3GPP TSG SA Plenary Meeting #13   **SP-010591**
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Source:	**Alcatel, AWS, Cingular Wireless, Ericsson, Lucent, Nokia, Nortel, Mannesmann Mobilfunk, Siemens, Telenor, Telia, Vodafone Group**
Title:	**IMS Rel 5 – Essential Features**
Document for:	**Information**
Agenda Item:	**8.8**

The aim of this document is to identify a core set of features which are essential in IMS release 5. These features are seen as urgent and important.

The list of features considered was taken from the updated IMS work plan (SP-010550). In some cases amendments and clarifying changes were made. The list of items was also supplemented with features from SP-010567 and SP-010579 for completeness.

TSG SA is asked to note this document as a provisional identification of essential IMS features, according to the list given below.

The work items were classified according to the following list:

Grey	**No classification**
	This item is used for top level "containers" that are broken down in to smaller units later in the table
Yellow	**Essential**
	These are urgent and important features. IMS should not be regarded completed without these features.
Blue	**No agreement**
	Agreement could not be reached on whether these features are essential or not.
Red	**Not Essential**
	These are less urgent or less important features. If not completed with Rel 5 timeframe, they should not delay Rel 5 IMS and shall be deferred to later releases.
	Even though these features are not essential this does not imply that 3GPP should stop working on them. As shown in the work plan they are still targeted for release 5.
White	**No competence present**
	These items need review by experts.

In addition to the contents of the table the following points were agreed:

- Items marked yellow or blue are important features and are having same priority
- The list of RFCs needs to be reviewed by suitable experts to see which are essential based on the list of contents shown in the table.

New IMS feature (clean-up)

