

TSG-SA Working Group 1 (Services) meeting #3
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TSG CN SS ad hoc
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To: TSG SA WG1

**Liaison Statement on Comments on
3GPP specification 22.135, Version 1.0.0, Service Aspects of Multicall**

The TSG CN SS ad hoc meeting have reviewed during their first meeting the 3GPP specification 22.135, Version 1.0.0, Service Aspects of Multicall. TSG CN SS ad hoc kindly ask TSG SA WG1 to consider the following comments during the further development of this specification.

1. TSG CN SS ad hoc want to point out that the for the limitation of Multicall to only one speech call additional functions of the core network are needed. However this is not an issue which will cause any delay in the specification work. However it was discussed in TSG CN SS ad hoc whether it may be more appropriate to allow from network viewpoint the full flexibility (i.e. no limitation of the number of speech calls) and to give the subscriber the possibility to restrict the number of any call type locally on the MS by pre-programming. It is then the task of the MS to reject incoming calls if the number of ongoing calls of this type is reached. However for this again it needs to be considered, whether it causes unnecessary waste of resources on the radio access. It is worth mentioning that due to future applications with regard to the speech transmission (e.g. voice over IP) it might happen, that neither the network nor the MS may recognise a call request as a speech call.
2. TSG CN SS ad hoc had problems to understand the concept of the shared bearer in section 4.2 with the reference to GSM supplementary services. It is the understanding of TSG CN SS ad hoc that the GSM supplementary service provide no mechanism to share a traffic channel between several circuit switched calls, i.e. to have simultaneous communications.
Supplementary services shall rather be understood as a mechanism for the management of call resources if these resources (in GSM one traffic channel) are engaged. Therefore the usage of the supplementary service concept for comparison with the Multicall feature was considered as not suitable.
3. The description of the Multicall scenarios in section 4.3 assumes the presence of GSM supplementary service like call waiting and call hold. TSG CN SS ad hoc would like to point out that these services are optionally for a subscriber, i.e. the presence of these services are not guaranteed. Therefore it is proposed that this specification shall describe in a first instance the operation of Multicall for the situation where no supplementary service is available.
From Core Network viewpoint this is important as well, since before supplementary service interactions are implemented, first the Multicall specific procedures need to be defined independently.
Furthermore it is highlighted that the interaction scenarios with other services (including supplementary service) shall only be described in the appropriate sections (section 6).
4. It is common for a stage 1 specification to define the subscription categories provided to a subscriber in more detail, e.g. possible values or ranges of provision data. Therefore it is proposed that this specification shall define a maximum value or a possible range for the maximum number of simultaneous calls for a served subscriber. This will be important for the design of the parameters in the protocols in responsibility

of TSG CN. The upper limit of the maximum number of simultaneous calls was considered as a important service issue as well.

Furthermore it is proposed to clarify in the document that if the multicall feature is not provided, that the maximum number of simultaneous calls shall be one. This is important to allow backward compatibility with 2nd generation systems.

5. TSG CN SS ad hoc had problems to understand the concept of Multicall Reconfiguration (section 5.3). The scenarios described in this section were understood as the normal call handling scenarios with regard to Multicall, i.e. add one call or release one call. Furthermore the scenario of Hold and Retrieval was considered as normal operation of the Call Hold supplementary service.
6. It is proposed to use the term "traffic channel" more carefully, e.g. for the busy definition. It is the understanding of TSG CN SS ad hoc that there are two types of "traffic channels", the physical one, provided by the RAN and logical ones created by subdividing the physical channel. It may happen that a subscriber is considered busy if the number of allowed logical traffic channels is reached, but the physical traffic channel still has additional capacity.

TSG CN SS ad hoc have recognised that the definition of supplementary services in conjunction with the Multicall feature need to be considered very carefully. Therefore it is suggested that the TSG CN SS ad hoc is involved in the discussion on the Multicall feature very early, to be able to provide the necessary mechanisms together with the other TSG CN working groups in time for Release 99.