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**2018 PDS Foundation Module – Document Index**

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Glossary of Terms

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

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# Introduction

## Purpose of Document

This document provides an index to the set of compliance documentation associated with the 2018 PDS integration module.

The documentation specifies two complementary compliance aspects:

* Integration Requirements
* Compliance Testing

The requirements and testing documentation are specified in dedicated sections of this document.

This version details the requirements for systems to support interoperation with the Spine Personal Demographics Service (PDS).

## Audience

This document and the compliance documentation referenced within it should be read by suppliers seeking system compliance for the PDS integration module.

## Context

Before a supplier can connect its existing system(s) to the NHS Spine, the supplier must gain the appropriate Compliance, as specified by the NHS Spine Compliance Scheme.

NHS Spine Compliance comprises System Compliance and Supplier Compliance.

The purpose of System Compliance is to verify that a system meets the technical requirements necessary to inter-operate with the NHS Spine in support of business functions.

System Compliance is available for a defined range of business functions, referred to as Compliance Modules.

PDS compliance will enable access to base NHS Spine functionality such as single sign on and smartcard usage, where applicable.

## Document Baseline Maintenance

The index provided by this document represents a baseline of compliance documentation. Whenever an update to the baseline is required, the changes will be highlighted in a new issue of this index document.

## Definitions

The keywords **MUST**, **MAY**, and **SHOULD** are to be interpreted as described in RFC2119:

**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**", mean 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.

The Existing System wishing to connect to the PDS shall be referred to as the **system** throughout this document.

# Compliance Modularity

## Compliance Modules and Foundation Modules

Compliance to a particular business domain, (e.g. the e-Referral Service Referrer Compliance module or Electronic Prescription Service (EPS) Dispenser Compliance module), requires compliance with a number of mandatory Foundation Modules. The current Foundation Modules are:

* Information Governance (IG)
* Communications and Messaging Standards
* Personal Demographics Service (PDS)

These modules contain a set of generic requirements applicable to all systems seeking compliance to a business domain. Compliance with these foundation modules is mandatory.

## Module Precedence

Compliance can be sought for a business domain and its foundation modules together or can be achieved separately. However, if done separately then there is an order of precedence which must be followed:

1. Information Governance compliance
2. Communications and Messaging Standards
3. PDS compliance
4. Business domain(s) compliance

This module is the PDS Foundation Module. As such, compliance with the IG and Communications and Messaging Standards compliance module is required before compliance to this module can be achieved.

# Requirements Summary

This section provides a high level overview of the main requirements systems must meet to gain PDS compliance. Section 4 contains the full authoritative set of requirements documentation.

## PDS Message Support

Because systems interface to PDS for different reasons, some types of system are required to support different subsets of the PDS messages. There may also a required minimum set of PDS messages expected of some systems with additional messages being optional. The table in [Appendix A](#_Appendix_A_-) list the different types of system by compliance module and the required and optional messages that they have to support.

Systems aiming to achieve PDS compliance and go live before business domain compliance are required to meet the PDS requirements needed to support that business domain, e.g. if the PDS requirements associated with a business domain require both simple and advanced trace to be supported then the system will need to be compliant with these areas when seeking PDS compliance in advance.

This document will indicate which requirements must be met by compliant systems for each compliance domain. Referenced documents herein may be explicitly included or excluded from a domain. Subsections of these documents may also be explicitly included or excluded from a domain.

## Authentication Requirements

All systems supporting PDS updates MUST support Single Sign On (SSO) user level 2-factor authentication using the tools and functions provided by the NHS Spine whose operation is detailed in the External Interface Specification. See IG Foundation Module for full details of IG requirements. Systems that only support the PDS Retrieval message or limited trace functionality are not required to support SSO as detailed above.

## Use of Gazetteer Service

All systems supporting PDS updates may use the spine Gazetteer service (or other approved source of Postcode Address File (PAF) data), as their source of correctly formatted addresses.

Suppliers wishing other sources to be considered for approval shall submit such requests to the Authority in writing. Note that all approved sources of address information must support updates on at least a monthly basis.

Note that some sources of address data may not conform to the NHS address format. In such cases, the system must amend the address format to ensure that addresses conform to the NHS standard.