line #	Uni_ID	Task Name	Acronym	Level	Rel	Splitable	Resource	Approval	Start	Finish	% Compl	Hyperlink	last_modif	Justification
1	1273	**Provisioning of IP-based multimedia services**	IMS	1	Rel5	No	WG SA1	TSG	21-Feb-2000		23%	SP-000216	8-Jun-2001	The end date is calculated by MS Project (corresponds to completion of last WT)
2	1274	**Call control and roaming to support IMS in UMTS**	IMS-CCR	2		No	WG SA2	TSG	21-Feb-2000		23%	SP-010339	17-Nov-2000	Same as above
3	1633	Stage 1	IMS-CCR	3		No	WG SA1		21-Feb-2000	15-Dec-2000	100%		30-Mar-2001	
4	1514	Stage 2 (Architecture and Main flows)	IMS-CCR	3		No	WG SA2	TSG	14-Apr-2000	23-Mar-2001	100%	SP-000289	8-Feb-2001	
6	2233	SIP Call Control protocol for the IMS	IMS-CCR	3		No	WG CN1	TSG	2-Oct-2000	Mar 2002	15%	NP-010143	30-May-2001	
7	1998	IMS signalling flows (TS 24.228)	IMS-CCR	4		No	WG CN1	TSG	2-Oct-2000	March 2002	65%		8-Feb-2001	Corresponds to 1.23 in SP010425
8	1278	IMS stage 3 (TS 24.229)	IMS-CCR	4		No	WG CN1	TSG	2-Oct-2000	Mar 2002	40%		8-Feb-2001	Corresponds to 1.23 in SP010425
9	2255	IMS Session Handling; stage 2 (TS 23.218)	IMS-CCR	4		No	WG CN1	TSG	2-Oct-2000	Mar 2002	38%		1-Apr-2000	Corresponds to 1.23 in SP010425
10	2521	IETF: draft-ietf-sip-rfc2543bis (Session Initiation Protocol)	IMS-CCR	4		No	WG CN1		24-Nov-2000	Mar 2002	0%		6-Sep-2001	End date to be confirmed. Corresponds to 1.23 in SP010425
11	2522	IETF: draft-sip-manyfolks-resource (Without COMET)(Integration of resource management and SIP)		4		No	WG CN1		24-Nov-2000	Mar 2002	0%		6-Sep-2001	Corresponds to 1.23 in SP010425
12	2523	IETF: draft-ietf-sip-100rel (Reliability of Provisional Response in SIP)	IMS-CCR	4		No	WG CN1		24-Nov-2000	Mar 2002	0%		6-Sep-2001	Corresponds to 1.23 in SP010425
13	2524	IETF: draft-ietf-sip-privacy (SIP extensions for caller identity and privacy)	IMS-CCR	4		No	WG CN1		24-Nov-2000	Mar 2002	0%		6-Sep-2001	
14	2525	IETF: draft-ietf-sip-call-auth (SIP extensions for media authorization)	IMS-CCR	4		No	WG CN1		24-Nov-2000	Mar 2002	0%		6-Sep-2001	
15	2526	IETF: draft-ietf-sip-events (specific event notification)	IMS-CCR	4		No	WG CN1		24-Nov-2000	Mar 2002				Corresponds to 1.23 in SP010425
16		IETF: draft-ietf-sip-refer (refer method)	IMS-CCR	4		?	WG CN1		24-Nov-2000	Mar 2002	0%		6-Sep-2001	
17		IETF:draft-ietf-sip-dhcp (DHCP options for SIP servers)	IMS-CCR	4		?	WG CN1		24-Nov-2000	Mar 2002	0%		6-Sep-2001	NOTE! Does not presently support Ipv6 ! Corresponds to 1.23 in SP010425
18		IETF:draft-biggs-sip-replaces (SIP replaces header)	IMS-CCR	4		?	WG CN1		24-Nov-2000	?? Mar 2002	0%		6-Sep-2001	Delivery from IETF unknown
19		IETF:draft-ietf-avt-rtp-amr (AMR and AMR_WB RTP and SDP)	IMS-CCR	4		?	WG CN1		24-Nov-2000	Mar 2002	100 %		6-Sep-2001	Corresponds to 1.23 in SP010425
20		IETF:draft-ietf-mmusic-sdp-new (IPv6 support within SDP)	IMS-CCR	4		?	WG CN1		24-Nov-2000	?? Mar 2002	0%		6-Sep-2001	Delivery from IETF unknown. Corresponds to 1.23 in SP010425
		IETF:draft-ietf-sip-serverfeatures (sip supported header)	IMS-CCR	4		?	WG CN1		24-Nov-2000	?? Mar 2002 ??	0%		6-Sep-2001	Delivery from IETF unknown. Corresponds to 1.23 in SP010425
		IETF: draft-ietf-sip-session-timer	IMS-CCR	4		?	WG CN1		24-Nov-2000	Mar 2002			24-Sep-2001	
		IETF: draft-agrawal-sip-h323-intrwrkng-reqs	IMS-CCR	4		?	WG CN1		24-Nov-2000	Mar 2002			24-Sep-2001	Corresponds to 2.12 in SP010425
		IETF: draft-ietf-sip-callerprefs	IMS-CCR	4		?	WG CN1		24-Nov-2000	Mar 2002			24-Sep-2001	
		IETF: draft-ietf-sip-state	IMS-CCR	4		?	WG CN1		24-Nov-2000	Mar 2002			24-Sep-2001	
		IETF: draft-ietf-aaa-diameter	IMS-CCR	4		?	WG CN1		24-Nov-2000	Mar 2002			24-Sep-2001	Corresponds to 1.23 in SP010425
		IETF: Draft-ietf-sip-isup	IMS-CCR	4		?	WG CN1		24-Nov-2000	Mar 2002			24-Sep-2001	Corresponds to 3.10 in SP010425
		IETF: draft-ietf-sip-isup-header	IMS-CCR	4		?	WG CN1		24-Nov-2000	Mar 2002			24-Sep-2001	
27	2529	UE Functionality Split	IMS-CCR	3		Yes	WG SA1		11-May-2001	December 2001	0%		6-Sep-2001	Move to separate feature? S3 and T2 interactions missing. Corresponds to 1.20 in SP010425
31	2023	SDM issues for CAMEL control of IMS	IMS-CCR	4		?	WG CN4		15-Nov-2000	March 2002	10%		13-Dec-2000	Re-introduced by N4
35	1290	Addressing	IMS-CCR	3		No	WG SA2		9-Oct-2000	31-Aug-2001	51%		1-Apr-2000	
36	1291	Architectural issues	IMS-CCR	4		No	WG SA2		9-Oct-2000	31-Aug-2001	100%		6-Sep-2001	Corresponds to 1.17 & 1.18 in SP010425
37	1292	Impact on HSS	IMS-CCR	4		No	WG CN4		15-Nov-2000	March 2002	15%		13-Dec-2000	Corresponds to 1.17 & 1.18 in SP010425
42	2530	Service Examples	IMS-Sex	3		Yes	WG SA1	TSG	17-Apr-2001	21-Dec-2001	20%		NA	

