

# WV-048 Client-Server Protocol Static Conformance Requirement Version 1.2

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Continues the Technical Activities Originated in the Wireless Village Initiative



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# 1. Scope

The Wireless Village Instant Messaging and Presence Service (IMPS) includes four primary features:

- Presence
- Instant Messaging
- Groups
- Shared Content

Presence is the key enabling technology for IMPS. It includes client device availability (my phone is on/off, in a call), user status (available, unavailable, in a meeting), location, client device capabilities (voice, text, GPRS, multimedia) and searchable personal statuses such as mood (happy, angry) and hobbies (football, fishing, computing, dancing). Since presence information is personal, it is only made available according to the user's wishes - access control features put the control of the user presence information in the users' hands.

Instant Messaging (IM) is a familiar concept in both the mobile and desktop worlds. Desktop IM clients, two-way SMS and two-way paging are all forms of Instant Messaging. Wireless Village IM will enable interoperable mobile IM in concert with other innovative features to provide an enhanced user experience.

Groups or chat are a fun and familiar concept on the Internet. Both operators and end-users are able to create and manage groups. Users can invite their friends and family to chat in group discussions. Operators can build common interest groups where end-users can meet each other online.

Shared Content allows users and operators to setup their own storage area where they can post pictures, music and other multimedia content while enabling the sharing with other individuals and groups in an IM or chat session.

These features, taken in part or as a whole, provide the basis for innovative new services that build upon a common interoperable framework.

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# 3. Terminology and Conventions

#### 3.1. Conventions

The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "MAY", and "OPTIONAL" in this document are to be interpreted as described in [RFC2119].

All sections and appendixes, except "Scope" and "Introduction", are normative, unless they are explicitly indicated to be informative.

### 3.2. Definitions

None.

#### 3.3. Abbreviations

COSE	Content Service Element
C-Req	Client Requirement
GRSE	Group Service Element
IMSE	Instant Messaging Service Element
PRSE	Presence Service Element
SAP	Service Access Point
SCR	Static Conformance Requirement
S-Req	Server Requirement
WAP	Wireless Application Protocol

# 4. Introduction

This document defines the static conformance requirement for the WV Client-Server Protocol. It defines the mandatory and OPTIONAL functionality at the transaction level. In addition, this document identifies the mandatory and OPTIONAL services the various service elements provide.

# 5. Wireless Village Service requirement

Req#	Description	C-	S-	Reference
		Req	Req	
SERV -1	Support of Service Access Point functionality	М	М	SAP
SERV-2	Support of Instant Messaging Service Element	0	0	IMSE
	functionality			
SERV-3	Support of Presence Service Element functionality	0	0	PRSE
SERV-4	Support of Group Service Element functionality	0	0	GRSE
SERV-5	Support of Content Service Element functionality	0	0	COSE

# 6. XML Encoding requirement

Req#	Description	C- Req	S- Req	Reference
XML-1	XML encoding is well-formed	М	М	[XML]
XML-2	XML encoding follows the DTD	М	М	[CSP]
XML-3	XML encoding tolerates protocol extension	М	М	[CSP]
XML-4	The namespace identifier for the session and transaction structure is "http://www.openmobilealliance.org/DTD/WV- CSP1.2"	М	М	[CSP DTD]
XML-5	The namespace identifier for the transaction content realising the defined WV functionality is "http://www.openmobilealliance.org/DTD/WV- TRC1.2"	М	М	[CSP DTD]
XML-6	The namespace identifier for the WV defined presence attributes is "http://www.openmobilealliance.org/DTD/WV-PA1.2"	М	М	[CSP DTD] and [PA DTD]
XML-7	The primitives are encoded using binary XML format	0	М	[CSP WBXML]
XML-8	The primitives are encoded using textual XML format	0	М	[CSP DTD]
XML-9	The primitives are encoded using either the textual XML format or the binary XML format	М	N/A	[CSP]

# 7. Addressing requirement

Req#	Description	C-	S-	Reference
		Req	Req	
ADDR-1	Support for local addressing	М	М	
ADDR-2	Support for external addressing	М	М	
ADDR-3	Server maintains the same addressing format within	N/A	М	
	a transaction.			
ADDR-4	Support for client addressing.	0	0	
ADDR-5	Users cannot refer to or access other users' contact	М	Μ	
	lists.			
ADDR-6	If the schema part of a WV address is missing the	М	М	
	default schema of "wv:" is assumed.			

