



Pilot project on the design, implementation and execution of the transfer of GNSS data during an E112 call to the PSAP

Contract No 440/PP/GRO/PPA/15/8308

5.1 *bis* Technical and User Requirements Austria





Reference: Template_compliance_TS_UR_Notrufnoe

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Compliance between the technical solution implemented and the HELP112 User Requirements not related to the location estimate process (response time requirements are included in order to show the impact of the transmission method on the delay to transmit the location data from the handset to the PSAP).

In the following table, keep the columns related to the technical solutions tested in your pilot, and then for each technical solution tested and each requirement, fill the table with:

- “Yes” if compliant or “No” if not compliant.
- A justification of the compliance or the reason why the technical solution is not compliant with the User Requirement.

Id	Requirement description	Technologies tested				AML dataSMS + User Plane Network Based Location Solution
		AML dataSMS	AML dataSMS roaming	AML SMS	AML HTTPS	
ACCE_001	The HELP112 solution shall be available for the widest range of handset types.	Yes, Tested with 3 handsets, Was achieved disabling the data channel	-	-	Yes, Tested with 3 handsets	-
ACCE_002	The process to initiate the estimate and transmission of the caller location to the PSAP shall be initiated without the need for caller intervention.	Yes, Initiation starts without caller's intervention.	-	-	Yes, Initiation starts without caller's intervention.	-



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ACCU_001	The precision of the estimated location shall be transmitted in metres.	Yes, Radius is transmitted in meters.	-	-	Yes, Radius is transmitted in meters.	-
ACCE_004	The location process and the transmission of location data to the PSAP shall not interfere with the voice call.	Yes, AML transmitting is done in the background and doesn't interfere with the voice call /no user interaction necessary	-	-	Yes, AML transmitting is done in the background and doesn't interfere with the voice call /no user interaction necessary	-
AML_001	HELP112 shall study the possibility to transmit extra data related to the caller's location in addition to the ones already expected in the current AML solution, such as Cell-ID, Radio Measurement Report, floor, and altitude when available.	Yes – not yet implemented, but under consideration by Google for AEL	-	-	Yes – not yet implemented, but under consideration by Google for AEL	-



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AML_002	HELP112 shall examine ways to configure the AML solution to be triggered when an emergency SMS is sent.	Yes – not yet implemented, but under consideration by Google for AEL	-	-	Yes – not yet implemented, but under consideration by Google for AEL	-
BATT_001	The HELP112 solution shall ensure that in cases of low battery power level, priority shall be given to the emergency voice call.	Yes – implemented by Google AEL	-	-	Yes – implemented by Google AEL	-



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BATT_002	In the HELP112 solution, the battery power level needed and expected to use either A-GNSS, stand-alone GNSS, or WiFi without GNSS, shall be different for each type of location solution, and dependant on the battery capacity of the handset.	No, Fixed percent minimum battery level selected to activate location estimation function using all positioning methods, set by Google	-	-	No, Fixed percent minimum battery level selected to activate location estimation function using all positioning methods, set by Google	-
CHAR_001	The HELP112 solution shall ensure that the data channel is used for the processes of estimating and transmitting the location if and only if the data connection is already activated on the handset.	N/A	-	-	Yes, (Exception: Paired WIFI Networks maybe used)	-



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CHAR_002	The HELP112 solution shall ensure that if a SMS is used to transmit the location information to the PSAP, it shall be recognised as an E112 SMS by the network and shall be free of charge for the caller.	No, As to our knowledge the currently used gateway has no special designated meaning for providers.	-	-	No, the carrier cannot/does not differentiate between TCP Connections from/to our servers and others.	-
LOCA_001	The HELP112 solution shall estimate the caller location by the GNSS capabilities of the handset if available and if the battery power level is sufficient.	Yes, If GNSS was available and the best location provider	-	-	Yes, If GNSS was available and the best location provider	-



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LOCA_002	The HELP112 solution shall make use of, trial and demonstrate the advantages of estimating the caller location by EGNOS and Galileo.	N/A	-	-	N/A	-
LOCA_003	The HELP112 location solution shall combine multiple positioning methods, when possible, in order to fit the requirements as widely as possible.	Yes, Handsets try to use best available positioning method: GNSS, WiFi and Cell-ID	-	-	Yes, Handsets try to use best available positioning method: GNSS, WiFi and Cell-ID	-



