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Technical Specification

**Universal Mobile Telecommunications System (UMTS);
Open Service Access (OSA);
Parlay X web services;
Part 15: Message broadcast
(3GPP TS 29.199-15 version 7.2.1 Release 7)**



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Foreword

This Technical Specification has been produced by the 3rd Generation Partnership Project (3GPP).

3GPP acknowledges the contribution of the Parlay X Web Services specifications from The Parlay Group. The Parlay Group is pleased to see 3GPP acknowledge and publish the present document, and the Parlay Group looks forward to working with the 3GPP community to improve future versions of the present document.

The contents of the present document are subject to continuing work within the TSG and may change following formal TSG approval. Should the TSG modify the contents of the present document, it will be re-released by the TSG with an identifying change of release date and an increase in version number as follows:

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Introduction

The present document is part 15 of a multi-part deliverable covering the 3rd Generation Partnership Project; Technical Specification Group Core Network and Terminals; Open Service Access (OSA); Parlay X Web Services, as identified below:

- Part 1: "Common"
- Part 2: "Third party call"
- Part 3: "Call Notification"
- Part 4: "Short Messaging"
- Part 5: "Multimedia Messaging"
- Part 6: "Payment"
- Part 7: "Account management"
- Part 8: "Terminal Status"
- Part 9: "Terminal location"
- Part 10: "Call handling"
- Part 11: "Audio call"
- Part 12: "Multimedia conference"
- Part 13: "Address list management"
- Part 14: "Presence"
- Part 15: "Message Broadcast"**
- Part 16: "Geocoding"
- Part 17: "Application driven Quality of Service (QoS)"
- Part 18: "Device Capabilities and Configuration"
- Part 19: "Multimedia streaming control"
- Part 20: "Multimedia multicast session management"

1 Scope

The present document is Part 15 of the Stage 3 Parlay X Web Services specification for Open Service Access (OSA).

The OSA specifications define an architecture that enables application developers to make use of network functionality through an open standardized 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 Message Broadcast Web Service aspects of the interface. All aspects of the Message Broadcast Web Service are defined here, these being:

- Name spaces.
- Sequence diagrams.
- Data definitions.
- Interface specification plus detailed method descriptions.
- Fault definitions.
- Service policies.
- WSDL description of the interfaces.

The present document has been defined jointly between 3GPP TSG CT WG5, ETSI TISPAN and The Parlay Group.

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 TR 21.905: "Vocabulary for 3GPP Specifications".
- [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 22.101: "Service aspects; Service principles".
- [5] W3C Recommendation (2 May 2001): "XML Schema Part 2: Datatypes".

NOTE: Available at <http://www.w3.org/TR/2001/REC-xmlschema-2-20010502/>.

- [6] 3GPP TS 29.199-1: "Open Service Access (OSA); Parlay X web services; Part 1: Common".
- [7] 3GPP TS 23.041: "Technical realization of Cell Broadcast Service (CBS)".
- [8] 3GPP TS 23.032: "Universal Geographical Area Description (GAD)".
- [9] 3GPP TS 29.199-9: "Open Service Access (OSA); Parlay X web services; Part 9: Terminal location".

- [10] 3GPP TS 29.199-4: "Open Service Access (OSA); Parlay X web services; Part 4: Short messaging".

3 Definitions and abbreviations

3.1 Definitions

For the purposes of the present document, the terms and definitions given in 3GPP TR 21.905 [1] and 3GPP TS 29.199-1 [6] apply.

3.2 Abbreviations

For the purposes of the present document, the abbreviations given in 3GPP TR 21.905 [1], 3GPP TS 29.199-1 [6], 3GPP TS 29.199-4 [10] and the following apply:

CBC	Cell Broadcast Centre
CBS	Cell Broadcast Service

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4 Detailed service description

Message broadcast is a functionality that allows an application to send messages to all the fixed or mobile terminals in a specified geographical area.

Message broadcast provides operations for sending a broadcast message to the network and a polling mechanism for monitoring the delivery status of a sent broadcast message. It also provides an asynchronous notification mechanism for broadcast delivery status. In addition, a mechanism is provided to start and stop the notification of delivery receipts.

There are various use cases of using Message Broadcast Web Service including the commercial application. This Web Service could be also used for non-commercial purpose as follows:

- To provide area-based public information like weather, traffic and other commonly-interested information.
- To provide emergency information like severe weather warning(e.g. typhoon, tsunami), environments hazards(e.g. chemical spills) and terrorism information.