# 8. Session requirement

Req#	Description	C- Req	S- Req	Reference
SESSION-1	If the primitive is sent within a session, the Type of the session is 'Inband'.	Μ	М	
SESSION-2	If the primitive is sent within a session, the ID element is present in the session identification element.	М	М	
SESSION-3	If the primitive is sent without session, the Type of the session is 'Outband'	Μ	М	
SESSION-4	If the primitive is sent without session, the ID element is not present in the session identification element.	Μ	М	
SESSION-5	If the primitive is sent within the session, the session IDs of the originating message and the reply are equal.	М	М	
SESSION-6	The server does not disconnect session within the agreed KeepAliveTime.	N/A	М	
SESSION-7	If TimeToLive is set in a client Request then server Response includes KeepAliveTime.	N/A	М	
SESSION-8	Server can choose any timer value as KeepAliveTime The client MUST obey that. If the client has specified an infinite time to live in by not submitting the Time-to-Live element in LoginRequest the server can nevertheless specify a finite time using the Keep-AliveTime element in LogonResponse.	N/A	M	
SESSION-9	If the client logs in with binary message format, the client and server sends all primitives using binary message format throughout the session.	М	М	
SESSION- 10	The server accepts the protocol version used by the client in login transaction.	N/A	0	
SESSION- 11	The client uses only the protocol version accepted by the server in the login transaction throughout the whole session.	М	N/A	

# 9. Transaction requirement

Req#	Description	C-	S-	Reference
TRANS-1	For a request primitive, the Mode element MUST be	Req M	Req M	
	'Request'	101	101	
TRANS-2	For a response primitive, the Mode element MUST	М	М	
TRANS-3	be 'Response'. For each transaction pair the originating and	М	М	
	resulting transaction IDs are equal.		101	
TRANS-4	The same transaction-ID is not used more than	М	М	
TDANO 5	once in a session.	N1/A		
TRANS-5	If a request primitive is submitted to the server, and the corresponding response primitive does not	N/A	М	
	contain a Result element, and an error occurs when			
	processing the request, the server returns a Status			
	primitive instead of the corresponding response primitive.			
TRANS-6	If a request primitive is submitted to the server, and	N/A	М	
	the corresponding response primitive contains a	,, .		
	Result element, and an error occurs when			
	processing the request, the server returns either the corresponding response primitive or a Status			
	primitive. In either case, the response primitive			
	indicates the error that occurred.			
TRANS-7	If a request primitive is submitted to the client, and	М	N/A	
	the corresponding response primitive does not contain a Result element, and an error occurs when			
	processing the request, the client returns a Status			
	primitive instead of the corresponding response			
TRANG	primitive.			
TRANS-8	If a request primitive is submitted to the client, and the corresponding response primitive contains a	М	N/A	
	Result element, and an error occurs when			
	processing the request, the client returns either the			
	corresponding response primitive or a Status			
	primitive. In either case, the response primitive indicates the error that occurred.			
TRANS-9	When the response primitive to a transaction is	М	М	
	replaced with Status primitive the response value			
TRANG 40	indicates unsuccessful operation.			
TRANS-10	All mandatory information elements are present in the primitives.	М	M	
TRANS-11	All conditional information elements are present or	М	М	
	absent according to the relevant SCR.			
TRANS-12	If a transaction is completely successful, the Result	М	М	
	element indicates successful completion, and detailed results are not included in the Result			
	element.			
TRANS-13	If a transaction is partially successful, the Result	М	М	
	element does not indicate successful completion.			
TRANS-14	If a transaction is partially successful, the details of the successfully completed transaction parts are	0	0	
	included.			
TRANS-15	If a transaction is partially successful, the details of	М	М	
	the not completed transaction parts are included.	N1/A	N 4	
TRANS-16	The server-originated primitives contain the Poll element.	N/A	М	
TRANS-17	If a primitive contains the Poll element and it is	М	N/A	
	indicating Yes, the client sends PollingRequest			

TRANS-18	primitive to the server. The server-originated primitives contain the CIR element.	N/A	0	
TRANS-19	If the server discovers that the CIR channel over the standalone TCP/IP is disconnected, the server- originated primitive contains the CIR element with the value 'F' to notify the client of the loss of the CIR channel.	N/A	0	