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LOCA_004	In the case that a location method fails to provide accurate caller location with regards to the accuracy requirements, the HELP112 solution shall ensure that a fall-back location solution would be available to provide a more accurate caller's location than the one estimated by Cell-ID.	Yes*, N/A** *Only if such an location method exists (eg. Wifi) **Service Provider Location methods have not been tested	-	-	Yes*, N/A** *Only if such an location method exists (eg. Wifi) **Service Provider Location methods have not been tested	-
PRES_001	The caller location has to be received on the GIS available at the call taker's terminal that has answered the call.	Yes, Caller location is displayed on the call taker's workstation	-	-	Yes, Caller location is displayed on the call taker's workstation	-



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PRES_002	No additional task shall be assigned to the call taker to get caller's location through the HELP112 solution.	No, The call taker has to open a web link and sign in in order to display the location	-	-	No, The call taker has to open a web link and sign in in order to display the location	-
PRES_003	The caller's location could either be pushed from the HELP112 solution to the call taker CAD, or pulled by the call taker CAD.	Yes, the availability status of AML information is pushed to the call taker.	-	-	Yes, the availability status of AML information is pushed to the call taker.	-
PRES_004	The caller's location data shall use the WGS84 coordinate system.	Yes, It is received and stored in WGS84 coordinate.	-	-	Yes, It is received and stored in WGS84 coordinate system.	-



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PRIV_001	The HELP112 solution shall ensure that the caller location is available only to respond to emergency calls. Privacy restrictions for uses not related to emergency calls shall be maintained and strictly enforced.	Yes AEL only triggered by country defined emergency codes and sent to PSAP which is permitted access to location information on emergency calls	-	-	Yes AEL only triggered by country defined emergency codes and sent to PSAP which is permitted access to location information on emergency calls	-
PRIV_002	Storage of caller location at the time of the emergency call in the PSAP shall be in agreement with the PSAPs operating policy and the national data protection legislation.	Yes AEL location is stored in the same way as existing network locations	-	-	Yes AEL location is stored in the same way as existing network locations	-



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PRIV_003	The caller's data storage shall be protected from unauthorized access. Only PSAP and legal authorities shall have access to the caller's data.	Yes Messages are only stored within the PSAP on a private server	-	-	Yes Messages are only stored within the PSAP on a private server	-
PRIV_004	The caller's location data obtained during an emergency call shall not be stored on the handset during or after the call.	Yes – messages are not stored on handset	-	-	Yes – messages are not stored on handset	-
PRIV_005	The caller shall not be able to suppress or degrade the availability of the location information for a 112 call.	Yes AEL functionality turns on GNSS and/or WiFi during emergency call without user interaction	-	-	Yes AEL functionality turns on GNSS and/or WiFi during emergency call without user interaction	-



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RESP_001	The response time shall be less than 5 seconds for a Cell-ID location solution.	No AEL takes about 20 seconds in order to gather the best location information, N/A, Conventional location based methods have not been tested	-	-	No AEL takes about 20 seconds in order to gather the best location information, N/A, Conventional location based methods have not been tested	-
RESP_002	The response time shall be less than 30 seconds for any solution that provides more accurate and precise caller location and satisfies the precision and accuracy requirements.	Yes, All locations were received within 30 seconds or less	-	-	Yes, All locations were received within 30 seconds or less	-



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ROAM_001	HELP112 shall study ways to be robust to a caller from a home HELP112 enabled country A that use the E112 service in a visited HELP112 enabled country B.	N/A	-	-	N/A	-
SECU_001	The HELP112 solution shall always be available to the entities authorized to access it. For example it must remain available even if wide-scale attacks are performed, e.g. denial of service, or access with appropriate privileges is gained that can make the service unavailable or unusable.	Yes, Password protected internal portal on high available server infrastructure	-		Yes, Password protected internal portal on high available server infrastructure	-



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SECU_002	HELP112 solution shall be protected from attacks that attempt to block the HELP112 solution to specific callers or to take advantage or profit from transmitting the location to other sources.	No, basic defence measurements have been implemented on PSAP side but using Google AEL solution 100% control is not possible	-		No, basic defence measurements have been implemented on PSAP side but using Google AEL solution 100% control is not possible	-
TRAN_001	HELP112 shall study the possibility of using the IP channel to transmit the caller's location data to the PSAP.	N/A	-	-	N/A	-



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TRAN_002	If the data connectivity is not available or is deactivated on the caller's handset, HELP112 solution shall ensure that a fall-back solution that doesn't use the data channel is available to transmit the location data to the PSAP.	N/A	-		Yes – can use pre-paired WIFI networks	-