eCall status in SA1

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Presentation outline

- What is SA1 and what does it do?
- Current activity to support eCall
- Issues and questions
- Conclusions

Who is SA1 and what does it do?

- SA1 is the service requirements working group of the third generation partnership project (3GPP)
- SA1 (also known as S1) reports to the technical specification group services and system aspects (TSG SA)
- SA1 defines the service requirements for the 3GPP system i.e. Using the ITU terminology, SA1 develops stage 1 technical specifications

SA1 mandate

- SA1 responsibilities are:
  - Definition of service and feature requirements
  - Framework (architecture) for services
  - Specification of services (stage 1)
  - Specification of service capabilities (stage 1)
  - Identification of technical and operational issues to meet market requirements
  - Charging and accounting requirements.
- Note that the market requirements are received by the Market Representation Partners (MRP) as well as by the 3GPP members.

SA1 and "external" requirements

- SA1 (and 3GPP in general) work is contribution driven
- SA1 (and 3GPP in general) strives to define globally applicable solutions i.e. Specification work to cater for regional variations, although allowed, is not encouraged
- Development of technical specifications in SA1 (and 3GPP in general), unlike standards institutes cannot be mandated (although the partners and the members strive to fulfill every request).

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The story so far for eCall

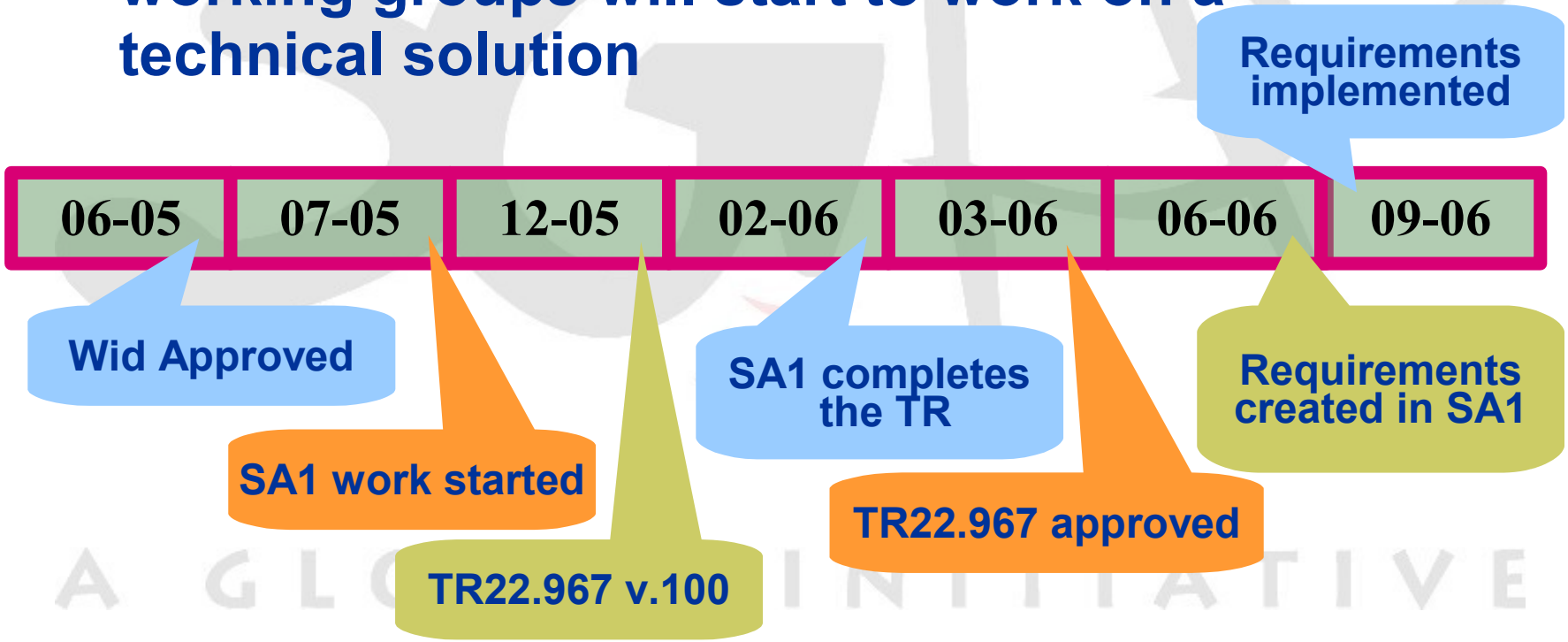
- ETSI (one of the partners of 3GPP) has requested via the MSG that SA1 develops requirements for the support of eCall
- In June 2005, a work item on eCall has been approved by TSG SA
- SA1 has started in July 2005 to develop a technical report TR 22.967