# **10. Service Access Point Requirement**

# **10.1. Functional requirements**

Req#	Description	C- Rea	S- Rea	Service Reference
SAP-1	Support for Status primitive	M	M	MF
SAP-2	Support for Communication Initiation Request primitive	0	M	
SAP-3	Support for 2-way Login transaction	М	М	MF
SAP-4	Support for 4-way Login transaction	0	М	
SAP-5	Support for Logout transaction originating from client	М	М	MF
SAP-6	Support for Server originated disconnect	М	М	MF
SAP-7	Support for Keep-Alive transaction	М	М	MF
SAP-8	Support for Get Service Provider Info transaction	0	0	GETSPI
SAP-9	Support for Service negotiation transaction	М	М	MF
SAP-10	Support for Client Capability negotiation transaction	М	М	MF
SAP-11	Support for searching based on various user properties	0	0	SRCH
SAP-12	Support for searching based on various group properties	0	0	SRCH
SAP-13	Support for stop search transaction	0	0	STSRC
SAP-14	Support for invitation transaction	0	0	INVIT
SAP-15	Support for cancel invitation transaction	0	0	CAINV
SAP-16	Support for verify ID transaction	0	0	VRID
SAP-17	Support for version discovery transaction	0	М	MF

#### **10.2. 10.2. Version negotiation transaction**

Req#	Description	C- Req	S- Reg	Reference
VERNG-1	When VersionDiscoveryRequest is sent to the SAP, the SAP responds back with VersionDiscoveryResponse.	N/A	M	
VERNG-2	If the Version-List element is omitted from the request, the SAP includes all of the implemented versions in the response	N/A	М	
VERNG-3	If the Version-List element is present in the request, and there are mutually supported versions, the SAP includes only the mutually supported versions in the response.	N/A	М	
VERNG-4	If the Version-List element is present in the request, and there are no mutually supported versions, the Version-List element is omitted from the response.	N/A	М	

## 10.3. Login transaction

Req#	Description	C-	S-	Reference
		Req	Req	
LOGIN-1	When LoginRequest is sent to the SAP, , and no error occurs, the SAP responds with a LoginResponse primitive in both 2-way and 4-way login modes.	N/A	М	
LOGIN-2	When LoginResponse indicates successful login,	N/A	Μ	

	the Session ID is present. Valid for both 2-way and 4-way login modes.			
LOGIN-3	When LoginResponse indicates failure in login, the Session-ID is not present. Valid for both 2 -way and 4-way login modes.	N/A	М	
LOGIN-4	If TimeToLive is omitted from LoginRequest it is considered to be infinite. Both 2-way and 4-way login modes.	М	М	
LOGIN-5	2-way mode login is performed when the LoginRequest contains the element "Password-String" as plain text.	М	М	
LOGIN-6	4-way mode login is performed when the LoginRequest contains the element "Supported Digest Schema"	М	М	
LOGIN-7	If 4-way mode login is performed, The transaction- ID is the same in all four primitives.	М	М	
LOGIN-8	If 4-way mode login is performed, in the first LoginResponse the server sends back a challenge "nonce" based on "Digest Schema".	М	М	
LOGIN-9	Upon receiving a challenge "nonce" (4-way mode login) the client responds with a LoginRequest with the BASE64-encoded result string based on the "schema"	М	N/A	
LOGIN-10	The server verifies that the password is valid.	N/A	М	
LOGIN-11	If the Client-Capability-Request element in the LoginResponse primitive indicates Yes, the client initiates client capability negotiation after the successful login	М	N/A	
LOGIN-12	If the Client-Capability-Request element in the LoginResponse primitive indicates No, the client initiates client capability negotiation after the successful login.	0	N/A	
LOGIN-13	Service negotiation transaction follows the successful login and the capability negotiation transaction if capability negotiation was requested.	М	М	
LOGIN-14	If the user has Auto-Join feature turned on for certain groups, Auto-Join to these groups takes place after the service negotiation.	М	М	
LOGIN-15	If the client or the server did not agree to support the group feature during the service negotiation, the Auto-Join feature does not take place.	М	М	
LOGIN-16	If the client has been auto-joined to any group after the successful login, the messages from the groups will not arrive until the client capability negotiation has been done.	N/A	М	
LOGIN-17	If any error occur during auto-join (group not available, group closed, not a member, etc) error message is not sent, and the particular group is not joined.	N/A	М	

#### **10.4. Get Service Provider Info transaction**

Req#	Description	C-	S-	Reference
		Req	Req	
GETSPI-1	When GetSPInfoRequest is sent to the SAP service element, and no error occurs, the SAP responds with a GetSPInfoResponse primitive.	N/A	Μ	
GETSPI-2	The Session-ID is present in an inband request.	М	N/A	
GETSPI-3	If Session-ID was present in the request, it is	N/A	М	

GETSPI-4	present in the response as well. The SAP supports GetSPInfoRequest as outband request	N/A	0	
GETSPI-5	The Client-ID is present in an outband request.	М	N/A	
GETSPI-6	If the Client-ID was present in the request, it is	N/A	М	
	present in the response as well.			

