**3GPP TSG SA WG5 Meeting #141e S5-221384**

**Online, , 15 Nov 2021- 24 Nov 2021**

**Source: Samsung**

**Title: pCR 28.312 ServiceDeploymentExpectation definition**

**Document for: Approval**

**Agenda Item: 6.4.10**

# 1 Decision/action requested

***The group is asked to discuss and approve the proposals.***

# 2 References

None

# 3 Rationale

This contribution provides the concrete ServiceSupportExpectation definition.

# 4 Detailed proposal

|  |
| --- |
| **1st modified section** |

#### 6.4.1 Service Supportt Expectation

6.4.1.1 Definition

Service Support Expectation is an IntentExpectation which can be used to represent MnS consumer's expectations for service deployment.

The Service Support Expectation is defined utilizing the constructs of the generic IntentExpectation <<dataType>> with set of allowed values and concrete dataTypes specified.

Following are the specific allowed values when implemented the IntentExpectation for Service Support Expectation

|  |  |
| --- | --- |
| **Attribute Name**  | **Allowed Values** |
| objectType (CM) | ServiceSupport |
| objectInstance (CM) | DN of the ServiceSupport |

Note: following are the qualifier description for attribute "objectType" and "objectInstance":

- In case of the intent expectation is not for a specific RAN SubNetwork instance or/and MnS consumer have no knowledge of the DN of this RAN SubNetwork instance, the attribute "objectType" needs to be specified;

- In case of the intent expectation is for a specific RAN SubNetwork instance and MnS consumer have the knowledge of the DN of this RAN SubNetwork instance, the attribute "objectInstance" needs to specified.

|  |  |
| --- | --- |
|  |  |
|  |  |

#### 6.4.1.2 ObjectContexts

Following provides the concrete ObjectContexts for Radio Network Expectation based on the common structure of ObjectContext. The properties of the attributes in the following table should be same with properties of ObjectContexts defined in clause 6.2.1.3

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute Name | Support Qualifier | isReadable  | isWritable | isInvariant | isNotifyable |
| pLMNContext | M | T | T | F | F |
| edgeIdenfiticationId | CM | T | T | F | F |
| edgeIdenfiticationLoc | CM | T | T | F | F |

Editor Note: Full List ffs ; edgeIdentification attributes are ffs (probably they are ExpectationContext, need to discuss)

6.4.1.2 ExpectationTargets

Following provides the concrete ExpectationTargets for Service Support Expectation based on the common structure of ExpectationTarget. The attribute properties defined in the table below should be same with the properties defined for ExpectationTargets in section 6.2.1.3

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Attribute Name** | **Support Qualifier** | **isReadable**  | **isWritable** | **isInvariant** | **isNotifyable** |
| dlThptPerUE | O | T | T | F | F |
| UlThptPerUE | O | T | T | F | F |
| reliability | O | T | T | F | F |
| dLLatency | O | T | T | F | F |
| uLLatency | O | T | T | F | F |

6.4.1.2 ExpectationContext

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Attribute Name** | **Support Qualifier** | **isReadable** | **isWritable** | **isInvariant** | **isNotifyable** |
|  |  |  |  |  |  |
| serviceStartTimeTarget | O | T | T | F | F |
| serviceEndTimeTarget | O | T | T | F | F |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| coverageAreaTAList | O | T | T | F | F |
| uEMobilityLevel | O | T | T | F | F |
| resourceSharingLevel | O | T | T | F | F |
| maxNumberofUEs | O | T | T | F | F |
| activityFactor | O | T | T | F | F |
| uESpeed | O | T | T | F | F |
| nROperatingBands |  |  |  |  |  |
| serviceType |  |  |  |  |  |
| delayTolerance |  |  |  |  |  |
| sliceSimultaneousUse |  |  |  |  |  |
| dLMaxPktSize |  |  |  |  |  |
| uLMaxPktSize |  |  |  |  |  |
| energyEfficiency |  |  |  |  |  |
| termDensity |  |  |  |  |  |
| survivalTime |  |  |  |  |  |
| dLDeterministicComm |  |  |  |  |  |
| uLDeterministicComm |  |  |  |  |  |
| positioning |  |  |  |  |  |
| synchronicity |  |  |  |  |  |

#### 6.2.1.4 Attribute definition

| Attribute Name | Documentation and Allowed Values | Properties |
| --- | --- | --- |
| serviceTargets | This provides various service requirements in form of ServiceProfile[x]. Service requirements will be translate into resource requirements for underlying Network Slice Instance/Network Slice Subnet Instancesto satisfy the service requirements.Following are the allowed values:-targetName: "serviceTargets"-targetCondition: "is equal than"-targetValueRange: a list of ServiceProfile attribute as defined in TS 28.541. | type: ExpectationTargetmultiplicity: 1isOrdered: N/AisUnique: N/AdefaultValue: FalseisNullable: True |
| serviceStartTimeTarget | This describes the start time at which the service shall be available. This contributes to the selection of the appropriate edge data network to be used for service deployment.Following are the allowed values:-targetName: "serviceStartTimeTarget "-targetCondition: "is equal than"-targetValueRange: start time stamp | type: ExpectationTargetmultiplicity: 1isOrdered: N/AisUnique: N/AdefaultValue: FalseisNullable: True |
| serviceEndTimeTarget | This describes the end time after which the service shall not be available. This contributes to the selection of the appropriate edge data network to be used for service deployment.Following are the allowed values:-targetName: "serviceEndTimeTarget "-targetCondition: "is equal than"-targetValueRange: end time stamp | type: ExpectationTargetmultiplicity: 1isOrdered: N/AisUnique: N/AdefaultValue: FalseisNullable: True |
| edgeIdenfiticationId | This identifies the edge network where the service need to be deployed. This should be used when the edge identification is known to the consumerFollowing are the allowed values:-targetName: "edgeIdentificationTarget"-targetCondition: "is equal than"-targetValueRange: EDNidentifier as defined in 28.538. | type: ExpectationTargetmultiplicity: 1isOrdered: N/AisUnique: N/AdefaultValue: FalseisNullable: True |
| edgeIdenfiticationLoc | This identifies the location where the service need to be deployed. This should be used when the edge identification is not known to the consumerFollowing are the allowed values:-targetName: "edgeIdentificationTarget"-targetCondition: "is equal than"-targetValueRange: geographical target location. This will take a form of either single latitude & longitude or a TAI | type: ExpectationTargetmultiplicity: 1isOrdered: N/AisUnique: N/AdefaultValue: FalseisNullable: True |

|  |
| --- |
| **End of 1st modified section** |