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CDA – Management Information Requirements

Document Management

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Glossary of Terms

|  |  |
| --- | --- |
| Term / Abbreviation | What it stands for |
|  |  |
|  |  |

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This document is valid from: **23th January 2014**

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# Introduction

This document lists the communications and messaging functional requirements and associated standards that systems need to adhere to ensure to general interoperation with the NHS communications and messaging services. This document specifies the management information requirements for systems sending and receiving CDA documents as illustrated in Figure 1 which illustrates the architecture of a Receiving System. The scope of the required management information covers both the MHS and the associated clinical application with information being drawn from these (logical) components. All of the data items referred to in this specification are listed in the various requirements documents contained within the CDA Interoperability Baseline Index. The Management Information requirements include information to be sent to the Authority and information to be made available to appropriate system users/administrators.

Figure 1: CDA Interoperability Architecture

## Purpose

The purpose of this document is to provide detailed requirements to developers of systems sending or receiving CDA documents. It must be read and understood within the context provided by the other documents published in the CDA Interoperability baseline.

## Audience

The audience for this document is primarily system architects and developers and other supplier staff involved with the design, build and test of systems that will be sending or receiving CDA documents across the architecture illustrated in Figure 1.

## Document Scope

The scope of this document covers the Management Information (MI) requirements for systems sending and receiving CDA documents. As such it covers:

* Making specified MI data available to appropriate system users/administrators
* Supplying routine MI Summary Reports to the Authority according to the Authority’s MI reporting schedule.
* Supplying ad-hoc MI Audit Reports to the Authority when requested.

The MI reports cover all CDA Document messaging including all successful and all failed transmissions.

This document does NOT specify what data is to be captured or which errors/failures are logged - these are documented elsewhere across the CDA Interoperability requirements documents.

This document does NOT cover access controls to information used to create MI reports (e.g. message logs, audit trails) – these are documented elsewhere across the CDA Interoperability requirements documents.

## Document Topology

The diagram below illustrates the scope of the baseline documentation defining requirements across the generic CDA interoperability environment with the area covered by this document circled. Suppliers must read associated documentation from this CDA interoperability baseline in order to comply with the overall requirements for CDA interoperability.



Figure 2: CDA Interoperability Documentation Model

## Definitions

Where used in this document set, the keywords MUST, SHOULD and MAY are to be interpreted as follows:

* **MUST**: This word, or the terms "**REQUIRED**" or "**SHALL**", means that the definition is an absolute` requirement of the specification.
* **SHOULD**: This word, or the adjective "**RECOMMENDED**", means that there may exist valid reasons in particular circumstances to ignore a particular item, but the full implications **MUST** be understood and carefully weighed before choosing a different course.
* **MAY**: This word, or the adjective “**OPTIONAL**”, means that an item is truly optional. One implementer may choose to include the item because a particular implementation requires it or because the implementer feels that it enhances the implementation while another implementer may omit the same item. An implementation which does not include a particular option **MUST** be prepared to interoperate with another implementation which does include the option, though perhaps with reduced functionality. In the same vein an implementation which does include a particular option **MUST** be prepared to interoperate with another implementation which does not include the option (except, of course, for the feature the option provides).

#  Management Information

## Overview

There is a management need for aggregated information about the various messages flowing between healthcare systems. Within the scope of the CDA Interoperability requirements, messages containing CDA Documents may be sent by a variety of transport channels and although some of these may be single national systems where monitoring could take place, messages can and will flow directly between sending and receiving systems with no possibility of monitoring (centrally) the flow of information. Centralised systems such as TMS and DTS cannot detect all failure scenarios or ‘look inside’ messages to see what type of data is being sent when it is not obvious from the ‘envelope’.

There is therefore a requirement for systems operating across this domain to gather and report back certain management information on a regular basis to the Authority. Much of this information, along with other similar information, will be of use to end user organisations to assist with planning and may also be of use to suppliers to assist with performance monitoring and capacity planning and so there may be some requirements which relate to local needs rather than Authority needs. These types of reports are referred to as ‘Summary Reports’ and ‘Detailed Reports’ within this document.

