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Universal Mobile Telecommunications System (UMTS);
LTE;
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Subpart 5: Conference call control
Service Capability Feature (SCF)
(3GPP TS 29.198-04-5 version 9.0.0 Release 9)

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Introduction

The present document is part 4, sub-part 5 of a multi-part TS covering the 3rd Generation Partnership Project: Technical Specification Group Core Network and Terminals; Open Service Access (OSA); Application Programming Interface (API), as identified below. The **API specification** (3GPP TS 29.198) is structured in the following Parts:

Part 1:	"Overview";	
Part 2:	"Common data definitions";	
Part 3:	"Framework";	
Part 4:	**"Call control";**	
	Sub-part 1: "Call control common definitions";	
	Sub-part 2: "Generic call control SCF";	
	Sub-part 3: "Multi-party call control SCF";	
	Sub-part 4: "Multimedia call control SCF";	
	Sub-part 5: "Conference call control SCF";	
Part 5:	"User Interaction SCF";	
Part 6:	"Mobility SCF";	
Part 7:	"Terminal capabilities SCF";	
Part 8:	"Data session control SCF";	
Part 9:	"Generic Messaging SCF";	(not part of 3GPP Release 8)
Part 10:	"Connectivity Manager SCF";	(new in 3GPP Release 8)
Part 11:	"Account management SCF";	
Part 12:	"Charging SCF".	
Part 13:	"Policy management SCF";	
Part 14:	"Presence and Availability Management (PAM) SCF";	
Part 15:	"Multi-media Messaging (MM) SCF";	
Part 16:	"Service broker SCF".	

The **Mapping specification of the OSA APIs and network protocols** (3GPP TR 29.998) is also structured as above. A mapping to network protocols is however not applicable for all Parts, but the numbering of Parts is kept.
Also in case a Part is not supported in a Release, the numbering of the parts is maintained.

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Table: Overview of the OSA APIs & Protocol Mappings 29.198 & 29.998-family

OSA API specifications 29.198-family						OSA API Mapping - 29.998-family	
29.198-01	Overview					29.998-01	Overview
29.198-02	Common Data Definitions					*29.998-02*	*Not Applicable*
29.198-03	Framework					*29.998-03*	*Not Applicable*
Call Control (CC) SCF	29.198-04-1 Common CC data definitions	29.198-04-2 Generic CC SCF	29.198-04-3 Multi-Party CC SCF	29.198-04-4 Multi-media CC SCF	**29.198-04-5 Conf. CC SCF**	29.998-04-1	Generic Call Control – CAP mapping
						29.998-04-2	*Generic Call Control – INAP mapping*
						29.998-04-3	*Generic Call Control – Megaco mapping*
						29.998-04-4	Multiparty Call Control – ISC mapping
29.198-05	User Interaction SCF					29.998-05-1	User Interaction – CAP mapping
						29.998-05-2	*User Interaction – INAP mapping*
						29.998-05-3	*User Interaction – Megaco mapping*
						29.998-05-4	User Interaction – SMS mapping
29.198-06	Mobility SCF					29.998-06-1	User Status and User Location – MAP mapping
						29.998-06-2	User Status and User Location – SIP mapping
29.198-07	Terminal Capabilities SCF					*29.998-07*	*Not Applicable*
29.198-08	Data Session Control SCF					29.998-08	Data Session Control – CAP mapping
29.198-09	*Generic Messaging SCF*					*29.998-09*	*Not Applicable*
29.198-10	Connectivity Manager SCF					*29.998-10*	*Not Applicable*
29.198-11	Account Management SCF					*29.998-11*	*Not Applicable*
29.198-12	Charging SCF					*29.998-12*	*Not Applicable*
29.198-13	Policy Management SCF					*29.998-13*	*Not Applicable*
29.198-14	Presence & Availability Management SCF					*29.998-14*	*Not Applicable*
29.198-15	Multi Media Messaging SCF					*29.998-15*	*Not Applicable*
29.198-16	Service Broker SCF					*29.998-16*	*Not Applicable*

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1 Scope

The present document is Part 4, Sub-Part 5 of the Stage 3 specification for an Application Programming Interface (API) for Open Service Access (OSA).

