## 3GPP TSG RAN WG2 #4 25-28 May 1999 Berlin, Germany

Source: TSG-T2

Liaison To: All WGs

CC:

Title: Report of the current status on terminal capabilities

In our Liaison Statement T(99)282, TSG-T2 had requested all WGs to identify the terminal capabilities until 15<sup>th</sup> of April. We received many excellent responses. T2 appreciates the co-operation of each WG on the work to identify terminal capabilities.

We have summarised the comments we received in the table below. The table lists the contribution number assigned by SWG6, and includes a brief summary of the response. We would appreciate it if you would let us know if we have not captured your response accurately.

T2 has not investigated the details of the LS answers yet. This Liaison Statement is to report the current status of investigation. In addition, we have indicated work items for each WG that we would like to request the WG as the next step in making progress. These are also shown in the table below.

T2 is proceeding along its defined work program. This is contained in T2-99(282) which states the following -

- The prime work priority is to achieve stable specification for the baseline implementation capabilities.
- Among the service capabilities, the specification work for the capabilities to support the default speech service is of priority.

T2 SWG6 would like to make the following requests for additional information -

- TSG-S1 is requested to identify service capabilities.
- In accordance with the identification of service capabilities by S1, each relevant WGs are asked to identify service implementation capabilities for each service capability.

WGs	LS answer Status			Requested future work
	STC_DOC	Subject and Brief	Source	and Comments
S1	T2-99398	<ul> <li>"Answer from S1 chairman on Terminal</li> <li>S1 have not had an opportunity to study its implications or to prepare a response.</li> </ul>	S1 chairman	<ul> <li>S1 is requested to list service or service capabilities to assist in the identification of terminal capabilities.</li> </ul>
S2	no answer			- We would like to request an answer to the LS
S3	no answer			- We would like to request S3 to identify the terminal capabilities in the "security" technical domain.
S4	T2-99332	"LS to TSG-T on Terminal Capabilities" - S4 identified terminal implementation capabilities to be mandatory or optional by service capability category, i.e. speech and circuit switched multimedia service H.324 based.	S4	- S4 is requested to identify service implementation capabilities for H.323 packet based multimedia service
S5	no answer			- The LS answer is requested.
N1	no answer			- N1 is requested to identify terminal capabilities for CC and MM.
N2	T2-99388	"Reply from TSG-N2 on terminal capabilities" N2 does not foresee any specific requirements for terminal capabilities for the work of TSG-N2.	N2 chairman	- We request N2 input on how to treat the issue of USSD.
N3	T2-99399	"LS from CN3 on Terminal Capabilities" - N3 identified service capabilities for a store & forward mechanism and a real-time service. For real-time service, two implementation capabilities are identified.	N3	- T2 believes that T2 has responsibility for the store & forward mechanism .

	]		R3	
		No terminal capabilities were identified that were within the scope of TSG RAN WG3.		
R4	T2-99361	Identifies the baseline terminal capability, in terms of Physical parameters	R4	
T1	no answer			- The LS answer is requested.
T2	T2-99435	Terminal Capabilities within T2 – suggested	BT (chairman)	
		No baseline implementation capabilities are identified.		
Т3	no answer			- T3 is requested to identify the baseline terminal implementation capabilities for "USIM" technical domain.

## Annex A. Definitions for use in describing Terminal Capabilities

**Service capabilities:** capabilities that can be used either singly or in combination to deliver services to the user. The characteristic of service capabilities is that their logical function can be defined in a way that is independent of the implementation of the UMTS system (although all service capabilities are of course constrained by the implementation of UMTS). Examples: a data bearer of 144 kbps; a high quality speech teleservice; an IP teleservice; a capability to forward a speech call.

**Baseline capabilities:** capabilities that are required for a service-less terminal to operate within a network. The baseline capabilities for a terminal include the capabilities to search for, synchronise with and register (with authentication) to a network. The negotiation of the terminal and the network capabilities, as well as the maintenance and termination of the registration are also part of the required baseline capabilities.

**Implementation capability:** a capability that relates to a particular technical domain. Example (in the domain of the physical layer): a spreading factor of 128; Examples (in the domain of security): the A5 algorithm; a 64 bit key length; Example (in the domain of transmitter performance): a power output of 21 dBm; Example (in the domain of the Codec): support of AMR Codec; Example (in the domain of the USIM): support of CHV1;

**Baseline implementation capabilities:** set of Implementation capabilities, in each technical domain, required to enable a terminal to support the required Baseline capabilities.

Service implementation capabilities: set of Implementation capabilities, in each technical domain, required to enable a terminal to support a set of Service capabilities.

Service-less terminal: a terminal that has only the Baseline capabilities.

For the purposes of testing, minimum tests should be based on a combination of the Baseline capabilities and the appropriate Service capabilities.

## Service Implementation Capabilities Baseline Implementation Capabilities n 2 3 4 5 1 Service Capabilities Baseline Capabilities Implementation Capabilities: L1 L2 L3 Security Etc...

## Figure 1. Baseline, Service and Implementation, Capabilities