

Source: SA1

Title: New WI on A-GNSS concept to extend A-GPS to include GALILEO

Document for: Approval

Agenda Item: 7.1.3

Work Item Description

Toward A-GNSS concept

To extend A-GPS to include GALILEO and other satellite navigation systems.

1 3GPP Work Area

x	Radio Access
x	Core Network
x	Services

2 **Linked work items**

32023 Location Services Enhancements

3 **Justification**

- The Cell-ID or E-OTD methods provide high service availability but limited service accuracy.
- The A-GPS method provides high service accuracy but service availability could be improved, especially when considering the obstacles masking the signals of part of the GPS satellites in urban environments.

Other satellite positioning systems will be developed in the near future. It has been highlighted the advantages of enlarging the Assisted GPS concept to Assisted Global Navigation Satellite Systems, and particularly to the GALILEO system, since it allows to improve the lacks mentioned here above.

It is then important for the 3GPP specifications to open the door to these other systems.

4 **Objective**

To include the capability of assisted GALILEO into 3GPP.

5 **Service Aspects**

The current work item proposes to improve the availability and the accuracy of the location services.

6 **MMI-Aspects**

None

7 **Charging Aspects**

Similar to those for A-GPS technology.

8 Security Aspects

Similar to those for A-GPS technology.

9 Impacts

Affects:	UICC apps	ME	AN	CN	Others
Yes		X	X	X	
No	X				
Don't know					

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Expected Output and Time scale (to be updated at each plenary)

New specifications						
Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments
NONE						
Affected existing specifications						
Spec No.	CR	Subject		Approved at plenary#	Comments	
TS 22.071		Stage 1 Description LCS		#25	S1	
TS 23.271		Functional Stage 2 Description of LCS		#26	S2	
TS 25.331		Radio Resource Control (RRC) - Protocol Specification		#27	R2	
TS 25.123		Requirements for support of radio resource management (TDD)		#27	R4	
TS 25.133		Requirements for support of radio resource management (FDD)		#27	R4	
TS 29.002		Mobile Application Part (MAP) Specification		#27	N4	
TS 24-080		Mobile Radio Interface Layer 3 – Supplementary Services Specification		#27	N4	
TS 24-008		Mobile radio interface Layer 3 specification; Core network protocols; Stage 3		#27	N1	
TS 44.031		Location Services (LCS); Mobile Station (MS) - Serving Mobile Location Centre (SMLC) Radio Resource LCS Protocol (RRLP)		#27	G2	
TS 49.031		Location Services (LCS); Base Station System Application Part LCS Extension (BSSAP-LE)		#27	G2	
TS 44-118		Mobile radio interface layer 3 specification, Radio Resource Control (RRC) protocol; lu mode		#27	G2	

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Work item raporteurs

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Work item leadership

SA-1

13 Supporting Companies

FRANCE TELECOM, ALCATEL, QUALCOMM, ERICSSON

14 Classification of the WI (if known)

	Feature (go to 14a)
X	Building Block (go to 14b)
	Work Task (go to 14c)

14a The WI is a Feature: List of building blocks under this feature

(list of Work Items identified as building blocks)

14b The WI is a Building Block: parent Feature

32023 Location services enhancements.

14c The WI is a Work Task: parent Building Block

(one Work Item identified as a building block)