.nhsia.nhs.uk/datastandards/pages/dd/index.asp](http://www.nhsia.nhs.uk/datastandards/pages/dd/index.asp)
- The XML schemas are available from the data standards website. [www.nhsia.nhs.uk/datastandards/pages/dd/web\\_site\\_content/pages/commissioning\\_data\\_set\\_versions.asp](http://www.nhsia.nhs.uk/datastandards/pages/dd/web_site_content/pages/commissioning_data_set_versions.asp)
- Data Set Change Notices (DSCN) where changes to the definitions are documented are available from [www.connectingforhealth.nhs.uk/dscn/](http://www.connectingforhealth.nhs.uk/dscn/)

Trusts should work to implement the above standards and ensure that data within the originating systems (e.g. PAS) are consistent with the data requirements of CDS returns.

## 9. What Changes Do I Need to Make?

All organisations will be required to submit its data in the new CDS-XML V5.0 format. To do this your organisation will need to be able to create 'conformant' CDS-XML V5.0 messages and deliver them using EDT. A conformant CDS-XML message must comply with the published standards which are available on the Internet (as shown in section 8).

Provider organisations must ensure that the systems they use to produce CDS returns in CDS-XML format have been successfully tested by NHS CfH. It is recommended that trusts use a compliant translation service provider (listed in section 12), or facilities provided by their LSP (support for submission of the CDS datasets are included in LSP contracts). Systems developed within the NHS, for example within trusts or shared ICT services, must also undergo compliance testing.

In summary:

- Trusts who employ EDIFACT translators or ClearNet services (for example User Defined Formats – UDF) should speak to their suppliers in order to understand their plans and timescales for the migration to XML and to ensure continued support through the migration period (suppliers intending to achieve XML compliance are listed in section 12).
- Trusts who have already, or are expecting to implement LSP solutions within the migration period should talk to their LSP.
- Trusts who manage their own submissions should consider engaging a compliant supplier (see section 12) or must apply for inclusion in the compliance process themselves (see section 5).
- All suppliers who intend to be included in the first wave of compliance testing should be listed in Table 1 and already in touch with the NHS CfH ESP team. If any suppliers have queries these should be channelled via the ESP team.

## 10. When Will Changes Occur?

The target dates for the XML migration are based on the CCMDs implementation plan. All CDS data submitters should plan for migration to XML between October 2006 (CDS-XML v5.0) and March 2007 (when support for CDS EDIFACT V3 finishes).

## 11. Data Quality Issues

The submission of CDS data to SUS has raised the profile of data quality as an issue of major importance. Within the SUS project, a programme of work to improve data quality has been initiated to support the immediate needs raised by SUS and Payment by Results (PbR). This has provided support for processing data into SUS, and there has been direct liaison with trusts to resolve difficulties with loading data onto the system.

In addition, detailed guidance papers have been published on the SUS web site. Organisations should refer to the paper published on 14 October 2005 on general data quality advice, and on 5 December 2005 within the 'SUS Progress Update' giving guidance on the correct use of recipient codes.

- [www.connectingforhealth.nhs.uk/delivery/programmes/sus/docs/npfit\\_ncr\\_des\\_0964\\_01\\_susdataquality.pdf](http://www.connectingforhealth.nhs.uk/delivery/programmes/sus/docs/npfit_ncr_des_0964_01_susdataquality.pdf)
- [www.connectingforhealth.nhs.uk/delivery/programmes/sus/docs/data\\_quality\\_guidance.pdf](http://www.connectingforhealth.nhs.uk/delivery/programmes/sus/docs/data_quality_guidance.pdf)

Organisations should follow up the guidance issued to date if they have not already done so, and take note of all subsequent notices on data quality issues that will be provided to support the migration to XML.

The programme of work to improve data will ultimately extend more widely across health and social care information.

## 12. XML Translation Service Suppliers

Table 1 lists suppliers who have confirmed their intent to develop their existing systems to achieve SUS compliance.

**Table 1. XML Translation Service Suppliers**

Supplier	Contact
<b>Anglia Healthcare Systems</b>	Oak Lodge, School Lane, Little Melton, Norfolk, NR9 3LB. <a href="http://www.ahsl.com/index.htm">www.ahsl.com/index.htm</a>
<b>Ardentia Limited</b>	Ardentia House, Staffordshire Technology Park, Stafford, ST18 0LQ. <a href="http://www.ardentia.co.uk">www.ardentia.co.uk</a>
<b>Cambridge DT</b>	The Granary, Park End, Swaffham Bullbeck, Cambridgeshire, CB5 0NA. <a href="http://www.cdt.co.uk">www.cdt.co.uk</a>
<b>Indigo4</b>	Aizlewoods Mill, Nursery Street, Sheffield, S3 8GG. <a href="http://www.indigo4.com">www.indigo4.com</a>
<b>Iuvo Ltd</b>	The Business Centre, Edward Street, Redditch, Worcestershire, B97 6HA. <a href="http://www.iuvo.co.uk">www.iuvo.co.uk</a>
<b>McKesson</b>	European Headquarters, Warwick Technology Park, Warwick, CV34 6NZ. <a href="http://www.mckesson.co.uk">www.mckesson.co.uk</a>
<b>NHS Connecting for Health (formerly NHAIS)</b>	Hexagon House, Pynes Hill, Exeter, Devon, EX2 5SE. <a href="http://www.nhsia.nhs.uk/nhais/pages/">www.nhsia.nhs.uk/nhais/pages/</a>
<b>The Sollis Partnership Ltd</b>	Eclipse House, 26 West Hill, Epsom, Surrey, KT19 8JD. <a href="http://www.sollis.co.uk">www.sollis.co.uk</a>

## 13. Contacts

Further detailed information will be made available on the SUS website as it becomes available. Contact details for all the groups involved in the migration are listed below.

For SUS users in the NHS:

<b>SUS Website</b>	WWW: <a href="http://www.connectingforhealth.nhs.uk/delivery/programmes/sus">www.connectingforhealth.nhs.uk/delivery/programmes/sus</a>
<b>The SUS helpdesk</b>	Tel: 0845 6002558 Email: <a href="mailto:bt.sus.helpdesk@bt.com">bt.sus.helpdesk@bt.com</a>

For organisations intending to develop XML translation services (external suppliers or NHS ICT services):

<b>ESP Website</b>	NWWW: <a href="http://www.connectingforhealth.nhs.uk/implementation/ESP">www.connectingforhealth.nhs.uk/implementation/ESP</a>
<b>ESP Compliance Team</b>	Email: <a href="mailto:ESPtestsupport@cfh.nhs.uk">ESPtestsupport@cfh.nhs.uk</a>
<b>ESP Deployment Support Team</b>	Email: <a href="mailto:ESPImplementation@cfh.nhs.uk">ESPImplementation@cfh.nhs.uk</a>