# **10.5. Service negotiation transaction**

Req#	Description	C-Req	S- Req	Referenc e
SCAPAB-1	When ServiceRequest is sent to the SAP, and no error occurs, the SAP responds with a ServiceResponse primitive.	N/A	М	
SCAPAB-2	If All-Functions-Request element indicates T in the ServiceRequest primitive, the server sends the list of all services that the server supports in the response.	N/A	Μ	
SCAPAB-3	If All-Functions-Request element indicates F in the ServiceRequest primitive, the Requested- Functions element is present in the request.	М	N/A	
SCAPAB-4	When only the mandatory functions of a particular feature are requested only the corresponding mandatory (MF, MP, MM, MG) element of the feature is present in the service tree.	М	M	
SCAPAB-5	If any other function is requested under a certain feature than the mandatory functions, the MF, MP, MM, MG element is not indicated in the tree.	М	М	
SCAPAB-6	When a sub-root element is requested without any elements under it, it means that all features and functions are requested under the particular sub-tree that are either mandatory or OPTIONAL.	М	M	
SCAPAB-7	The server provides the agreed services	N/A	Μ	
SCAPAB-8	The server does not agree to provide services that are not subscribed by the user.	N/A	М	
SCAPAB-9	The server does not agree to provide services that were not requested by the client.	N/A	М	
SCAPAB- 10	Service negotiation is repeated during a session.	0	М	

# **10.6. Client Capability negotiation transaction**

Req#	Description	C-Req	S- Req	Reference
CCAPAB-1	When CapabilityRequest is sent to the SAP, and no error occurs, the SAP responds with a CapabilityResponse primitive.	N/A	Μ	
CCAPAB-2	The server does not provide capabilities that were not requested by the client.	N/A	М	
CCAPAB-3	The CapabilityResponse primitive contains the list of capabilities that the server agrees to provide.	N/A	Μ	
CCAPAB-4	The server does not assume and use capabilities that are not supported by the client.	N/A	М	

CCAPAB-5	Client capability negotiation is repeated during a session.	0	М	
CCAPAB-6	Client capabilities are maintained between sessions.	N/A	0	
CCAPAB-7	If the client indicates the use of standalone TCP/IP binding for CIR, the server provides the IP-address and TCP port in the response	N/A	M	
CCAPAB-8	If the client indicates the use of standalone UDP/IP binding for CIR, the client provides the UDP port in the request	0	N/A	
CCAPAB-9	If the client requested standalone UDP/IP binding for CIR and the client provided the UDP port in the request, the server uses the provided port for CIR requests	N/A	М	
CCAPAB-10	If the client indicates the use of WAP SMS or WAP UDP binding for CIR, it does not provide the UDP port in the request	М	N/A	
CCAPAB-11	If the client indicates the use of WAP SMS or WAP UDP binding for CIR, the server does not provide the IP-address or TCP port in the response	N/A	М	

# 10.7. Logout transaction

Req#	Description	C- Req	S- Req	Reference
LOGOUT-1	When the client initiates session termination, it sends LogoutRequest is sent to the SAP service element. If no error occurs, the SAP responds with a Status primitive.	N/A	Μ	
LOGOUT-2	When the server initiates session termination, the SAP sends Disconnect primitive to the client, and the client does not respond.	N/A	М	
LOGOUT-3	The client ignores the transaction-ID included in the Disconnect primitive.	М	N/A	
LOGOUT-4	If the time-to-live timer of the session is exceeded the server disconnects the client by sending a Disconnect primitive to the client.	N/A	М	

