**Origination Date:** 09/10/2019

**Originator:** iconectiv

### Change Order Number: NANC 548

**Description:** XIS – Doc-only Changes – XML Content Type

**Functional Backwards Compatible:** Yes

**IMPACT/CHANGE ASSESSMENT**

|  |  |  |
| --- | --- | --- |
| DOC | FRS | IIS |
| N | N |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CMIP | GDMO | ASN.1 | **NPAC** | SOA | LSMS |
| N | N | N | N | N |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| XML | XIS | XSD | **NPAC** | SOA | LSMS |
| Y | N | N | N | N |

**Business Need**

The XML Interface Specification (XIS), currently does not specify the Content Type to be used in interface messages except in the message examples. Since multiple Content Types can be used and have been implemented, the XIS should be updated to identify the supported Content Type(s) other than in example messages. This will make the implementation clear to any vendor that wants to build the XML interface in the future. Also see PIM 126.

**Description of Change:**

Changes detailed below.

XIS:

In Section 1.5.1 on References, add a reference to the IETF standard on Media Types that recommends using application/xml content type for XML, obsoleting a previous standard that recommended the use of text/xml.

### 1.5.1 Standards

RFC2616 - Hypertext Transfer Protocol -- HTTP/1.1

RFC5246 – The Transport Layer Security (TLS) Protocol, Version 1.2

RFC7303 – XML Media Types

In Section 2.3 on XML Interface Operations, identify that the application/xml content type is used based on the newer standard.

## 2.3 XML Interface Operations

The NPAC XML Interface uses an HTTPS/1.1 POST operation for origination of all messages and an HTTPS response for the synchronous acknowledgement. Each message contains an HTTPS header complying with Hypertext Transfer Protocol – HTTPS/1.1 - RFC2616 and an XML string in the body of the message. The XML string for both the request and the synchronous acknowledgement must successfully be parsed using the NPAC XML Schema described in *Section 4, XML Interface Schema*.

Note – Although all message examples in this document show a Content-Type of text/xml, based on RFC 7303, application/xml or text/xml may be used. In messages sent by the NPAC SMS, the Content-Type will always be application/xml per RFC 7303 recommendation. The NPAC SMS will accept text/xml or application/xml Content-Type in messages from local systems.

**HTTPS POST - Requests**

POST / HTTP/1.1

Content-Type: text/xml

Content-Length: <nnnn>

<?xml version="1.0" encoding="UTF-8" standalone="no"?>

<SOAMessages xmlns="urn:lnp:npac:1.0" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">

<MessageHeader>

<schema\_version>1.1</schema\_version>

<sp\_id>1111</sp\_id>

<sp\_key>abcdefgh</sp\_key>

<npac\_region>midwest\_region</npac\_region>

<departure\_timestamp>2012-12-17T09:30:47.244Z</departure\_timestamp>

</MessageHeader>

<MessageContent>

<soa\_to\_npac>

<Message>

<invoke\_id>261</invoke\_id>
<origination\_timestamp>2012-12-17T09:30:46.284Z </origination\_timestamp>

<KeepAlive/>

</Message>

</soa\_to\_npac>

</MessageContent>

</SOAMessages>

**HTTPS Response – Synchronous Acknowledgement**

Success Example:

HTTP/1.1 200 OK

Content-Type: text/xml

Content-Length: 121

<?xml version="1.0" encoding="UTF-8" standalone="no"?>

<SyncAck xmlns="urn:lnp:npac:1.0"

xmlns:xsi="<http://www.w3.org/2001/XMLSchema-instance>">

 <sync\_ack\_status>

 <basic\_code>success</basic\_code>

 </sync\_ack\_status>

</SyncAck>

## [snip]