Future plans

- TR 22.967 (Transferring of Emergency Call Data) is currently more than 50% complete and will be presented for information at TSG SA-30 in December 2005
- SA1 will continue to work on the TR in SA1-31 meeting and aims to complete the document
- The TR will be sent for approval at TSG SA-31 (March 2006)

Future plans

- Once the TR is approved, SA1 will prepare the necessary change requests to the existing stage 1 specifications and the other 3GPP working groups will start to work on a technical solution



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The 4 seconds issue

ETSI MSG requires that the MSD be available to the PSAP operator within 4 seconds of it being sent by the eCall mobile.

- **SA1 is not clear on this requirement in particular:**
  - **Why 4 seconds?**
  - **When does the timer starts? At call set up, once the call is answered**
- **The current understanding is that 4 seconds are counted from the call set up time i.e. The time the eCall mobile needs to register on the network is not counted.**

Terminal capabilities

ETSI MSG requires that the terminal shall be dual mode GSM/GPRS and UMTS (WCDMA) in order to ensure full European coverage during the lifetime of the car

- **Since emergency calls in the PS domain are only fully supported in Rel-7, SA1 would like to understand the rationale for requiring that the terminal supports GPRS**

Timescales

ETSI MSG requires that 3GPP should aim at finishing the specification by December 2005.

- **SA1 is making good progress however, SA1 will not be able to complete the study by the deadline given**
- **At present it is expected that the report is approved (and then published) after TSG SA meeting 31 (March 2006).**
- **After the report is completed other working groups in 3GPP will need to devise a technical solution, this could take another 6 months.**

Roaming outside the EU

ETSI MSG requires that the solution shall work on all European GSM/3G networks (pan European solution, full roaming capability)

- **SA1 would like to have a clarification on whether it is required that the service is also available in networks not supporting eCall (e.g. Countries outside the EU) or not.**
- **A decision on this point is important because it may have profound implications on the choice of the most appropriate technical solution.**

Location information

- SA1 understand that the eCall data is intended to supplement a normal E112 emergency call.
- It is understood that the eCall system will deliver location information generated by in-car systems.
- Does that mean that the operator is exempt from the requirement to deliver Location Information for eCall E112 emergency calls?

Current use cases

- The following use cases are being considered by 3GPP:
  - Automatic eCall, the driver is able to speak
  - Automatic eCall, silent call
  - Manual eCall, driver is able to speak
  - Manual eCall, silent call
  - False eCall
- Are there missing use cases?

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Conclusions

- The MSG deadline shall not be met
- Several open questions remain to be addressed urgently in order to complete the study:
  - is the operator is exempt from the requirement to deliver Location Information for eCall E112 emergency calls?
  - From when and up to when are the 4 seconds required for the MSD to be made available measured?
  - What are the precise requirements for availability of eCall capabilities while roaming?

Conclusions

- SA1 would like to have an endorsement of the following preliminary deductions
  - eCall should be based on Circuit Switched rather than Packet Switched calls
  - eCall shall be designed to require no changes to existing 3GPP standards
  - The eCall mobile cannot be allowed to generate traffic on the network until an emergency situation is detected
  - Once an eCall is established it can only be released by the PSAP operator

– End of the presentation –