## 10.8. KeepAlive transaction

Req#	Description	C- Req	S- Req	Reference
NOOP-1	When KeepAliveRequest is sent to the SAP, and no error occurs, the SAP responds with a KeepAliveResponse primitive.	N/A	М	
NOOP-2	If no other transaction will occur during the active KeepAliveTime interval, client MUST send a KeepAliveRequest in order to keep the session 'alive'.	Μ	N/A	
NOOP-3	Each transaction resets the Keep-Alive timer in the server.	N/A	М	
NOOP-4	If the Time To-Live element is present in the request primitive, the server changes the KeepAliveTime to the indicated value.	N/A	0	
NOOP-5	If the server does not accept the new timeout value requested by the client, the response is either	N/A	М	

	includes the new timeout value proposed by the server, or the status code is indicating that 'the old value is in use'.			
NOOP-6	If the server proposed a new timeout value in the response, the client will use the new value.	М	N/A	

#### 10.9. General search transaction

Req#	Description	C- Req	S- Req	Reference
SRCH-1	When SearchRequest is sent to the SAP, and no error occurs, the SAP responds with a SearchResponse primitive.	N/A	M	
SRCH-2	The 1 <sup>st</sup> SearchRequest primitive contains Search- Pair-List and Search-limit.	М	N/A	
SRCH-3	The request includes one or more Search-Pair-List.	М	N/A	
SRCH-4	If the request includes more than one Search-Pair- List, the Search-Element is different in each Search- Pair-List.	М	N/A	
SRCH-5	If the request includes more than one Search-Pair- List, the Search-Element is of the same type (user or group) in each Search-Pair-List.	М	N/A	
SRCH-6	If the request includes more than one Search-Pair- List, logical AND operation is assumed between the different pairs.	М	М	
SRCH-7	The 1 <sup>st</sup> SearchRequest primitive does not contain Search-ID and Search-Index.	М	N/A	
SRCH-8	If the 1 <sup>st</sup> search was successful, the 1 <sup>st</sup> SearchResponse primitive contains Search-ID and Search-Findings.	N/A	М	
SRCH-9	The subsequent SearchRequest primitives do not contain Search-Pair-List or Search-limit.	М	N/A	
SRCH-10	The subsequent SearchRequest primitives contain Search-ID and Search-Index.	М	N/A	
SRCH-11	The subsequent SearchResponse primitives do not contain Search-ID.	N/A	М	
SRCH-12	The number of search findings is not decreasing.	N/A	М	
SRCH-13	The subsequent SearchResponse messages contain Search-Index and Search-Result.	N/A	М	
SRCH-14	It is possible to continue a successful search.	М	М	
SRCH-15	Presence attributes that are not proactively authorized to the searching user are excluded from the search result.	N/A	М	
SRCH-16	If a user has not proactively authorized the searching user certain presence attributes part of the Search-Criteria, that user is not considered as matching.	N/A	М	
SRCH-17	If a search is not successful, and the SearchResponse primitive is returned, the Result element in the SearchResponse primitive indicates failed search, and the primitive itself does not contain any of the conditional information elements.	N/A	М	
SRCH-18	The search-result of a user search is always user- ID.	N/A	М	
SRCH-19	The search-result of a group search is always group-ID.	N/A	М	
SRCH-20	The search-results provided by the server match the search-pairs included in the request.	N/A	М	

SRCH-21	When a new search is started, the server invalidates the previous search.	N/A	М	
SRCH-22	The client sends StopSearchRequest primitive to the server when the search is needed no more.	0	N/A	
SRCH-23	The server invalidates the search specified in StopSearchRequest primiti ve.	N/A	М	
SRCH-24	When searching for groups and the search-element GROUP_USER_ID_JOINED is used and if it contains the searching user's own User-Id, the group property Searchable SHALL NOT be checked and all groups are searchable.	N/A	М	
SRCH-25	When searching for groups and the search-element GROUP_ID is used and the searching user owns this group, the group property Searchable SHALL NOT be checked and all groups are searchable.	N/A	М	
SRCH-26	When searching for groups and a restricted group is found, the server MUST check that the searching user is a group member (user, moderator or administrator of the group) before this search result is regarded as valid and the Group-Id is delivered to the searching user.	N/A	М	
SRCH-27	When searching for groups and the search-element GROUP_USER_ID_AUTOJOIN is used, it contains the searching user's own User-Id. The group property Searchable is not checked and all groups are searchable.	N/A	М	