Another dimension to MI reporting is to assist with ‘failure’ investigations. Whilst the routine MI reports will include aggregated data about failures, there will, from time to time, be a need to investigate specific failure cases. This would typically require extracting ‘audit’ data from various logs held by systems. These types of reports are referred to as ‘Audit Reports’ within this document.

## Terminology – ‘System UUID’

The term ‘system’ in the context of Management Information refers to the clinical application that is generating CDA Documents or consuming them from a business perspective. Examples of this are a GP clinical system receiving Discharge Summaries or a PAS system generating them. It is recognised that some clinical systems support multiple organisations and also that some organisations have multiple systems. The system UUID referred to in the ‘CDA Interoperability – MHS Requirements’ and referred to again in this document, is the UUID of an instance of a clinical system, i.e. a single copy of application software being used by one or more organisations or part of an organisation.

It is recognised that much of the data required in the reports may be contained in an associated MHS and that several clinical systems may share a single MHS. In these situations the supplier must still report at clinical system level and thus they will be responsible for ensuring that the required information is available to generate management information reports by Organisation and clinical system instance.

## Reporting Scope

The scope of the MI data covered by the reports details in this document is limited to messages containing CDA Documents. Application/Business Acknowledgement messages are not counted in Summary or Detailed Reports – their sending or receipt will update the status of a message received or sent containing a CDA Document – this is one of the reasons for delaying the time between the end of a reporting period and the time the reports must be produced – to allow time for acknowledgements to be returned.

| **Req ID** | **Requirement Text** | **Status** |
| --- | --- | --- |
| **MI01** | The messages which MUST be reported on within these MI Summary and Detailed Reports are:* Inpatient Discharge (Discharge DMS version 4.0)
* Outpatient Attendance (Outpatients DMS version 2.0)
* A&E Report (Emergency DMS version 4.0)
* OOH Report (Out of Hours DMS version 2.0)
* Ambulance Report (Ambulance DMS version 1.0)
* Generic CDA message (Non-Coded CDA Document DMS version 1.0)

Note: Further domains may be added in subsequent releases of this document. | Must |
| **MI02** | The messages which MUST NOT be reported on within these MI Summary and Detailed Reports are:Application Acknowledgement (all above domains)ITK Business Acknowledgement (all above domains) | Must |
| **MI03** | The system **SHOULD** also include other messages containing CDA Documents supported by the system, for example those within the Telehealth and HSCI domains:* Telehealth (Telehealth DMS version 3.0[[1]](#footnote-1))
* Health and Social Care (HSCI DMS version 3.2)
* NHS 111 (NHS 111 DMS version 1.0)
 | Should |
| **MI04** | The system **MAY** support the generation of similar Summary and Detailed Reports for other messaging domains to support local user management needs, e.g. Choose and Book, EPS, SCR, Pathology, Referrals, etc. | May |
| MI04.1 | Where other messages not listed in MI01 and MI02 above are supported, these **MUST NOT** be included in Summary, Detailed or Audit Reports. | Must  |

## Summary Reports & Detailed Reports

The source data for these reports are:

* Trading Partner Configuration data – see section 3.1 of ‘CDA Interoperability – MHS Requirements’
* Message and Audit Logs data – see section 3.2 of ‘CDA Interoperability – MHS Requirements’
* Error data which may be recorded in the ‘Message Logs’, ‘Audit logs’ (as per previous item) or held in application error logs.

The requirements apply to both Sending and Receiving systems. Each system is required to send one Summary Report and one Detailed Report per system per period.

