DICOM Correction Proposal

STATUS	Submitted
Date of Last Update	2026/01/07
Person Assigned	Rob Horn
Submitter Name	Nikhilesh Sonar (nikhilesh.sonar@philips.com)
Submission Date	2017/11/03

Correction Number	CP-1754 and CP-1756
Log Summary: Suggestion for version controlling of Audit Message Schema as RFC-3881 no longer is referred	
Name of Standard PS3.15	

Rationale For Correction from CP-1754:

After the cementing of CP-1616, and significant changes made to the Audit Message Schema (Section A.5.1-1) in the DICOM Standard version 2016c, in particular, it has become difficult to discern implementations of such messages from before the change, and after, as there is no differentiating factor between the two message formats.

It would be suggestive to introduce a version marker to handle this change – and any changes made in the future to the schema. Breaking away from RFC-3881 would mean more maneuverability to the DICOM Committee, and more changes and revisions.

Keeping true to CP-1616, one such place to introduce the version is in the MSGID part of the Syslog message; by removing the appended *+RFC3881* and replacing it with the relevant version of the DICOM Standard or of the Schema. This would prompt the Audit Message Server /Viewer of the schema to be used to read the message in.

This update would both remove the reference to RFC-3881 and also introduce a version marker.

Rationale For Correction from CP-1756:

There is no description of how to describe the message format used in the Audit Message.

The message can have a URL-reference to the schema used, this supports later processing of the message.

DISCUSS:

The MSGID is used by Syslog implementations to sort, filter, and organize messages as they are received and when they are processed. Changing the MSGID would be a breaking change for implementations in the field.

One or more of the XML content elements, e.g.:

```
Xsi:schemaLocation=”uri:stuff”
```

or

```
<?xml-model
  href="https://example.org/schemas/customer.rng"
  type="application/relax-ng-compact-syntax"
?>
```

could be used to provide more details about the specific schema used. We could add a note suggesting it’s use. You don’t put this into the RNG base schema. It goes in the message. Note that you can have multiple xsi:schemaLocations and ?xml-models in an XML instance.

Xsi:schemaLocation is usually limited to W3C XML Schema format, while ?xml-model permits reference to any schema. For that reason, ?xml-model is chosen for the note.

The proposal is to add a note pointing out the potential use of ?xml-model to identify specific versions and possible vendor extensions, and pointing out that multiple ?xml-model may be present.

Correction Wording:

Item #1: Update A.5.1 DICOM Audit Message Schema

Note**s:** **1.** This schema can be converted into an equivalent XML Schema or other electronic format. ~~**It includes some modifications to the [RFC 3881] schema that reflect field experience with audit message requirements. It extends the [RFC 3881] schema.**~~ **It is derived from the retired RFC3881 schema.**

2. An ?xml-model element might be included in the message body to indicate product extensions or schema versions. For example:

```
<?xml-model
```

```
  href="https://example.org/schemas/customer.rng"
  type="application/relax-ng-compact-syntax"
?>
```

More than one ?xml-model element can be present.

There might also be XML comments providing further description, but these are usually ignored by processing software.