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| Title:\* | TR0053-Subscription & Notification |
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| Intended purpose of  document:\* | Decision  Discussion  Information  Other <specify> |
| Impacted other TS/TR(s) |  |
| Decision requested or recommendation:\* | <A concise statement of the decision required or the recommended action to be taken> |
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# Introduction

SDS-2019-0378R02 (TR0053-Subscription\_&\_Notification) propose the following potential requirements:

1. The oneM2M system shall support deferred notification for some or all of the notification receivers.
2. The oneM2M system shall support sending deferred notifications with a subsequent check that the event notification criteria are still met after the deferral period is complete.(e.g. is met after the specified time frame).

This contribution propose a potential solution by adding a new attribute *deferredNotification* under the subscription resource, This attribute has a value of the deferral period and a list of deferred notification receiver. The hosting CSE shall sending deferred notification with a subsequent check that the event notification criteria are still met after the deferral period to the deferred notification receiver.

### -----------------------Start of change 1-------------------------------------------

6.x.4 Potential Solution

### 6.x.4.x Solution x: Deferred Notification

### 6.x.4.x.1 Definition of a new attribute for *subscription* Resource

Table 6.x.4: A new Attributes of *<subscription>* resource

| Attributes of *<subscription>* | Multiplicity | RW/  RO/  WO | Description |
| --- | --- | --- | --- |
| *deferredNotification* | 0..1 | RW | This attribute (notification policy), if set, indicates that the notification shall be deferred for a period of time before sending to the receivers. This attribute contains a value of the deferred period and a list of deferred notification receivers (notificationURIs). The hosting CSE shall defer the notification only for the listed receivers for the deferred period, and check whether the event notification criteria are still met after the deferred period. If yes, the hosting CSE shall send the deferred notification to the list of the receivers. |

### 6.x.4.x.2 Example Procedure for Deferred Notification



step1: Subscriber send the create <subscription> request with *notificationURI=* *Notification Recevier #1 and Notification Recevier #2*, the *deferredNotification* including *deferred period* and *deferred notificationURI*, e.g., *deferred Period=10s, deferred notificationURI=#2*;

step2: The hosting CSE create <subscription> resource with *deferred Period=10s, deferred notificationURI=#2*;

step3: The hosting CSE send create <subscription> response;

step4: When the notificationCriteria is met, the hosting CSE sent notify request to the Notification Recevier #1

step5: After the *deferral period,* the hosting CSE checks if the *notificationCriteria* are still met

step6: If the *notificationCriteria* are still met, the hosting CSE sends the notification to the Notification Receiver#2

### -----------------------End of change 1---------------------------------------------