A Summary Report contains aggregated data and only differentiates between messages sent and messages received whereas a Detailed Report breaks each sent and received message counts down by Trading Partner that the system has communicated with.

| **Req ID** | **Requirement Text** | **Status** |
| --- | --- | --- |
| **MI20** | The system **MUST** create each Summary and Detailed Report in the format prescribed within this document.  | Must |
| **MI21** | Each Report **MUST** only contain a record set for a single Organisation (i.e. a single ODS code). Where multiple systems support a single Organisation, each system MUST generate its own Report.  | Must |
| MI21.1 | Where the system supports multiple Organisations (e.g. a hosted environment) or where a supplier chooses to collect Management Information centrally each record set **MUST** only contain data for one Organisation and one system UUID.  | Must |
| **MI22** | Each Report **MUST** contain one header record and one footer record per reporting period. | Must |
| **MI23** | The header record **MUST** appear at the start of the Report for the reporting period. The footer record **MUST** appear at the end of the Report for the reporting period. | Must |
| MI23.1 | The header record **MUST** contain the date range for the record set. Each record set **MUST** span a whole reporting period. For example if the period is defined as Monday to Sunday the report must cover from Monday 00:00:00:000 (HH:MM:SS:nnn) to Sunday 23:59:59.999 (HH:MM:SS:nnn).  | Must |
| **MI24** | The system **MUST** only create one Summary Report and one Detailed Report per system per Organisation for each reporting period.  | Must |
| **MI25** | The Summary Report **MUST** contain one record per Message/Interaction Type Identifier summarising activity where the system was the Sending system and one record per Message/Interaction Type Identifier summarising activity where the system was the Receiving system. See Data Requirements section for details of the content and format of a Summary Report record. | Must |
| MI25.1 | If the system sent zero messages or received zero messages within the time period, the record set **MUST** still be created (and sent) containing the header and footer records only with the ‘Total records’ data item in the footer record set to ‘0’. | Must |
| **MI26** | The Detailed Report **MUST** contain one record per Message/Interaction Type Identifier per Trading Partner summarising activity where the system was the Sending system and one record per Message/Interaction Type Identifier per Trading Partner summarising activity where the system was the Receiving system. See Data Requirements section for details of the content and format of a Detailed Report record. | Must |
| **MI27** | The system **MUST** submit Reports to the Authority according to the Authority Schedule (see below). | Must |
| **MI28** | The header record **MUST** contain the system UUID, the start and end dates and the ODS code to provide a unique identifier for the record set. | Must |
| **MI29** | Each record representing a Sent message **MUST** be marked “SR” **MUST** even if the record failed to be sent. | Must |
| **MI30** | Each record representing a Received message **MUST** be marked “RR” **MUST** even if the record failed in some way.  | Must |
| **MI31** | The Authority will process the Summary Reports received and identify any missing information or missing reports. The system **MUST** be capableof both re-creating a previously sent report or create a missing report and to resend a previously sent report. The supplier MUST initiate the resend within one week of receiving the request from the Authority. The system **MUST** resend such reports using the normal delivery mechanism. | Must |
| **MI32** | The system **MUST** make these reports available locally to authorised users. The reports **MUST** be retained for this purpose for a period of at least 3 months. The reports **MAY** be copied into a user area for these purposes. | Must |

## Audit Reports

Audit Reports may be requested by the Authority from time to time to assist with forensic analysis of messaging to help with problem analysis.

The source data for these reports are:

* Trading Partner Configuration data – see section 3.1 of ‘CDA Interoperability – MHS Requirements’
* Message and Audit Logs data – see section 3.2 of ‘CDA Interoperability – MHS Requirements’
* Error data which may be recorded in the ‘Message Logs’, ‘Audit logs’ (as per previous item) or held in application error logs.

The Authority will submit requests for Audit reports in plain English describing the subset of audit data required, e.g. all messages, including acknowledgements, sent from system XXX for ODS code YYY to system ZZZ with ASID xxxxx (i.e. across TMS) between <date 1> and <date 2>.

