**3GPP TSG-SA1 Meeting #95e *S1-213209***

**Electronic Meeting, 23 August –2 September 2021** *(revision of S1-213176r3)*

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| *CR-Form-v12.1* |
| **CHANGE REQUEST** |
|  |
|  |  | **CR** | **0001** | **rev** | **-** | **Current version:** |  |  |
|  |
| *For* [***HE******LP***](http://www.3gpp.org/3G_Specs/CRs.htm#_blank)*on using this form: comprehensive instructions can be found at* [*http://www.3gpp.org/Change-Requests*](http://www.3gpp.org/Change-Requests)*.* |
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| ***Proposed change affects:*** | UICC apps | **x** | ME | **x** | Radio Access Network |  | Core Network | **x** |

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| ***Title:***  | MSGin5G store-and-forward modifications  |
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| ***Source to WG:*** |  |
| ***Source to TSG:*** |  |
|  |  |
| ***Work item code:*** |  |  | ***Date:*** |  |
|  |  |  |  |  |
| ***Category:*** | **F** |  | ***Release:*** |  |
|  | *Use one of the following categories:****F*** *(correction)****A*** *(mirror corresponding to a change in an earlier release)****B*** *(addition of feature),* ***C*** *(functional modification of feature)****D*** *(editorial modification)*Detailed explanations of the above categories canbe found in 3GPP [TR 21.900](http://www.3gpp.org/ftp/Specs/html-info/21900.htm). | *Use one of the following releases:Rel-8 (Release 8)Rel-9 (Release 9)Rel-10 (Release 10)Rel-11 (Release 11)…Rel-15 (Release 15)Rel-16 (Release 16)Rel-17 (Release 17)Rel-18 (Release 18)* |
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| ***Reason for change:*** | SA6 sent SA1 an LS (S1-213197/S6-211831) to clarify the following MSGin5G requirement:[R-5.1.2-005] The MSGin5G Service shall support storage of a message if a UE is unavailable (disconnected or power off) for future delivery once the UE becomes available.SA6 asks for clarification about the requirement as it pertains to:1. Can the sender provide per-message information that can be leveraged for store-and-forwarding? If yes, what information should the sender provide to control the message handling (e.g. an indication of whether the message can be buffered, how long the message is valid, or a priority of the message)?
2. Can the receiver pre-configure information (e.g. preference to opt in/out) about store-and-forward?
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| ***Summary of change:*** | Add a service requirement for MSGin5G Service to specify the sender may provide per-message information. |
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| ***Consequences if not approved:*** | SA6 does not complete the Rel-17 5GMARCH exception work in time. |
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| ***Clauses affected:*** |  |
|  |  |
|  | **Y** | **N** |  |  |
| ***Other specs*** |  | **x** |  Other core specifications  | TS/TR ... CR ...  |
| ***affected:*** |  | **x** |  Test specifications | TS/TR ... CR ...  |
| ***(show related CRs)*** |  | **x** |  O&M Specifications | TS/TR ... CR ...  |
|  |  |
| ***Other comments:*** |  |
|  |  |
| ***This CR's revision history:*** |  |

---Start of the Change---

### 5.1.2 Requirements

[R-5.1.2-001] The MSGin5G Service shall support UE sending and receiving a text or data message with end-to-end latency less than [500] ms.

NOTE 1: Initial connection activation latencies may be longer depending on receiving UE power saving states, paging, etc.

[R-5.1.2-002] The MSGin5G Service shall support variable size of payload of a text or data message with maximum [2048] bytes, and support segmented transmission if the content is large than the maximum payload length of a message.

[R-5.1.2-003] The MSGin5G Service shall support delivery of a message to a specific application in the terminated UE. This message contains the contents that can be handled by the specific application.

[R-5.1.2-004] The MSGin5G Service shall support acknowledgement of delivery status (success, failure) of a message and indication of reason if the delivery is failed.

[R-5.1.2-005] The MSGin5G Service shall support storage of a message if a UE is unavailable (disconnected or power off) for future delivery once the UE becomes available.

[R-5.1.2-006] The MSGin5G Service shall support a server in the network triggering the UE to perform an action (e.g. wake up and establish a PDN connection).

[R-5.1.2-007] The MSGin5G Service shall support a UE sending and receiving messages via a MSGin5G Gateway

NOTE 2: The connection between the UE and the MSGin5G Gateway can be 3GPP or non-3GPP access (e.g. WLAN.)

[R-5.1.2-008] The MSGin5G Service shall support the mobility of a UE (i.e. the UE can still send/receive messages when it changes the location of network access).

[R-5.1.2-009] The MSGin5G Service shall support per-message information for store and forward, e.g. whether the message can be buffered or how long the message is valid.

---End of the Change---