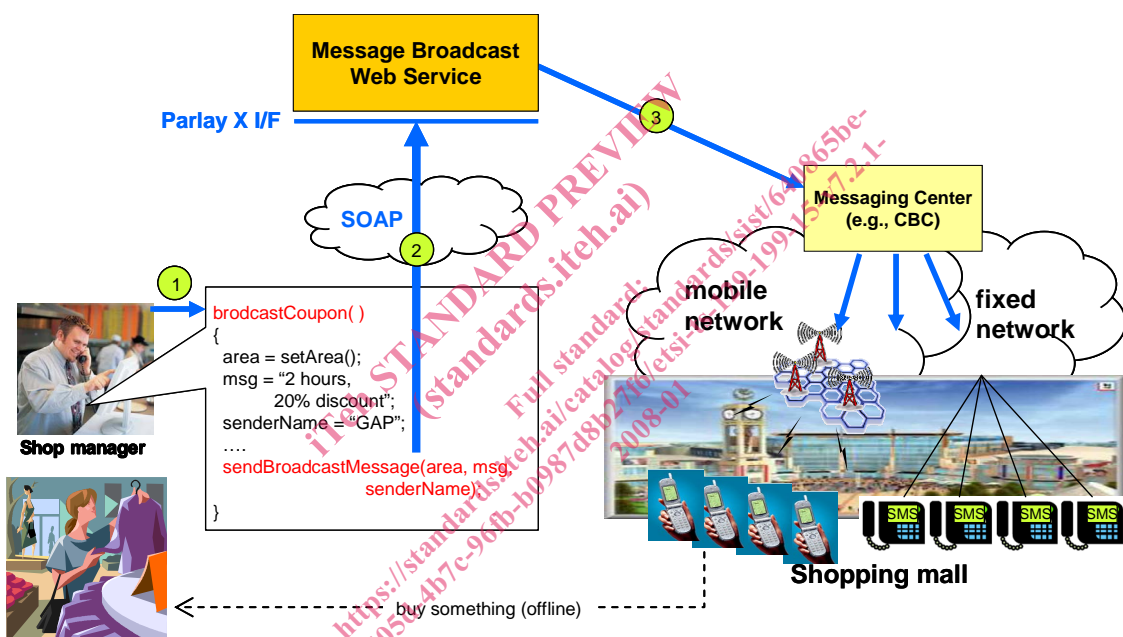


Figure 4.1: Send Broadcast Message Scenario

Figure 4.1 shows an advertising scenario using Message Broadcast Web Service to broadcast discount message around and within the shopping mall area. A shop manager who wants to increase sales in a holiday can make use of a message broadcast application. By using the application, he can set the targeted area and write a message and the sender's name to be contacted (1). Then, the application invokes a Parlay X interface to use Message Broadcast Web Service operation(2). After invocation, the Message Broadcast Web Service sends a message delivery operation to messaging centre (e.g. CBC) (3). Subsequently, the message on discount information is delivered to all the terminals within the targeted area.

5 Namespaces

The SendBroadcastMessage interface uses the namespace:

http://www.csapi.org/wsd/parlayx/message_broadcast/send/v3_1

The MessageBroadcastNotification interface uses the namespace:

http://www.csapi.org/wsd/parlayx/message_broadcast/notification/v3_1

The MessageBroadcastNotificationManager interface uses the namespace:

http://www.csapi.org/wsd/parlayx/message_broadcast/notification_manager/v3_0

The data types are defined in the namespace:

http://www.csapi.org/schema/parlayx/message_broadcast/v3_1

The 'xsd' namespace used in the present document refers to the XML Schema data types defined in XML Schema [5]. The use of the name 'xsd' is not semantically significant.

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6 Sequence Diagrams

6.1 Send broadcast message, get the status and cancel it

Pattern: Request/Response, One way

An application can send a broadcast message to a specific area and also get the delivery status from Message Broadcast Web services. If message broadcasting is no more needed, an application can send a cancellation request.

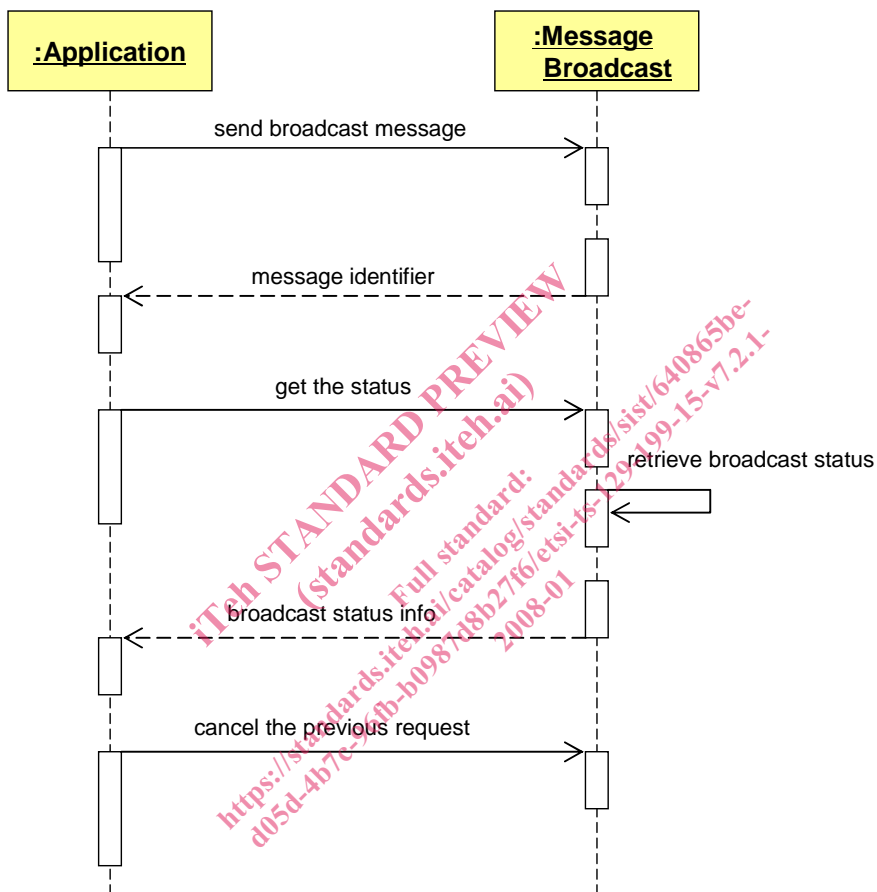


Figure 6.1: Message Broadcast Operations