**3GPP TSG-WG SA4 Meeting #130 *S4-242121***

**Orlando, USA, 18th – 22nd Nov, 2024**

Title: [DRAFT] LS on Time Synchronization for MBS

Response to: —

Release: Rel-19

Work Item: FS\_AMD

Source: [Qualcomm to be] SA4

To: SA2

Cc:

**Contact Person:**

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Attachments: -

# 1. Overall Description

SA4 is in the process of concluding a feasibility study on Advanced Media Delivery. One Key Issue is a systematic analysis of MBMS User Services features and their potential relevance for MBS. In this context it was identified that MBMS in TS 26.346 supports time Synchronization between the BM-SC and MBMS UEs. This is needed for user service protocols, such as the schedule in the user service description or the File Delivery Table (FDT), both containing NTP encoded time values.

In order to support these user service functionalities consistently, time synchronization between the MBS client and the network generating this data is needed. SA4 considers time synchronization may be fully supported by referencing the required functionality in TS 26.346 [16] in clause 4.6. However, this requires that an SNTP server is available on the network and candidate solutions to support the network functionalities (i.e. the SNTP server) for this feature include

* the addition of a function in the MBSTF, or
* the addition of a function in the MBSF, or
* a new network entity shared between all functions requiring time synchronization.

Before concluding on the appropriate solution, SA4 would kindly ask if SA2 is aware of a network entity that can be used by UEs and network functions for time synchronization, and the reference points are defined. If this is not available, would SA2 provide such a functionality. If not available or foreseen to be specified, we consider to extend the MBSF or MBSTF to add this functionality as part of the MBS User Service architecture in TS 26.502.

# 2. Actions

**To SA2 group.**

**ACTION:** SA4 asks SA2 to take the above into account and provide feedback if any.

**3. Date of Next TSG SA WG4 Meetings:**

TSG-SA4 Meeting #131 17th – 21st Jan, 2025 Geneva, CH

TSG-SA4 Meeting #131-bis-e 11th – 17th Apr, 2025 Online