Note that acknowledgement messages ARE included within these reports.

| **Req ID** | **Requirement Text** | **Status** |
| --- | --- | --- |
| **MI40** | The supplier **MUST** provide the requested Audit Report within 3 working days (Mon-Sat excluding bank/statutory holidays) from receipt of the request from the Authority. | Must |
| **MI40.1** | The supplier **MUST** provide a contact point for such requests to be sent to – the preferred method being an email address within the supplier service desk. Such requests are expected to be logged with the service desk with an appropriate severity level. | Must |
| **MI41** | All Audit Reports **MUST** conform to the data file requirements below. | Must |
| **MI42** | The system **MUST NOT** include any Patient Identifiable data within an Audit Report.  | Must |

## Report Period and Reporting Schedule

The current default is for each report to cover a whole week (Monday to Sunday) and for the reports to be produced no earlier than 5 days after the end of the period and no later than 10 days after the end of the reporting period. This allows for acknowledgements, retries and other such delays that occur normally for these types of messages. Thus in the example of a one week reporting period above ending on a Sunday, the earliest that the report can be produced is 00:00:01 on the following Saturday and the latest is 23:59 on the second following Wednesday.

Systems are required to support flexible reporting periods and report production periods.

Reports will be sent to a nominated DTS mailbox which is not specified in this document. Suppliers will be informed of this in due course.

| **Req ID** | **Requirement Text** | **Status** |
| --- | --- | --- |
| **MI50** | The system **MUST** support the following reporting periods:* Daily (00:00:00 to 23:59:59.nnn)
* Weekly (Monday 00:00:00 to Sunday 23:59:59.nnn)
* Monthly (1st day of calendar month 00:00:00 to last day of month 23:59:59.nnn)
 | Must |
| **MI50.1** | The default reporting MUST be ‘Weekly’ | Must |
| **MI51** | The system **MUST** support the following configuration parameters:* Minimum period following reporting period end to commence data analysis
* Maximum period following reporting end to commence data analysis
 | Must |
| **MI52** | The system **MUST** produce the report (i.e. commence data analysis) no earlier than the minimum period above and complete the analysis no later than the maximum period above.  | Must |
| **MI53** | The system **MUST** send (i.e. commence network transmission) the report no later than the maximum period above. | Must |

## Date and Time values

| **Req ID** | **Requirement Text** | **Status** |
| --- | --- | --- |
| **MI60** | All dates included in reports MUST be UTC. Systems MAY not include any time zone offset. | Must |
| **MI61** | All times MUST include hours and minutes and, where required seconds and/or milliseconds. This is specified in the data description (see Section 3)Notes1. The ‘TS’ data type mandates that 14 digits are included, the last 2 representing seconds – these must be ‘00’ when seconds are not required.
2. The ‘TS’ data type allows any number of digits after the decimal point for seconds – systems must not use anymore than 3 digits to represent milliseconds.
 | Must |

# Data Requirements

The following subsections detail the record types associated with Summary Reports, Detailed Reports and Audit Reports. The header record also includes information about the software in use by the organisation and its product and version.

The format for the transfer of the content is XML. The XML schema files are described and are embedded in Section 4.

The record names and ‘Data Item’ names in the following sections correspond to the schema file names and ‘tag’ names in the XML schemas.

## Report Header Record

The header record for the Summary Report, Detailed Report and Audit Report file is detailed below. This header is **always** sent even if there are no messages sent or received. The header contains identification information of the system, Organisation and MI time period.

| **Data Item** | **Data Description** |
| --- | --- |
| Record Type | “HR” |
| ODS | ODS of the organisation to which the data applies. |
| System UUID | The UUID of the instance of the clinical system generating the report. |
| Clinical system  | This MUST be a concatenation of Supplier name, clinical application product name and version identifier (e.g. “McKesson\_TotalCare\_v14.2.3”). The strings MUST be concatenated with a single underline character and the complete string MUST be enclosed in double quotes.Ideally this is sourced from a local configuration file to enable changes to software versions to be reflected by a change to the string variable in this field. |
| Report Period – Start Date | Start date & time for time period covered by the MI record.This must be UTC time and must include date and time down to the nearest minute.  |
| Report Period – End Date | Start date & time for time period covered by the MI record.This must be UTC time and must include date and time down to the nearest minute.  |
| Report Creation Time | The date and time when the data analysis commenced to produce the report.This must be UTC time and must include date and time down to the nearest minute. |
| MI Report type | “Summary” or “Detailed” or “Audit” |

## Report Footer Record

The footer record for the Summary Report, Detailed Report and Audit Report file is detailed below. This footer is always sent, even if there are no messages sent or received. The footer contains identification information of the system, Organisation and MI time period.

