**3GPP TSG-SA5 Meeting #143-e *S5-223334***

**e-meeting, 9 - 17 May 2022**

**Source: Huawei, Ericsson**

**Title: pCR TR 28.925 Add issue on analysis on IRP specifications needs to support SBMA**

**Document for: approval**

**Agenda Item: 6.5.8.2**

# 1 Decision/action requested

***The group is asked to discuss and approval.***

# 2 References

[1] 3GPP draft TR 28.925: “Management and orchestration; Study on enhancement of service based management architecture v0.4.0”.

[2] 3GPP TS 32.103: "Telecommunication management; Integration Reference Point (IRP) overview and usage guide".

# 3 Rationale

It proposes to add issue "analysis on IRP specifications needs to support SBMA" to address the FS\_eSBMA\_WoP#2.

* *Investigation on whether there are more information in other IRP specifications that should be moved or converted to support SBMA.*

Some interface IPR specifications (e.g. Basic CM IRP, Alarm IRP) have been developed to corresponding SBMA specifications (e.g. provisiong MnS, fault supervision MnS), some NRM IRP specifications (e.g. Generic NRM IRP) are reused for SBMA, there are still some IRP specifications haven't produced corresponding SBMA specifications. So it is better to have overview analysis on above 3GPP Interface IRPs and 3GPP NRM IRPs to decide which IRP spepcifications needs to be converted to SBMA specifications in the future.

This contribution is to compare and analyse the Interface IRPs and NRM IRPs which are listed in clause 5 and clause 6 in TS 32.103[2] and the existing management services.

# 4 Detailed proposal

It proposes to make the following changes to TR 28.925[1].

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| **1st Change** |

## 4.X Issue #X: Analysis on IRP specification needs to support SBMA

### 4.X.1 Description

The overview of interface IRP and NRM IRP are illustrated in clause 5 and clause 6 in TS 32.103[24] as follows:



Figure 4.X-1: 3GPP Interface IRPs



Figure 4.X-2: 3GPP NRM IRPs

Some interface IPR specifications (e.g. Basic CM IRP, Alarm IRP) have been developed to corresponding SBMA specifications (e.g. provisiong MnS, fault supervision MnS), some NRM IRP specifications (e.g. Generic NRM IRP) are reused for SBMA, there are still some IRP specifications haven't produced corresponding SBMA specifications.

### 4.X.2 Potential solutions

Following table 4.X.2-1 provides the overview analysis on 3GPP Interface IRPs and the related SBMA specifications.

|  |  |  |
| --- | --- | --- |
| 3GPP Interface IRP specifications | Whether correponding SBMA specification is needed | Status |
| Generic/Common Interface IRPs | Name convention for Managed Objects (32.300) | Yes | The name convetion is used in SBMA. |
| Notification IRP (32.301/2/6) | Yes | SBMA specification is already defined (TS 28.532) |
| Generic IRP (32.31x) | Not needed as it’s management of interface IRPs |  |
| FM related interface IRPs | Alarm IRP (32.111-x) | Yes | SBMA specification is already defined (TS 28.532) |
| Advanced Alarm Management IRP (32.12x) | Yes | Aready covered by FS\_FSEV SID |
| Test management IRP (32.32x) | TBD |  |
| CM related interface IRPs | Basic CM IRP (32.60x) | Yes | SBMA specification is already defined (TS 28.532) |
| Bulk CM IRP (32.61x) | TBD |  |
| Kernel CM IRP (32.66x) | TBD |  |
| PM file format/collection & Trace related Interface IRPs | Performance Management IRP (32.41x) | Yes | SBMA specification is already defined (TS 28.532 and TS 28.550) |
| Performance Measurement collection (32.43x) | Yes | SBMA specification is already defined (TS 28.532 and TS 28.550) |
| Trace Management IRP (32.42x, 32.44x) | Yes | Already reused for SBMA |
| Notification Log IRP (32.33x) | Yes | Aready covered by FS\_eSBMAe SID (see FS\_eSBMAe\_WoP#7) |
| Supporting interface IRPs | File Transfer IRP (32.34x) | Yes | SBMA specification is already defined (TS 28.537 and TS 28.622) |
| Communication Surveillance IRP (32.35x) | Yes | SBMA specification is already defined (TS 28.537,TS 28.622, TS 28.532) |
| Entry Point IRP (32.36x) | Yes | SBMA specification is already defined (5GDMS, TS 28.537, TS 28.622) |
| Other interface IRPs | Partial Suspension of Itf-N IRP (32.38x) | TBD |  |
| Delta synchronization IRP (32.39x) | TBD |  |
| SON related Interface IRPs | Self-Configuration IRP (32.50x) | Yes | SBMA specification for PnC is already defined (TS 28.314/5/6)SBMA specification for SBMA is covered by RANSC WI |
| Software Management IRP(32.53x) | Yes | Covered by Issue #6 in clause 4.6 |

Following table 4.X.2-2 give the overview analysis on 3GPP NRM IRPs to derive which IRP spepcifications needs to be convert to SBMA specifications in the future.

|  |  |  |
| --- | --- | --- |
| 3GPP NRM IRP specifications | Whether correponding SBMA specification is needed | Status |
| FMC model | Umbrella Information Model (28.620) | Yes | Reused for SBMA  |
| Common NRM IRP | Generic NRM IRP (28.621/2/3) | Yes | Reused for SBMA |
| 3GPP Access Network (AN) related NRM IRPs | Generic RAN NRM IRP (28.661/2/3) | Yes | Covered by Issue #4 in clasue 4.3 |
| GERAN NRM IRP (28.654/5/6) | Not applicable |  |
| UTRAN NRM IRP (28.651/2/3) | Not applicable |  |
| E-UTRAN NRM IRP (28.657/8/9) | Yes  | Covered by Issue #4 in clasue 4.3 |
| Generic RAN NRM IRP 28.661/2/3) | Yes | There is a dependency from 28.541 to 28.662 |
| 3GPP Core Network (CN)/IMS related NRM IRPs | CN NRM IRP (28.701/2/3) | Not applicable |  |
| CN NRM IRP (28.704/5/6) | Not applicable |  |
| EPC NRM IRP (28.707/8/9) | Not applicable |  |
| 3GPP H(e)NB related NRM IRPs | HNS NRM IRP (28.671/2/3) | Not applicable |  |
| HeNS NRM IRP (28.674/5/6) | Not applicable |  |
| Service management related NRM IRPs | SuM NRM IRP(28.751/2/3) | TBD |  |
| Supporting NRM IRPs | Inventory Management NRM IRP (28.631/2/3) | Yes  | Covered by Issue #7 in clasue 4.7 and5.4.They are already included in (informative) annex E in TS 28.533 about 5G specifications though still lacking SBMA-compatible solution set |
| Transport Network NRM IRP (28.731/2/3) | TBD |  |
| Signalling Transport NW IF NRM IRP (28.734/5/6) | TBD |  |
| State management data definition IRP (28.624/5&) | Yes | Most of the relevant contents from 28.625 have been copied into 28.622/28.541. |
| Self-Organizing Networks NRM IRPs | SON Policy NRM IRP (28.627/8/9) | Not applicable |  |
| Non-3GPP access interworking NRM IRPs | EPC and non-3GPP access interworking system Network Resource Model (NRM) IRP (28.611/2/6) | Not applicable |  |
| Wireless Local Area Network NRM IRP | WLAN NRM IRP (28.681/2/3) | TBD |  |

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| **End of Changes** |