# Compliance Requirements Documentation

The following documents specify the requirements that a system must satisfy to achieve System Compliance for PDS. The list of documents also includes clarification notes, reference material (e.g. data required for system configuration) and other documents which are intended to assist overall understanding. In cases where some sections of a document do or do not apply, the applicable sections of the document are listed.

## Document Types

Each of the documents in the following tables has been given a ‘type’ to assist suppliers with the management of the baseline documents. The table below lists the document types used and a brief description of the content type.

| Type Code | Name | Description |
| --- | --- | --- |
| BI | Background Information | Documentation that provides useful information to help understand the business domain, business processes, (e.g. use cases), spine system functional specifications, etc. |
| G | Guidance documents | Documents that do not contain any requirements but which provide guidance on building or implementing systems, future requirements, documents issued to end-users on how to do things (which may in turn place indirect requirements upon systems if they are unable to support the user in that aspect of their work). |
| RS | Requirements Specification | These documents contain the system requirements. ALL of these documents must be read, and systems designed to meet the requirements therein. It is suggested that ALL of these are passed to development departments. |
| TS | Technical Supplement | These documents supplement the Requirements Specifications. They typically contain reference data (e.g. the different types of message patterns, data value ranges). |

## Messages and Message Handling

| Document | Issue Date | Type |
| --- | --- | --- |
| Message Implementation Manual (MIM) v6.3.01  Applicable Sections:  Infrastructure  PDS | 8th January 2008 | TS |
| External Interface Specification (EIS) Issue 11.6 (or most recent version available) - .ZIP file.  Applicable Sections:  1 - Introduction  2 - MHS  3 – Message Interaction Map  4 - Gazetteer  5 – SDS  6 – SSB  7 – SSB API  11 – Access Control Service  Part A – Appendix  Part B – Errors  Part C - Validation  ***Authored by BT NASP*** | 5th Dec 2008 | TS |
| 8878 2008-B PDS Error Base v2.10  8882 2008-B TMS Error Codes v2.3 | 11th Dec 2008  8th July 2008 | TS |
| 2086 Message Handling Service Behaviour Patterns, Issue 9.5  ***Authored by BT NASP*** | 31st Jan 2008 | TS |
| 9260 Contract Properties and Bindings v1H  ***Authored by BT NASP*** | 25th April 2008 | TS |
| NASP XML Package v10 2008-11-28  ***Authored by BT NASP*** | 28th Nov 2008 | TS |
| CDT D 0055 BT NASP Connection, Issue 1 v12  ***Authored by BT NASP*** | 11th May 2004 | TS |

See **Error! Reference source not found.** “**Error! Reference source not found.**” for a full listing of message interactions that must be supported by different systems/different business domains being supported.

## Information Governance, Security and Single Sign On (SSO)

The system must have achieved compliance against the relevant set of IG requirements (i.e. v2 or v3) for the type of system under test as defined in the Information Governance v2/3 Foundation module.

## Communications and Messaging Standards

The system must meet the Communications and Messaging Standards Foundation Module.

## PDS Functional Requirements

The functional requirements for integrating with PDS and additional guidance to help with integration are contained in the documents listed in the table below.

### Scope of PDS Support

Different types of system will support different subsets of PDS. A subset may be a subset of the PDS data model and/or a subset of messages used to interact with PDS. Appendix A defines the message subsets that must be supported for each business domain compliance module. Any PDS data constraints are either specified within this document or are specified by the NHS Digital business domains and will be documented in the baseline documentation for that domain.

The basic principle behind determining the scope of PDS support is that where a data item exists in both PDS and the local system that the data item is kept synchronised between the two systems. Local systems that can update PDS should therefore be able to update these items on PDS.

In order to ensure the (local) system is tested correctly suppliers must provide a detailed gap analysis between the two systems and clearly state which data items are supported and in what way. In this context ‘support’ means that cardinality, data formats, field lengths and associated attributes (e.g. effective dates) are supported in full as per the PDS Data Dictionary (contained within the PDS Integration Guidance). Any data item which is not supported in full must have a fully documented alternate synchronisation solution that is agreed by NHS Digital before testing commences.