| **Data Item** | **Data Description** |
| --- | --- |
| Record Type | “FR” |
| ODS | ODS of the organisation that created the report |
| System UUID | The UUID of the instance of the clinical system generating the report. |
| Total Records | The number (integer) of records in the record set (not including the header or footer record). |
| MI Report type | “Summary” or “Detailed” or “Audit” |

## Summary Report - Body

The received and sent messages are summarised into a single entry for each message or interaction type in the Summary Report file. Each record includes the number of messages sent/received on each transport channel and the success/failure/warning counts overall.

### Sent Messages

| **Sent Messages –Summary Report - body** |
| --- |
| **Data Item** | **Data Description** |
| Record Type | “SR” |
| ODS | ODS of the organisation that created the report (this is a duplicate of the header row to make processing easier) |
| System UUID | The UUID of the instance of the clinical system generating the report. |
| Message/Interaction Type Identifier | Message or Interaction identifier from MIM/DMS (e.g. POCD\_IN150001UK06 or urn:nhs-itk:interaction:primaryRecipientDischargeReport-v1-0 |
| Total number of messages sent via TMS | Integer; default 0 |
| Total number of messages sent via DTS | Integer; default 0 |
| Total number of messages sent using ITK web service messaging | Integer; default 0 |
| Total number of sent messages positively acknowledged (all channels) | Integer; default 0 |
| Total number of sent messages negatively acknowledged (all channels) | Integer; default 0 |
| Total number of sent messages with an acknowledgement containing a warning (all channels) | Integer; default 0 |
| Total number of sent messages awaiting an acknowledgement (all channels) | Integer; default 0 |
| MI Report type | “Summary” |

### Received Messages

| **Received Messages Summary Report - body** |
| --- |
| **Data Item** | **Data Description** |
| Record Type | “RR” |
| ODS | ODS of the organisation that created the report (this is a duplicate of the header row to make processing easier) |
| System UUID | The UUID of the instance of the clinical system generating the report. |
| Message/Interaction Type Identifier | Message or Interaction identifier from MIM/DMS (e.g. POCD\_IN150001UK06 or urn:nhs-itk:interaction:primaryRecipientDischargeReport-v1-0 |
| Total number of messages received via TMS | Integer; default 0 |
| Total number of messages received via DTS | Integer; default 0 |
| Total number of messages received using ITK web service messaging | Integer; default 0 |
| Total number of received messages positively acknowledged (all channels) | Integer; default 0 |
| Total number of received messages negatively acknowledged (all channels) | Integer; default 0 |
| Total number of received messages with an acknowledgement containing a warning (all channels) | Integer; default 0 |
| Total number of received messages awaiting an acknowledgement to be sent (all channels) | Integer; default 0 |
| Report type | “Summary” |

## Detailed Report - Body

The received and sent messages are detailed in each Detailed Report file. Each will include the number of messages sent/received to each Trading Partner on each transport channel and the success/failure/warning counts on each channel.

### Sent messages

| **Sent Messages Detailed Report - body** |
| --- |
| **Data Item** | **Data Description** |
| Record Type | “DSR” |
| ODS | ODS of the organisation that created the report (this is a duplicate of the header row to make processing easier) |
| System UUID | The UUID of the instance of the clinical system generating the report. |
| Recipient - ODS code | ODS for the message receiving organisation |
| Recipient - Trading partner ID | Trading Partner Identifier for the message recipient organisation (where present) |
| Message/Interaction Type Identifier | Message or Interaction identifier from MIM/DMS |
| TMS ID | The ASID of the recipient system |
| Total number of messages sent via TMS | Integer; default 0 |
| Total number of sent messages positively acknowledged (TMS) | Integer; default 0 |
| Total number of sent messages negatively acknowledged (TMS) | Integer; default 0 |
| Total number of sent messages with an acknowledgement containing a warning (TMS) | Integer; default 0 |
| Total number of sent messages awaiting an acknowledgement (TMS) | Integer; default 0 |
| DTS ID | The DTS Mailbox ID of the recipient system |
| Total number of messages sent via DTS | Integer; default 0 |
| Total number of sent messages positively acknowledged (DTS) | Integer; default 0 |
| Total number of sent messages negatively acknowledged (DTS) | Integer; default 0 |
| Total number of sent messages with an acknowledgement containing a warning (DTS) | Integer; default 0 |
| Total number of sent messages awaiting an acknowledgement (DTS) | Integer; default 0 |
| ITK ID | The ITK Address of the recipient system |
| Total number of messages sent using ITK web service messaging | Integer; default 0 |
| Total number of sent messages positively acknowledged (ITK) | Integer; default 0 |
| Total number of sent messages negatively acknowledged (ITK) | Integer; default 0 |
| Total number of sent messages with an acknowledgement containing a warning (ITK) | Integer; default 0 |
| Total number of sent messages awaiting an acknowledgement (TMS) | Integer; default 0 |
| Report type | “Detailed” |