The OSA specifications define an architecture that enables application developers to make use of network functionality through an open standardised interface, i.e. the OSA APIs. The concepts and the functional architecture for the OSA are contained in 3GPP TS 23.198 [3]. The requirements for OSA are contained in 3GPP TS 22.127 [2].

The present document specifies the Conference call control Service Capability Feature (SCF) aspects of the interface. All aspects of the Conference call control SCF are defined here, these being:

- Sequence Diagrams
- Class Diagrams
- Interface specification plus detailed method descriptions
- State Transition diagrams
- Data definitions
- IDL Description of the interfaces
- WSDL Description of the interfaces
- Reference to the Java™ API description of the interfaces

The process by which this task is accomplished is through the use of object modelling techniques described by the Unified Modelling Language (UML).

This specification has been defined jointly between 3GPP TSG CT WG5, ETSI TISPAN and the Parlay Group, in co-operation with a number of JAIN™ Community member companies.

Maintenance of up to 3GPP Rel-8 and new OSA Stage 1, 2 and 3 work beyond Rel-9 was moved to OMA in June 2008.

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2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication, edition number, version number, etc.) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document *in the same Release as the present document*.

[1] 3GPP TS 29.198-01: "Open Service Access (OSA) Application Programming Interface (API); Part 1: Overview".

[2] 3GPP TS 22.127: "Service Requirement for the Open Services Access (OSA); Stage 1".

[3] 3GPP TS 23.198: "Open Service Access (OSA); Stage 2".

[4] 3GPP TS 22.002: "Circuit Bearer Services (BS) supported by a Public Land Mobile Network (PLMN)".

[5] ISO 4217 (1995): "Codes for the representation of currencies and funds ".

[6] 3GPP TS 24.002: "GSM-UMTS Public Land Mobile Network (PLMN) Access Reference Configuration".

[7] 3GPP TS 22.003: "Circuit Teleservices supported by a Public Land Mobile Network (PLMN)".

[8] ITU-T Q.763: "Signalling System No. 7 - ISDN user part formats and codes".

[9] ANSI T1.113: "Signalling System No. 7 (SS7) - Integrated Services Digital Network (ISDN) User Part".

3 Definitions and abbreviations

3.1 Definitions

For the purposes of the present document, the terms and definitions given in TS 29.198-1 [1] apply.

3.2 Abbreviations

For the purposes of the present document, the abbreviations given in TS 29.198-1 [1] apply.

4 Conference call control Service Sequence Diagrams

4.1 Meet-me conference without subconferencing

This sequence illustrates a pre-arranged meet-me conference for a specified time period. During this timeslot parties can 'call in to' the meet-me conference by dialling a special number.

For each participant joining the conference, the application can decide to accept the participant in to the conference.

The application can also be notified when parties are leaving the conference.