#	UID	Title	Code	Rel	Stop	WG	Level	Start	End	%	Doc	Date	Comments
43	2531	IMS Framework Report	IMS-FrWk	3	Yes	WG SA1	TSG	17-Apr-2001	21-Dec-2001	15%		NA	
44	1298	**Access Security for IMS**	IMS-ASEC	2	No	WG SA3	TSG	4-Sep-2000	June 2002	0%	S3-010283	12-Jun-2001	Corresponds to 1.3 in SP010425
45		SIP extensions for Integrity protection		3	No	WG CN1				?		6-Sep-2001	Corresponds to 1.6 in SP010425
90		IMS impacts on UICC		3	No	WG T3			June 2002			24-Sep-2001	Corresponds to 1.19 in SP010425
46	1299	**Lawful interception**	IMS-LI	2	No	WG SA3	TSG	4-Sep-2000	March 2002	10%	SP-000309	1-Apr-2000	Corresponds to 3.3 in SP010425
47	1300	**(copy) UTRAN evolutions for efficient support of IMS (ROHC: UID2206 (completed),**	IMS-RAN	2	this one or the one bellow	TSG RAN		2-Apr-2001	March 2002	0%	unknown	6-Sep-2001	Work on UID1680 and 1688 not started. Corresponds to 1.1 in SP010425
		Moved from above row: UEP: UID 1686 (not approved), header removal (not approved))											Corresponds to 3.1 in SP010425
48		**(copy) GERAN evolutions for efficient support of IMS (Header adaptation) Assume this is header removal/UEP on GERAN.**	IMS-RAN	2	this one or the one above	TSG GERAN		2-Apr-2001	March 2002	0%	unknown	6-Sep-2001	Work just starting. Corresponds to 2.1 & 2.3 in SP010425
52	Xxx	**(Copy) End-to-end QoS**			No	WG SA2		January 2001	March 2002				Just a copy to remind that End-to-end QoS has to be guaranteed for RT IMS. Is it interesting to introduce IMS if RT services are not supported?
		1) How to apply "Manyfolks" draft in UMTS environment 2) QoS coordination of UMTS bearers and bearer in UE and GGSN when applicable 3) Support for QoS for IMS signalling											Corresponds to 1.14 in SP010425
		End to End at SIP/SDP session level End-to-end negotiation of QoS parameters on a per-session basis, with respect to the subscription profile, network policies, invoked service/application											Corresponds to 3.11 in SP010425
		End-to-end bearer establishment corresponding to the QoS requirements negotiated and agreed in session/service layers during session setup											Corresponds to 3.12 in SP010425
53	2048	**Interworking between IMS and IP networks**	IMS-CCR-IWIP	2	?	WG CN3	WG	28-Aug-2000	March 2002	30%	NP-000466	30-May-2001	
		SIP-SIP Interworking (May not be any work required)											Corresponds to 2.11 in SP010425
		SIP-H323 Interworking											Corresponds to 2.12 in SP010425
53bis	1296	Impact on MM/CC/SM	IMS-CCR-IWMM	3	No	WG CN1		19-Mar-2001	March 2002	5%		30-May-2001	
60	2047	**Interworking between IMS and CS networks (SIP-ISUP)**	IMS-CCR-IWCS	2	?	WG CN3	TSG	28-Aug-2000	March 2002 28-Dec-2001	30%	NP-000465	30-May-2001	moved here (was a WT under "Interworking with other multimedia protocols"). Corresponds to 2.9, 2.10, 3.7 – 3.10 in SP010425
		Interworking between IMS and CS networks (SIP-BICC)											N3 should define the priority between SIP-ISUP and SIP-BICC interworking.
63	1280	**SIP SS and relationship to Mg, Mw and Cx**	IMS-CCR	2	No	WG CN4		1-Jan-2001	28-Dec-2001	0%		1-Apr-2000	Moved here. Corresponds to 1.22 in SP010425
66	1732	**Number portability in IMS**	IMS-MNP	2	Yes	WG CN4		1-Jan-2001	June 2002	0%		6-Sep-2001	Requirements not clear. Corresponds to 3.16 & 3.17 in SP010425
67	1598	**(Copy) AMR-WB**		2	Yes	WG SA4		4-Sep-2000	29-Jun-2001	95%		20-Mar-2001	From S4 point of view completed excluding TR on performance characterisation .

