Log Summary: Harmonize use of Association-related terms

Name of Standard
PS3.7, PS3.8 (probably also PS3.4 and PS3.5)

Rationale for Correction:
Both P3.7 and PS3.8 refer to the term “Association Initiator” from ISO 8649 in Section 3.4 and 3.5, respectively. However, PS3.7 does not make use of this term.

Furthermore, the term “Association Acceptor” or “Association Responder” is missing, which is probably also defined in the ISO standard and at least the former used in the DICOM standard text (at least in PS3.7).

Sometimes the (Association-) initiator is also called (Association-) requestor. It is not always clear whether the terms as defined in the ISO standard or the ones as “defined” in the DICOM standard (see PS3.7 Section 8.2 and PS3.8 Section 7.1) are meant, or whether e.g. “Association Initiator”, “initiator”, “Association-requestor” and “requestor” are synonyms of the same concept.

In order to avoid confusion, it is proposed to always use the same term (with the same spelling) for identical concepts and to define new DICOM-related terms if needed, e.g. “Association-requestor” and “Association-acceptor”.

The terms “Association Acceptor” and “association acceptor” are also used in PS3.4. In addition, the terms “Association-requestor” and “association acceptor” are used quite frequently in this Part, but without referencing the “definition” in PS3.7. PS3.5 also refers to “Association Establishment”, while PS3.8 uses “association establishment” and “Association establishment”, without defining this term either.

The spelling of these Association-related terms throughout the DICOM standard text (e.g. also PS3.4 and PS3.5) is rather inconsistent, e.g. regarding capitalization and hyphenation. This should be fixed.

By the way, ISO 8649 has apparently been superseded by ISO/IEC 15953:1999:
https://www.iso.org/standard/24382.html

Correction Wording:

3 Definitions

For the purposes of this Standard, the following definitions apply.
3.1 Reference Model Definitions

This Part of the Standard is based on the concepts developed in [ISO 7498-1] and makes use of the following terms defined in it:

Application Entity See [ISO 7498-1].
Application Process See [ISO 7498-1].
Protocol See [ISO 7498-1].
Protocol Data Unit See [ISO 7498-1].
Service See [ISO 7498-1].
Transfer Syntax See [ISO 7498-1].

For reference see PS3.7 Section 3.2, 3.4 and 3.10

3.2 Service Conventions Definitions

This Part of the Standard makes use of the following terms defined in [ISO/TR 8509]:

Service Provider See [ISO/TR 8509].
Service User See [ISO/TR 8509].
Confirmed Service See [ISO/TR 8509].
Non-confirmed Service See [ISO/TR 8509].
Primitive See [ISO/TR 8509].
Request (Primitive) See [ISO/TR 8509].
Indication (Primitive) See [ISO/TR 8509].
Response (Primitive) See [ISO/TR 8509].
Confirm (Primitive) See [ISO/TR 8509].

[...]
DIMSE-N Services
A subset of the DIMSE services that supports operations and notifications on Normalized SOP Instances related to Normalized Information Object Definitions with peer DIMSE Service Users.

DIMSE Service Group (DSG)
A specific set of one or more DIMSE Services that define the operations and/or notifications that can be performed on a data structure.

DIMSE Service Provider
An abstraction of the totality of those entities that provide DIMSE services to peer DIMSE Service Users.

DIMSE Service User
That part of an Application Entity that makes use of the DICOM Message Service Element.

Extended Negotiation
Exchange of application information by peer DICOM AEs at Association establishment, defined by specific Service Class specifications.

Implementation Class UID
The unique identifier of a specific class of implementation.

Invoking DIMSE Service User
The DIMSE Service User that invokes a DIMSE operation or notification.

Performing DIMSE Service User
The DIMSE Service User that performs a DIMSE operation or notification invoked by a peer DIMSE Service User.

For reference see PS3.8 Section 3.3 and 3.5

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Service User See [ISO/TR 8509].
Confirmed Service See [ISO/TR 8509].
Non-confirmed Service See [ISO/TR 8509].
Primitive See [ISO/TR 8509].
Request (Primitive) See [ISO/TR 8509].
Indication (Primitive) See [ISO/TR 8509].
Response (Primitive) See [ISO/TR 8509].
Confirmation (Primitive) See [ISO/TR 8509].

[...]
The establishment of an Association involves two DIMSE Service Users, one that is the Association-requestor and one that is the Association-acceptor. A DIMSE Service User may initiate an Association establishment by using the A-ASSOCIATE service described in PS3.8.

Included in the parameters of the A-ASSOCIATE service is the Application Context that specifies, among other things, the rules required for the coordination of initialization information corresponding to different DICOM Application Entities. The Application Contexts permitted for DIMSE are specified in Annex A.

Change PS3.8 Section 7.1
(This is a first attempt to harmonize the spelling and properly refer to defined terms in one of the affected sections.)

7.1 A-ASSOCIATE Service

The establishment of an Association between two AEs shall be performed through ACSE A-ASSOCIATE Request, Indication, Response and Confirmation primitives. The initiator of the service is hereafter called an Association-requestor and the Service User that receives the A-ASSOCIATE Indication is hereafter called the Association-acceptor. It shall be a confirmed Service.

Note

The A-ASSOCIATE service supports the equivalent of a channel establishment in a point-to-point interface (see the retired PS3.9).

Figure 7-1 illustrates the Association establishment between two AEs.