#### 10.10. Invitation transaction

Req#	Description	C-	S-	Reference
		Req	Req	
INVIT-1	The inviting client assigns the Invite-ID.	M	N/A	
INVIT-2	The Invite ID are unique within a session.	М	N/A	
INVIT-3	The Invite ID is the same in the InviteRequest,	М	М	
	InviteUserRequest, InviteUserResponse and			
	InviteResponse primitives.			
INVIT-4	When InviteRequest primitive is sent to the SAP, the	N/A	М	
	SAP responds with a Status primitive.			
INVIT-5	When InviteRequest primitive is sent to the SAP, the	N/A	Μ	
	SAP sends InviteUserRequest to all users that are			
	invited.			
INVIT-6	When InviteUserRequest primitive is sent to the	М	N/A	
	client, the client responds with a Status primitive.			
INVIT-7	The client accepts or declines the invitation.	0	N/A	
INVIT-8	When InviteUserResponse primitive is sent to the	N/A	Μ	
	SAP, the SAP sends InviteResponse to the			
	originating client.			
INVIT-9	When InviteUserResponse primitive is sent to the	N/A	М	
	SAP, the SAP replies with a Status primitive.			
INVIT-10	When InviteResponse primitive is sent to the client,	М	N/A	
	the client responds with a Status primitive.			
INVIT-11	If Invite-Type is GR (group), Invite-Group element is	Μ	М	
	present in the primitive.			
INVIT-12	The Recipient element in the InviteUser primitive is	М	N/A	
	User-IDs, Screen -names and contact list IDs, or any			
	combination of those.			
INVIT-13	If Own-Screen-Name is present in the InviteRequest	N/A	М	
	primitive, the InviteUserRequest primitive contains			
	Screen-Name instead of User-ID (of the requesting			

INVIT-14	user). If Own-Screen -Name is not present in the InviteRequest primitive, the InviteUserRequest primitive contains the User-ID of the requesting user. The server validates the User -ID before the InviteUserRequest is sent.	N/A	М	
INVIT-15	If Invite-Group, Invite-Presence, Invite-Content or Invite-Reason is present in the InviteRequest primitive, the InviteUserRequest primitive contains those as well.	N/A	Μ	
INVIT-16	If Own-Screen -Name is present in the InviteUserResponse primitive, the InviteResponse primitive contains Screen - Name instead of User - ID (of the responding user).	N/A	Μ	
INVIT-17	If Invite-Response is present in the InviteUserResponse primitive, the InviteResponse primitive contains it as well.	N/A	М	
INVIT-18	Server does not send invitations for services not negotiated by the client.	N/A	М	
INVIT-19	Server generates appropriate Invite -Response to requestor to indicate lack of support by invited client.	N/A	М	
INVIT-20	The client includes the original Sender element without any changes in the InviteUserResponse primitive from the corresponding InviteUserRequest primitive	М	N/A	
INVIT-21	If the invitation is to group membership, the Sender element in the InviteResponse primtive identifies the group ID	N/A	М	

# **10.11. Cancel invitation transaction**

Req#	Description	C- Req	S- Req	Reference
CAINV-1	When CancelInviteRequest primitive is sent to the SAP, the SAP responds with a Status primitive.	N/A	М	
CAINV -2	When CancellnviteRequest primitive is sent to the SAP, the SAP sends CancellnviteUserRequest the users indicated in the request.	N/A	Μ	
CAINV -3	When CancelInviteUserRequest primitive is sent to the client, the client responds with a Status primitive.	М	N/A	
CAINV -4	The Invite ID refers to a previously sent out invitation.	М	N/A	
CAINV -5	The Invite ID is the same in the CancelInviteRequest and the CancelInviteUserRequest primitives.	N/A	М	
CAINV -6	If the CancelInviteRequest primitive contains Screen-Name, the CancelInviteUserRequest primitive contains Screen-Name instead of User-ID (of the requesting user).	N/A	М	
CAINV -7	If the CancelInviteRequest primitive contains Recall-Reason, the CancelInviteUserRequest primitive contains it as well.	N/A	М	
CAINV -8	If a client receives a CancelInviteUserRequest primitive with unknown Invite-ID, the primitive is replied to with a successful Status primitive and the request is ignored.	М	N/A	

# 10.12. Verify ID

Req#	Description	C-Req	S- Req	Referenc e
VRID-1	The VerifyIDRequest supports local addressing and external addressing as specified in [CSP].	N/A	M	
VRID-2	When VerifyIDRequest primitive is sent to the SAP, the SAP responds with a Status message.	N/A	М	
VRID-3	When local addressing is used in VerifyIDRequest primitive, the SAP when responding with a status primitive includes fully qualified (User-ID, ContactList-ID or Group-ID).	N/A	М	
VRID-4	If the ID-List contains the Contact-List-ID, the Contact-List-ID is the user's own Contact-List-ID.	М	N/A	