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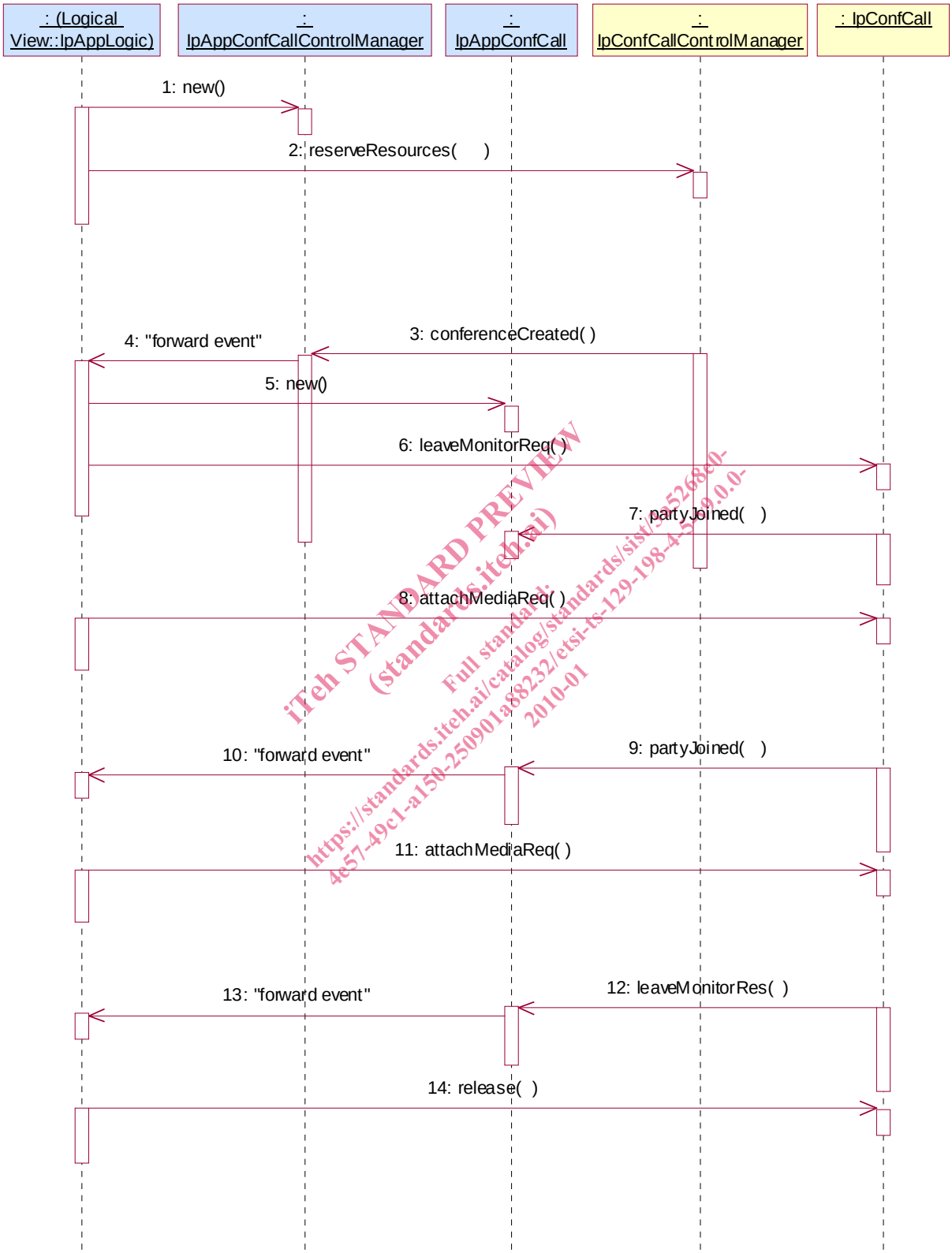

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1: The application creates a new object to receive the callbacks from the conference call control manager.

2: The application reserves resources for some time in the future.

With this same method the application registers interest in the creation of the conference (e.g. when the first party to joins the conference or at the specified start time, this is implementation dependant).

The reservation also includes the conference policy. One of the elements is whether joined parties must be explicitly attached. If so, this is treated as an implicit joinMonitorReq.

3: The conference is created.

4: The message is forwarded to the application.

5: The application creates an object to receive the call back messages from the conference call.

6: The application also requests to be notified when parties leave the conference.

7: The application is notified of the first party that joined the conference.

8: When the party is allowed to join the conference, the party is added.

Alternatively, the party could have been rejected with a releaseCallLeg.

9: A new party joins the conference and the application is notified.

10: The message is forwarded to the application.

11: This party also is allowed into the conference by attaching the leg.

12: A party leaves the conference.

13: The message is forwarded to the application.

14: The application decides to release the entire conference.