### Received messages

| **Receiving Messages Detailed Report - body** |
| --- |
| **Data Item** | **Data Description** |
| Record Type | “DRR” |
| ODS | ODS of the organisation that created the report (this is a duplicate of the header row to make processing easier) |
| System UUID | The UUID of the instance of the clinical system generating the report. |
| Sender ODS code | ODS for the message sending organisation |
| Sender Trading partner ID | Trading Partner Identifier for the message sender organisation (where present) |
| Message/Interaction Type Identifier | Message or Interaction identifier from MIM/DTS |
| TMS ID | The ASID of the sending system |
| Total number of messages received via TMS | Integer; default 0 |
| Total number of received messages positively acknowledged (TMS) | Integer; default 0 |
| Total number of received messages negatively acknowledged (TMS) | Integer; default 0 |
| Total number of received messages with an acknowledgement containing a warning (TMS) | Integer; default 0 |
| Total number of received messages without an acknowledgement being sent back (TMS) | Integer; default 0 |
| DTS ID | The DTS Mailbox ID of the sending system |
| Total number of messages received via DTS | Integer; default 0 |
| Total number of received messages positively acknowledged (DTS) | Integer; default 0 |
| Total number of received messages negatively acknowledged (DTS) | Integer; default 0 |
| Total number of received messages with an acknowledgement containing a warning (DTS) | Integer; default 0 |
| Total number of received messages without an acknowledgement being sent back (DTS) | Integer; default 0 |
| ITK ID | The ITK Address of the sending system |
| Total number of messages received via ITK web service messaging | Integer; default 0 |
| Total number of received messages positively acknowledged (ITK) | Integer; default 0 |
| Total number of received messages negatively acknowledged (ITK) | Integer; default 0 |
| Total number of received messages with an acknowledgement containing a warning (ITK) | Integer; default 0 |
| Total number of received messages without an acknowledgement being sent back (ITK) | Integer; default 0 |
| Report type | “Detailed” |

## Audit Report - Body

| **Sent Messages Detailed Report - body** |
| --- |
| **Data Item** | **Data Description** |
| Record Type | “AR” |
| ODS | ODS of the organisation that created the report (this is a duplicate of the header row to make processing easier) |
| System UUID | The UUID of the instance of the clinical system generating the report. |
| Direction | “S” if sent or “R” if received |
| Date and time sent or received | This must be UTC time and must include date and time down to the nearest millisecond. |
| Transport Channel | One of:* “T” for TMS,
* “D” for DTS,
* “I” for ITK web service messaging,
* “O” for other
 |
| Transport Channel ID | One of:* ASID for TMS
* DTS Mailbox ID
* ITK Address
* Other value (only to be used if “O” used above)
 |
| Message/Interaction Type Identifier | Message or Interaction identifier from MIM/DMS |
| Message/Transmission Identifier | UUID/GUID of individual message/transmission |
| Interaction Supported | Boolean |
| Transport Channel Receipt Status | For sent messages only, one of:* “S” success
* “E” error
* “W” awaiting reply
 |
| Application/Business Acknowledgement Status | For sent messages only, one of:* “S” success
* “E” error
* “W” awaiting reply
* “N” Not applicable (e.g. sent message is an Application/Business Acknowledgement )
 |
| Application/Business Acknowledgement ID | UUID/GUID of message/transmission containing the Application/Business Acknowledgement reply |
| Date & Time of Application/Business Acknowledgement response received | This must be UTC time and must include date and time down to the nearest second. Milliseconds may be included. |
| Error Code(s) | Where multiple error codes are returned, the values must be concatenated using a single underline character, e.g. 410\_41005.This field MUST be used for all types of error, e.g. SOAP transmission failures, ebXML failures, etc and not just errors documented in the Point to Point Error Codes document. |
| “Error Text” | Any text associated with the error, enclosed in double quotes |
| Message size | Bytes (integer) |
| Record Type | “Audit” |

