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TSG-SA Working Group 1 (Services) meeting #2 Edinburgh, Scotland 9th-12th March 1999

Agenda Item: 9.0.2 (Multicall)

Source: Ericsson

Title: Multi-call scenarios

Document for: Discussion

In a proposed CR to 22.00, a requirement on multicall service is added. The service scenarios are not yet provided. This document proposes how some typical scenarios should be handled.

Scenario:

- 1. Ongoing *speech* call Additional call (incoming or outgoing) is *speech* In this case, the same call hold/call wait/multiparty mechanisms as in GSM shall apply, i.e. these calls shall be multiplexed on the same call. There is no need for a multicall mechanism in this scenario.
- 2. Ongoing speech call Additional call is data (CS/PS).

In this case there is a need for the support of multiple calls, i.e. it should be possible to speak and transfer data simultaneously. This means that for an MS capable of Multicalls, the call may be set up as a multicall. The CW/CH/MPTY services as specified in GSM are not applicable to the multicall case.

For MSs not having multicall capability, similar mechanisms as in GSM should apply (Call waiting, GPRS class B), i.e. the ongoing call must be disconnected/suspended before the additional call can be set-up.

3. Ongoing data call - Additional call is speech.

In this case there is a need for the support of multiple calls, i.e. it should be possible to speak and transfer data simultaneously. This means that for an MS capable of Multicalls, the call may be set up as a multicall. The CW/CH/MPTY services as specified in GSM are not applicable to the multicall case.

For MSs not having multicall capability, similar mechanisms as in GSM should apply (Call waiting, GPRS class B), i.e. the ongoing call must be disconnected/suspended before the additional call can be set-up.

4. Ongoing data call - Additional call is data.

In this case there is a need for the support of multiple calls, i.e. it should be possible to have several data calls simultaneously. This means that for an MS capable of Multicalls, the call may be set up as a multicall. The CW/CH/MPTY services as specified in GSM are not applicable to the multicall case.

For MSs not having multicall capability, similar mechanisms as in GSM should apply (Call waiting, GPRS class B), i.e. the ongoing call must be disconnected/suspended before the additional call can be set-up.

The conclusion of the above-mentioned assumptions is that the multicall capability is optional to the MS and independent from the CW/CH/MPTY services. These services (as defined in GSM) are only applicable to scenarios where multicall is **not** supported.