**3GPP TSG-SA5 Meeting #143-e *S5-223430rev1***

e-meeting, 9 - 17 May 2022

**Source: Ericsson**

**Title: Fix intentFulfillmentInfo attribute definition**

**Document for: Approval**

**Agenda Item: 6.6.3**

# 1 Decision/action requested

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

# 2 References

[1] 3GPP draft TS 28.312: “Management and orchestration; Intent driven management services for mobile networks v1.1.0”.

# 3 Rationale

This contribution proposes to update clause 6.2.1.4 of Rel-17 TS 28.312[1] to fix the intentFulfillmentInfo attribute definition which contains invalid text.

# 4 Detailed proposal

It proposes to make the following changes to TS 28.312[1].

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| **Start of 1st Change** |

#### 6.2.1.4 Attribute definition

| **Attribute Name** | **Documentation and Allowed Values** | **Properties** |
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| userLabel | A user-friendly (and user assignable) name of the intent.  allowedValues: Not Applicable | type: String  multiplicity: 1  isOrdered: F  isUnique: F  defaultValue: None  isNullable: False |
| intentExpectations | It describes the expectations including requirements, goals and contexts (including constraints and filter information) given to a 3GPP system. It states the list of specific outcomes desired to be realized for expectation object(s).  allowedValues: Not Applicable | type: IntentExpectation  multiplicity: 1..\*  isOrdered: F  isUnique: F  defaultValue: None  isNullable: False |
| intentFulfillmentInfo | It describes status of fulfilment of an intent and the related reasons for that status.  allowedValues: Not Applicable | type: FulfillmentInfo  multiplicity: 1  isOrdered: False  isUnique: False  defaultValue: None  isNullable: False |
| expectationFulfillmentInfo | It describes status of fulfilment of an intentExpectation and the related reasons for that status.  allowedValues: Not Applicable | type: FulfillmentInfo  multiplicity: 1  isOrdered: False  isUnique: False  defaultValue: None  isNullable: False |
| targetFulfillmentInfo | It describes status of fulfilment of an expectationTarget and the related reasons for that status.  allowedValues: Not Applicable | type: FulfillmentInfo  multiplicity: 1  isOrdered: False  isUnique: False  defaultValue: None  isNullable: False |
| intentFulfilStatus | It describes the current status of the intent fulfilment result, which is configured by MnS producer and can be read by MnS consumer.  allowedValues: "FULFILLED", “NOT\_FULFILLED | type: ENUM  multiplicity: 1  isOrdered: N/A  isUnique: N/A  defaultValue: None  isNullable: False |
| notFullfilledState | It describes the current progress of or the reason for not achieving fulfilment for the intent, intentExpectation or expectationTarget. It is configured/written by MnS producer and can be read by MnS consumer.  allowedValues: " ACKNOWLEDGED", "COMPLIANT", "DEGRADED", "SUSPENDED", "TERMINATED" "FULFILLMENTFAILED", | type: ENUM  multiplicity: 1  isOrdered: N/A  isUnique: N/A  defaultValue: None  isNullable: False |
| notFullfilledReason | It describes the reasons/observations related to the specific noted notFullfilledState  allowedValues: Not Applicable | type: String  multiplicity: 1  isOrdered: F  isUnique: F  defaultValue: None  isNullable: False |
| intentContexts | It describes the list of IntentContext(s) which represents the constraints and conditions that should apply for the entire intent even if there may be specific contexts defined for specific parts of the intent.  allowedValues: triple of (attribute, condition, value range) | type: Context  multiplicity: \*  isOrdered: False  isUnique: False  defaultValue: None  isNullable: False |
| expectationId | A user-friendly (and user assignable) name of the intentExpectation.  allowedValues: Not Applicable | type: String  multiplicity: 1  isOrdered: False  isUnique: False  defaultValue: None  isNullable: False |
| expectationVerb | It describes the characteristic of the intentExpectation and is the property that describes the types of intentExpectations. Examples of verbs and their related types of expectation are   * Deliver: DeliveryIntentExpectation, e.g. Deliver a RAN network, Service, Slice, function * Ensure: AssuranceintentExpectation, e.g. of a metric, PM, CM .values   allowedValues: Deliver, Ensure | type: String  multiplicity: 1  isOrdered: False  isUnique: False  defaultValue: None  isNullable: False |
| expectationObject | It describes the expectation objects of the IntentExpectation that are required to be applied on.  allowedValues: Not Applicable | type: ExpectationObject  multiplicity: 1  isOrdered: False  isUnique: False  defaultValue: None  isNullable: False |