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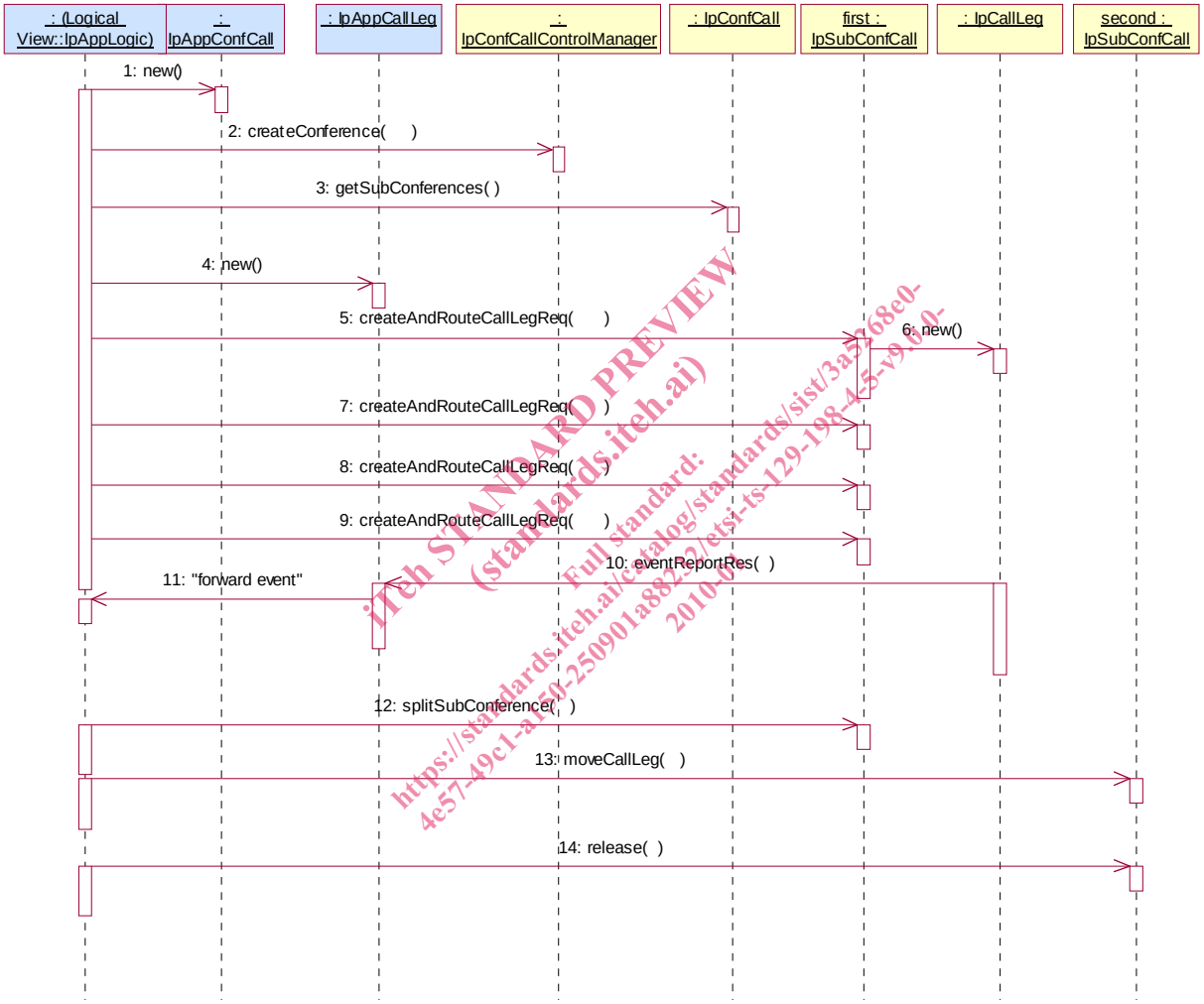
4.2 Non-add hoc add-on with subconferencing

This sequence illustrates a prearranged add-on conference. The end user that initiates the call, communicates with the conference application via a web interface (not shown). By dragging and dropping names from the addressbook, the end-user adds parties to the conference.

Also via the web-interface, the end-user can group parties in subconferences. Only parties in the same subconference can talk to each other.



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1: The application creates a new interface to receive the callbacks from the conference call.

2: The application initiates the conference. There has been no prior resource reservation, so there is a chance that no resources are available when parties are added to the conference.

The conferenceCall interface object is returned.

3: Together with the conference a subconference is implicitly created.

However, the subconference is not returned as a result of the createConference, therefore the application uses this method to get the subconference.

4: The application creates a new IpAppCallLeg interface.

5: The application adds the first party to the subconference. This process is repeated for all 4 parties. Note that in the following not all steps are shown.