Change Order Form

**Origination Date** (mm/dd/yyyy): 1/06/2025

**Originator(s)**: iconectiv

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**(NOTE: Originator(s) to complete this section of the form along with Sections 1, 2 and 3)**

1. **CO Name/Description: SOA TPS Impact on LSMS – Doc Only**

**Functional Backwards Compatible:** Yes

**IMPACT/CHANGE ASSESSMENT**

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

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

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

1. **Business Need:**

The GUST subcommittee has been examining the business needs for potentially increasing the LSMS transaction rates. During this activity several issues were observed and discussed. The activity was referred to the APT. It was identified that the current FRS requirements may not be clear on the relationship between SOA and LSMS transaction rates. The current language has caused some confusion when understanding the applicable transaction rate requirements. See also PIM 157.

1. **Description of Change:**

This change order clarifies the SOA-to-NPAC interface transaction rate requirements to describe that the types of transactions can be broken down into requests that result in LSMS transactions (“Active-like”), requests that do not result in LSMS transactions (“Pending-like”), and notification traffic; and that the “Active-like” portion is also contrained by the NPAC SMS-to-Local SMS interface transaction rate requirements.

**FRS:**

### 6.4.2 Interface Performance Requirements

R6-26 Interface availability

Both the SOA-to-NPAC SMS interface and the NPAC SMS-to-Local SMS interface shall be available on a 24 by 7 basis, consistent with other availability requirements in this specification.

R6-27 Interface reliability

A 99.9 % reliability rate shall be maintained for both the SOA-to-NPAC SMS interface and NPAC SMS-to-Local SMS interface.

AR6-1 Range Activations

DELETED

AR6-2 Percent of Range Activations

DELETED

R6-28.1 SOA to NPAC SMS interface transaction rates - sustained

A transaction rate of 7.0 CMIP/XML transactions (sustained) per second shall be supported by each SOA-to-NPAC SMS interface association. The SOA-to-NPAC SMS interface transactions consist of “Active-like” requests that cause LSMS transactions, “Pending-like” requests that do not cause LSMS transactions, and notifications sent from NPAC SMS to SOA. Since “Active like” SOA-to-NPAC SMS transactions result in LSMS transactions, it is expected that these transactions do not cause the LSMS transaction rates to exceed the requirements defined in RR6-108 NPAC SMS-to-Local SMS interface transaction rates – sustained and RR6-109 NPAC SMS-to-Local SMS interface transaction rates – total bandwidth.

R6-28.2 SOA to NPAC SMS interface transaction rates - peak

NPAC SMS shall support a rate of 10.0 CMIP/XML transactions per second (peak for a five minute period, within any 60 minute window) over a single SOA-to-NPAC SMS interface association. The SOA-to-NPAC SMS interface transactions consist of “Active-like” requests that cause LSMS transactions, “Pending-like” requests that do not cause LSMS transactions, and notifications sent from NPAC SMS to SOA. Since “Active like” SOA-to-NPAC SMS transactions result in LSMS transactions, it is expected that these transactions do not cause the LSMS transaction rates to exceed the requirements defined in RR6-108 NPAC SMS-to-Local SMS interface transaction rates – sustained and RR6-109 NPAC SMS-to-Local SMS interface transaction rates – total bandwidth.

R6-29.1 NPAC SMS-to-Local SMS interface transaction rates

DELETED

R6-29.2 NPAC SMS-to-Local SMS interface transaction rates - peak

DELETED

RR6-107 SOA to NPAC SMS interface transaction rates – total bandwidth

NPAC SMS shall support a total bandwidth of 70.0 SOA CMIP/XML transactions per second (sustained) for a single NPAC SMS region. (previously NANC 393, NewReq 1) The SOA-to-NPAC SMS interface transactions consist of “Active-like” requests that cause LSMS transactions, “Pending-like” requests that do not cause LSMS transactions, and notifications sent from NPAC SMS to SOA. Since “Active like” SOA-to-NPAC SMS transactions result in LSMS transactions, it is expected that these transactions do not cause the LSMS transaction rates to exceed the requirements defined in RR6-108 NPAC SMS-to-Local SMS interface transaction rates – sustained and RR6-109 NPAC SMS-to-Local SMS interface transaction rates – total bandwidth.

RR6-108 NPAC SMS-to-Local SMS interface transaction rates – sustained

NPAC SMS shall support a rate of 7.0 CMIP/XML transactions per second (sustained) over each NPAC SMS-to-Local SMS interface association. (previously NANC 393, NewReq 2)

RR6-109 NPAC SMS-to-Local SMS interface transaction rates – total bandwidth

NPAC SMS shall support a total bandwidth of 210 Local SMS CMIP/XML transactions per second (sustained) for a single NPAC SMS region. (previously NANC 393, NewReq 3)

[snip]

**IIS:**

No Change Needed.

**EFD (IIS APPENDICES A AND B):**

No Change Needed.

**GDMO:**

No Change Needed.

**ASN.1:**

No Change Needed.

**XIS:**

No Change Needed.

**XSD:**

No Change Needed.