# Data Transfer

## Data Format

The data will be encoded into XML. A number of schemas have been developed to carry the required content. These are:

* SummaryReport.xsd
* DetailedReport.xsd
* AuditReport.xsd

And they include, as appropriate the following schemas:

* ReportHeader.xsd
* ReportFooter.xsd
* ReceivedMessagesSummary.xsd
* SentMessagesSummary.xsd
* ReceivedMessagesDetailed.xsd
* SentMessagesDetailed.xsd
* AuditReportBody.xsd

And the following schema is used to define the data types present in the above

* DataTypes.xsd

The schema files are provided as a zip CDA\_MI\_XSDs\_v2.1zip

## Delivery mechanism

The transport mechanism being used for MI reporting is DTS. Each file is sent over DTS to the Authority’s specified DTS mailbox. All files sent over DTS must be set to be compressed using the appropriate settings in the DTS Control File.

Each MI report is transmitted separately in its own file, and thus 2 files are sent for every reporting period – a summary report and a detailed report. Audit reports may be sent from time to time – again with each being in a separate file.

## Security & integrity of data

No patient record data is included in the Management Information data. Standard DTS security measures are therefore sufficient for the transfer of Management Information - no encryption is required.

Security and integrity of the data within systems will be the responsibility of the system supplier. Security and integrity of the data within DTS will be provided by the DTS Service. MI data held on the Supplier or the Authority systems, is to be treated as “Commercial in Confidence”. There is no data relating to individual persons recorded within the MI data set, however, the information may be commercially beneficial to an organisation that possesses a copy.

## Data Transfer Requirements

The following data transfer requirements apply:

| **Req ID** | **Requirement Text** | **Priority** |
| --- | --- | --- |
| **MI70** | Each Summary Report, Detailed Report and Audit Report **MUST** be in its own file, i.e. single MI report file MUST NOT contain multiple record sets (i.e. more than one Header record). | Must |
| **MI170.1** | The supplier must send a NULL return if there are no transactions for the period defined in the header. | Must |
| **MI72** | The system **MUST NOT** attempt to send files to DTS which exceed the maximum DTS file size (currently 50MB). The supplier MUST inform the Authority if any such files are created and thus cannot be sent.  | Must |
| **MI73** | The DTS Control File settings detailed in the ‘CDA Interoperability – MHS Requirements’ section 3.9.4 ‘DTS Implementation Profile’ **MUST** be used when sending MI reports. Note that the MI files are not CDA documents and thus an ITK Distribution Envelope is NOT required to be used and the ‘Workflow ID’ field is to be populated as defined below. | Must |
| **MI73.1** | The ‘Workflow ID’ field in the DTS Control File **MUST** be set to “GPSOC\_MI” | Must |
| **MI74** | The supplier **MUST** is responsible for the security and integrity of the data within the system. | Must |
| **MI75** | MI Reports located on the system, **MUST** be treated as “Commercial in Confidence”. | Must |
| **MI75.1** | Where reports are made available to local users, either on screen, or printed or ‘exported’, the user MUST be made aware that the reports and the data within the reports is “Commercial in Confidence”. | Must |

1. V2.1 (draft) is the current version at the time of writing – v3.0 is expected to be published before the end of 2011. [↑](#footnote-ref-1)