

# TEI19 Discussion on On-demand broadcast of GNSS assistance data

China Mobile

# Introduction

## Background

In pre-R18 and R18 of eLCS, the procedures of GNSS assistance data broadcast and GNSS assistance data collection are respectively defined in clause 6.14 and clause 6.15 of TS 23.273, as presented in figure 1 below.

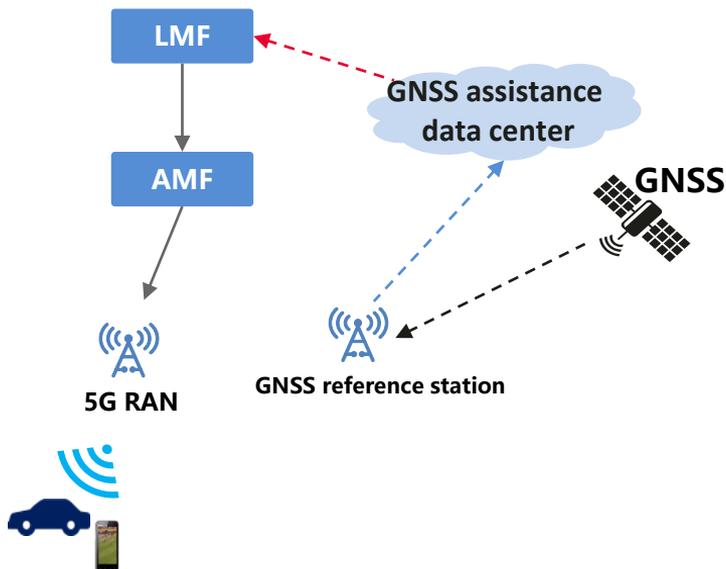


Figure.1 Broadcast of GNSS assistance data

## Existing Mechanism

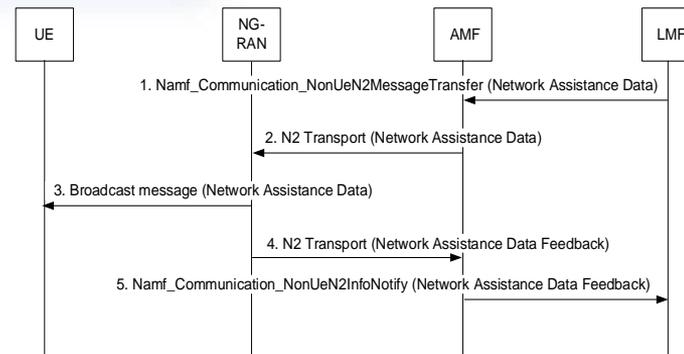


Figure 6.14.1-1: Broadcasting Network Assistance Data

As specified in clause 6.14.1 of TS 23.273, the procedure is not associated with any UE location session, after LMF obtained the GNSS assistance data, the LMF may send it to AMF, which further forwards to the target NG-RAN for broadcasting, no matter whether there are target UEs in the broadcasting area.

## Motivation

However, without being aware of whether there are UEs subscribed with GNSS assistance data in a target area, arbitrary broadcasting may cause energy and air-interface resource wasting, and even AMF signaling overload especially in early stage of feature deployment ( i.e., there are not many subscribed users in the whole PLMN).

Therefore, considering energy/resources efficiency and AMF signaling pressure, the current procedure can be improved with minor enhancement.

# TEI19 objective and Expected enhancement

## Objective

- Support of on-demand GNSS assistance data broadcasting by considering whether target UE(s) with corresponding assistance data subscription has visited the target area(s).

Note 1: This target area for on-demand GNSS assistance data broadcasting control may be per Registration Area level (e.g., TAI or TAI list).

Note 2: This work has no RAN impacts and may require 0.25 TU to discuss and agree the corresponding CR.

## Expected enhancement

Impacted existing TS/TR			
TS/TR No.	Description of change	Target completion plenary#	Remarks
TS 23.273	Enhance the call flow of GNSS assistance data broadcast to specify LMF subscribes to AMF for the on-demand broadcasting in the target service area.	<i>TBD</i>	<i>This will be handled as "TEI19".</i>
TS 23.502	Potential enhancement on AMF event exposure subscription and notification between AMF and LMF for the on-demand GNSS assistance data broadcasting.	<i>TBD</i>	<i>This will be handled as "TEI19".</i>

# Thanks!