It is important that suppliers ensure their systems meet all the requirements contained in the documents of type ‘RS’ in the table below that are relevant to the subset of PDS supported by their system.

| Document Name | Issue Date | Type |
| --- | --- | --- |
| 2018 PDS Integration Requirements - v1.0 | 23rd February 2018 | RS |
| 2018 PDS Integration Guidance - v1.0 | 23rd February 2018 | G |
| 2018 PDS Integration Requirements Matrix - v1.0 | 23rd February 2018 | RS |
| NPFIT-SI-SIGOV-0073.05 Guidance on Implementing RBAC for PSIS and PDS v2.1 | 5th May 2011 | G |
| NPFIT-FNT-TO-DSD-0120.06 Business Use Case: Sensitive Patients – Local Business Processes v1.0 | 14th August 2008 | G |

# Compliance Assurance Documentation

The tables below identify the documents that define and support the compliance assurance and testing activity for the PDS compliance module.

## Assurance Approach

In order to gain compliance against this module, suppliers are required to follow an appropriate assurance approach, for example, the Common Assurance Process (CAP) (see table below). A number of templates have been developed to assist suppliers with production of documentation associated with the assurance process, which together with the process document form a baseline set of documents referenced in the table below.

| Document Name | Issue Date |
| --- | --- |
| CAP Baseline Index v2.0 | 23rd February 2009 |

## Testing Documentation

The latest version of the Test Support and Assurance Baseline Index should be used as this will contain up to date information on sandpit configurations and other test support materials.

| Document Name | Issue Date |
| --- | --- |
| Test Support and Assurance Baseline Index v1.5 | 6th January 2015 |

# Supplementary Guidance

This section provides supplementary guidance for implementation of the PDS module and should be read in conjunction with the requirements documents specified in Section 4 of this document.

## Modularity and Co-existence

In cases where a supplier is implementing more than one NHS Spine module within the same system the system must be capable of supporting all modules simultaneously. The supplier must also implement each module in such a way that it’s module-specific NHS Spine interactions can be switched off without affecting other modules (e.g. EPS functionality can be switched ON/OFF without affecting e-Referral Service functionality). This provides greater deployment flexibility for local implementations. Note that this does NOT apply to Foundation modules, i.e. foundation module functionality must not be switched off.

# Appendix A - Message Interaction Support Matrix for MIM 6.3.01

The first table below shows the full set of PDS message interactions from MIM 6.3.01 that the Spine supports. The second table shows which message groups systems are required to support by compliance business domain, which message groups may optionally be supported, and which are not allowed to be used.

| Message Interaction Name | Interaction ID |
| --- | --- |
| Application Acknowledgement | MCCI\_IN010000UK13 |
| Query Act Failed | QUQI\_IN010000UK14 |
| PDS Simple Trace Query | QUPA\_IN000005UK01 |
| PDS Simple Trace Query Response | QUPA\_IN000007UK01 |
| PDS Advanced Trace Query | QUPA\_IN000006UK02 |
| PDS Advanced Trace Query Response | QUPA\_IN000011UK02 |
| PDS Retrieval Query | QUPA\_IN000008UK02 |
| PDS Retrieval Query Response | QUPA\_IN000009UK03 |
| PDS Confirm NHS Number Query | QUPA\_IN000016UK02 |
| PDS Confirm NHS Number Query Response | QUPA\_IN000010UK02 |
| PDS NHS Number Allocation Request | PRPA\_IN000200UK03 |
| PDS NHS Number Allocation Request Accepted | PRPA\_IN000201UK01 |
| PDS General Update Request | PRPA\_IN000203UK03 |
| PDS General Update Request Accepted | PRPA\_IN000202UK01 |
| PDS NHAIS Update Request | PRPA\_IN000204UK03 |
| PDS NHAIS Update Request Accepted | PRPA\_IN000209UK01 |
| PDS Create Initial Record Request | PRPA\_IN000205UK03 |
| PDS Create Initial Record Request Accepted | PRPA\_IN000206UK01 |
| PDS Create Initial Record Request Rejected (duplicate found) | PRPA\_IN000207UK03 |
| PDS Birth Notification | PRPA\_IN000208UK03 |
| PDS Cross Check Trace Query | QUPA\_IN000014UK01 |
| PDS Cross Check Trace Query Response | QUPA\_IN000015UK02 |