68	2036	**Multimedia codecs and protocols for conversational PS services**	IMS-CODEC	2	No	WG SA4	TSG	26-Jul-2000	21-Dec-2001	21%	SP-000398	20-Mar-2001	
69	2039	Codecs		3	No	WG SA4	TSG	26-Jul-2000	21-Mar-2001	100%	SP-000398	20-Mar-2001	
70	2040	Performance characterisation of codec		3	No	WG SA4	TSG	2-Oct-2000	21-Dec-2001	0%	SP-000398	1-Apr-2000	Technical report, not must for R5
72	2038	Transport protocols		3	No	WG SA4		2-Oct-2000	21-Dec-2001	0%		6-Sep-2001	check if done
74		**SIP message compression**	IMS-COMP		no	WG SA2			March 2002			6-Sep-2001	Corresponds to 1.2 in SP010425
75		Stage 2			No	WG SA2			Dec 2001			6-Sep-2001	
76		Compression signalling (link to IETF RFC needed?)			no	WG CN1			March 2002	0%		6-Sep-2001	
77		**IMS Local services**	IMS-LOCSER		yes	WG SA2			March 2002	20%		6-Sep-2001	Corresponds to 1.16 in SP010425
78		**Stage 3 description of IMS interfaces**	IMS	3	no	TSG CN			March 2002			6-Sep-2001	
79	1286	Cx interface (HSS to CSCF) [previous name was "CSCF – HSS (Cx) applications and services"]			No	WG CN4			March 2002			6-Sep-2001	Corresponds to 1.25 in SP010425
80		Enhancements of Mc interface (IM-MGW to MGCF)			No	WG CN4			March 2002			6-Sep-2001	
81		Mw interface (CSCF to P-CSCF)			No	WG CN1			March 2002			6-Sep-2001	Corresponds to 1.21 in SP010425
82		Mm interface (CSCF to external IP multimedia network) May not be any work required			?	WG CN1			March 2002			6-Sep-2001	
83		Mg interface (CSCF to MGCF - interworking with CS)			?	WG CN4			March 2002			6-Sep-2001	Corresponds to 1.21 in SP010425
84		Mr interface (CSCF to MRF)			Yes	WG CN1			?			6-Sep-2001	Corresponds to 2.8 & 3.6 in SP010425
85		Dx interface (I-CSCF to SLF)			?	WG CN4			?			6-Sep-2001	Corresponds to 1.26 in SP010425
86		Go interface (GGSN to PCF)			?	WG CN3			March 2002			6-Sep-2001	Corresponds to 3.18 - 3.22 in SP010425
87		ISC (IMS Service Control) interface		2	?	WG CN1			?			6-Sep-2001	Corresponds to 1.23 in SP010425
88	1310	**Support of VHE/OSA by the IMS**	IMS-ONOSA	3	?	WG CN5	TSG	14-Aug-2000	?	0%		16-Feb-2001	N5 has just started considering the IMS architecture. Corresponds to 3.23 in SP010425
89	12000	**Support of CAMEL by the IMS**	IMS-CAMEL	3	?	WG CN2		July 2001	Mar 2002	0%		16-Feb-2001	N2 has just started technical work. Corresponds to 3.24 in SP010425
91	31002	**Pre-pay/real-time charging in IMS Note: Operator requirements for IMS charging need clarification. Is content-based charging essential?**	IMS-PREPAY	2	?	WG SA1		15-Jun-2001	15-Mar-2002	0%		6-Sep-2001	Corresponds to 1.8…1.13 in SP010425
93	2242	**Charging Management for IMS**	OAM-CH/IP	2	No	WG SA5	TSG	1-Dec-2000	14-Mar-2002	35%	SP-000524	6-Jun-2001	
94		**Charging Implications of IMS architecture**		2	No	WG SA2		Aug 2001	Nov 2001	20%		6-Jun-2001	
95	1913	**Start Testing**		2	No	MLST		14-Dec-2001	14-Dec-2001	0%		1-Apr-2000	
96	1844	**Conformance Test Aspects - Provisioning of IMS**	IMS-TEST	2	No	WG T1		Mar-2002	Dec-2002	0%		1-Apr-2000	Corresponds to 1.28 in SP010425
		Added from SP010425:											
	1298	**User Authentication**											Corresponds to 1.7 in SP010425
	1290	**SIP URI (part of addressing)**											Corresponds to 1.17 in SP010425
	1514	**Gm (UE-CSCF)**											Corresponds to 1.21 in SP010425
		Terminal support of IPv6 (IETF draft: Cellular host profile)											Corresponds to 1.27 in SP010425
	1653 2527	**IMS Emergency Sessions**											Corresponds to 2.6 & 2.7 in SP010425

		Sh (HSS – AS)														Corresponds to 2.15 in SP010425
	1576 1586	**Network Domain Security**														Corresponds to 1.4 & 1.5 in SP010425
	1298 1576	**IMS security/Confidentiality (optional)**														Corresponds to 2.5 in SP010425
	1142 1303	**OAM for IMS (for later delivery)**														Corresponds to 2.1423 in SP010425