| objectType | It describes the type of expectation object of the IntentExpectation that are required to be applied on. It can be class name of the managed object.  allowedValues: see scenario specific Intent Expectation | type: Enum  multiplicity: 1  isOrdered: False  isUnique: False  defaultValue: None  isNullable: False |
| objectInstance | It describes an specific object instance (e.g. instance of managed object) to which the intentExpectation should apply.  allowedValues: Not Applicable | type: DN  multiplicity: 1  isOrdered: False  isUnique: False  defaultValue: None  isNullable: False |
| objectContexts | It describes the list of ObjectContext(s) which represents the constraints and conditions to be used as filter information to identify the object(s) to which a given intentExpectation should apply. Note there may be other constraints and conditions defined either for the entire intent, for the specific intentExpectation or for the expectationTarget of the considered intentExpectation.  The concrete ObjectContext depends on the ExpectationObject, which is defined in clause 6.2.2. All the concrete ObjectContexts follow the common structure of ObjectContext | type: Context  multiplicity: \*  isOrdered: False  isUnique: False  defaultValue: None  isNullable: False |
| expectionTargets | It describes the list of ExpectationTarget(s) which represent specific outcomes on the metrics that characterize the performance of the object(s) or some abstract index that expresses the behavior of the object(s) that are desired to be realized for a given intentExpectation.  The concrete ExpectationTarget depends on the ExpectationObject, which is defined in clause 6.4. All the concrete ExpectationTargets follow the common structure of ExpectationTarget | type: ExpectationTarget  multiplicity: 1..\*  isOrdered: False  isUnique: False  defaultValue: None  isNullable: False |
| expectationContexts | It describes the list of context(s) which represents the constraints and conditions that should apply for a specific intentExpectation.  Note there may be other constraints and conditions defined for the entire intent or for specific parts of the intentExpectation.  allowedValues: depends on Expectation Object in the IntentExpectation | type: Context  multiplicity: 1..\*  isOrdered: False  isUnique: False  defaultValue: None  isNullable: False |
| targetName | It describes the name of the Expectation of the expectation target which represents specific outcomes on the metrics that characterize the performance of the object(s) or some abstract index that expresses the behavior of the object(s) that are desired to be realized for a given intentExpectation.allowedValues: depends on ExpectationObject in the IntentExpectation | type: String  multiplicity: 1  isOrdered: False  isUnique: False  defaultValue: Null  isNullable: True |
| targetCondition | It expresses the limits within which the targetName is allowed/supposed to be  allowedValues: is equal to; is less than; is greater than: "is within the range" ; "is outside the range" c | type: Enum  multiplicity: 1  isOrdered: False  isUnique: False  defaultValue: "is equal to"  isNullable: False |
| targetValueRange | It describes the range of values that applicable to the targetName and the TargetCondition.  allowedValues: depends on the targetName | type: Real  multiplicity: 1  isOrdered: False  isUnique: False  defaultValue: Null  isNullable: True |
| targetContexts | It describes the list of constraints and conditions that should apply for a specific expectationTarget. Note there may be other constraints and conditions defined for the entire intent or the intentExpectation.  allowedValues: Not Applicable | type: Context  multiplicity: 1..\*  isOrdered: False  isUnique: False  defaultValue: None  isNullable: False |
| contextAttribute | It describes a specific attribute of or related to the object or to characteristics thereof (e.g. its control parameter, gauge, counter, KPI, weighted metric, etc) to which the expectation should apply or an attribute related to the operating conditions of the object (such as weather conditions, load conditions, etc). | type: String  multiplicity: 1  isOrdered: False  isUnique: False  defaultValue: Null  isNullable: True |
| contextCondition | It expresses the limits within which the ContextAttribute is allowed/supposed to be  allowedValues: is equal to; is less than; is greater than; "is within the range" ;"is outside the range" . | type: Enum  multiplicity: upto 1  isOrdered: False  isUnique: False  defaultValue: "is equal to"  isNullable: False |
| contextValueRange | It describes the range of values that applicable to the ContextAttribute and the ContextCondition.  AllowedValue: depends on the contextAttribute | type: Real  multiplicity: 1  isOrdered: False  isUnique: False  defaultValue: Null  isNullable: True |

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| **End of change** |