| PDS Message Interaction Group (initiated message shown)  Compliance Module | PDS Retrieval | PDS Simple Trace | PDS Advanced Trace | PDS Cross Check Trace | PDS Update | PDS Confirm NHS Number | PDS NHS Number Allocation | PDS NHAIS Update | PDS Create Initial Record | PDS Birth Notification | Base Message Set Level | Notes |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Child Health Systems v1 | O | O | O | O | O | O | O | N | N | R | 0B |  |
| e-RS Referrer v1 | R | R | R | N | R | N | N | N | N | N | 2 |  |
| e-RS Referrer v2.x | R | R | R | N | R | N | N | N | N | N | 2 |  |
| e-RS Referrer v3 | R | R | R | O | R | O | C | N | N | N | 3 | See note 1 |
| e-RS Provider v1 | R | N | N | N | N | N | N | N | N | N | 0R |  |
| e-RS Provider v2.x | R | N | N | N | N | N | N | N | N | N | 0R |  |
| e-RS Provider v3 | R | O | O | O | O | O | O | N | N | N | 0R |  |
| EPS Prescriber v1 | R | R | R | N | R | N | N | N | N | N | 2 |  |
| EPS Prescriber v2 | R | R | R | O | R | O | O | N | N | N | 2 |  |
| EPS Dispenser v2 | R | R | N | O | R | O | N | N | N | N | 1 |  |
| GP Summary v1 | R | R | R | O | R | O | R | N | N | N | 3 |  |
| GP Systems v1 | R | R | R | O | R | O | R | N | N | N | 3 |  |
| GP2GP v1.1 & v1.1a | R | R | R | O | R | O | R | N | N | N | 3 |  |
| GP2GP v2 | R | R | R | O | R | O | R | N | N | N | 3 |  |
| HSCI v1 | R | R | R | O | R | O | O | N | N | N | 2 |  |
| Hearing Screening | O | O | O | O | O | O | N | N | N | R | 0B |  |
| Maternity Systems v1 | R | R | R | O | R | O | C | N | R | N | 4 | See note 2 |
| ONS | N | N | N | N | N | N | N | N | N | R | 0B |  |
| SCR v1 | R | R | R | O | O | O | O | N | N | N | 0T |  |
| SCR v2 | R | R | R | O | C | O | C | N | N | N | 2 | See note 3 |

*Table Key*

R=required (mandatory)

O=optional

N=not allowed (must not be supported)

C=conditional (see notes below).

No systems providing data to SUS are required to interact with PDS to support the submission of CDS or MHMDS data.

*Notes*

1. Where the e-RS Referrer system is a GP system it IS required to support NHS Number Allocation.
2. Maternity Systems are required to support the standard PDS message set in order to trace and update mothers of newborn babies. The NHS Number Allocation Message can ONLY be used to add Mothers when they are not present on PDS – it MUST NOT be used to register babies.
3. Formerly ‘PSIS Consumer v1’ in PDS v3 Foundation Module. Systems would usually be expected to support PDS updates.

# Appendix B - Message Sets

In order to simplify and automate end point registrations common sets of messages are labelled as PDS Levels as detailed below. Additional optional messages can be added to most of these sets to reflect approved variations/extensions to these common sets.

| PDS Message Sets  Level | PDS Retrieval | PDS Simple Trace | PDS Advanced Trace | PDS Update | PDS Confirm NHS Number | PDS NHS Number Allocation | PDS NHAIS Update | PDS Create Initial Record | PDS Birth Notification | PDS Cross Check Trace |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Level 0R | R | N | N | N | N | N | N | N | N | N |
| Level 0T | R | R | R | N | N | N | N | N | N | N |
| Level 0B | N | N | N | N | N | N | N | N | R | N |
| Level 1 | R | R | N | R | O | N | N | N | N | O |
| Level 2 | R | R | R | R | O | O | N | N | N | O |
| Level 3 | R | R | R | R | O | R | N | N | N | O |
| Level 4 | R | R | R | R | O | O | N | R | N | O |

*Table Key*

R=required (mandatory)

O=optional

N=not allowed (must not be supported).

*Notes*

Systems that support any an additional optional message with have the ‘+’ suffix appended to their level, e.g. a Level 2 system that support the PDS Cross Check message will become a ‘Level 2+’ system with the optional message(s) documented.