# **11. Presence Service Element Requirement**

# 11.1. Functional requirements

Req#	Description	C- Reg	S- Req	Service Reference
PRSE-1	Support for get list of contact lists (IDs) transaction	0	0	GCLI
PRSE-2	Support for create contact list transaction	0	0	CCLI
PRSE-3	Support for delete contact list transaction	0	0	DCLI
PRSE-4	Support for manage contact list transaction	0	0	MCLS
PRSE-5	Support for create attribute list transaction	0	0	CALI
PRSE-6	Support for delete attribute list transaction	0	0	DALI
PRSE-7	Support for get attribute list transaction	0	0	GALS
PRSE-8	Support for subscribe presence transaction	М	М	MP
PRSE-9	Support for unsubscribe presence transaction	М	М	MP
PRSE-10	Support for get watcher list transaction	0	0	GETWL
PRSE-11	Support for presence notification transaction	М	М	MP
PRSE-12	Support for get presence transaction	0	0	GETPR
PRSE-13	Support for update presence transaction	0	0	UPDPR
PRSE-14	Support for reactive presence authorization request	0	0	REACT
	transaction			
PRSE-15	Support for reactive presence authorization of user	0	0	REACT
	transaction			
PRSE-16	Support for cancel presence authorization	0	0	CAAUT
	transaction			
PRSE-17	Support for get reactive authorization status	0	0	GETAUT
	transaction			

#### 11.2. Get list of contact lists (IDs) transaction

Req#	Description	C- Req	S- Req	Reference
GCLI-1	When GetListRequest is sent to the SAP, and no error occurs, the SAP responds with a GetListResponse primitive.	N/A	М	
GCLI-2	The response contains the list of all contact list IDs that are owned by the user (if any).	N/A	М	
GCLI-3	The response contains the ID of the user's default contact list in the Default-CList-ID element.	N/A	М	

#### 11.3. Create contact list transaction

Req#	Description	C-	S-	Reference
		Req	Req	
CCLI-1	When CreateListRequest is sent to the SAP, the SAP responds with a Status primitive.	N/A	М	
CCLI-2	If the server creates a contact list but is not able to add all users specified in the User -Nick-List or is not able to apply all property changes specified in Contact-List- Props, the server replies with status code 201 (partially successful).	N/A	М	
CCLI-3	If the contact list exists on the server, the server indicates error in the Status primitive.	N/A	М	
CCLI-	If the contact list does not exist on the server, and the server is able to add all users in User-Nick-List and is able to apply all property changes specified in Contact-	N/A	Μ	

CCLI-4	List-Props, the server creates the contact list. If the contact list does not exist on the server, but the server is unable to add all users in User-Nick-List or is unable to apply all property changes specified in Contact-List-Props, the server creates the contact list.	N/A	ο	
CCLI-5	If User-Nick-List is provided in the primitive, the server adds the specified users and nicknames, if provided, to the newly created contact list.	N/A	М	
CCLI-6	If Contact-List-Props is provided in the primitive, the server applies the specified properties to the newly created contact list. Exception: If there exists no other contact list for this user on the server the property 'Default' will be set to 'T' no matter what the Contact- List-Props field specifies.	N/A	Μ	

#### 11.4. Delete contact list transaction

Req#	Description	C- Req	S- Req	Reference
DCLI-1	When DeleteListRequest is sent to the SAP, the SAP responds with a Status primitive.	N/A	М	
DCLI-2	If the contact list exists on the server, the server deletes it and responds with a status code of 200.	N/A	М	
DCLI-3	If the contact list does not exist on the server, the server responds with a status code of 700.	N/A	М	
DCLI-4	If the server supports the feature of automatic subscription / unsubscription and the "AutoSubscribe" has been requested 'T' for the contact list being deleted, the server unsubscribes to the presence attributes of each user in this contact list.	N/A	М	

# **11.5. Manage contact list transaction**

Req#	Description	C- Reg	S- Req	Reference
MCLS -1	When ListManageRequest is sent to the SAP, and	N/A	0	
	no error occurs, the SAP responds with a ListManageResponse primitive.			
MCLS -2	Nickname is provided with each user-ID.	0	N/A	
MCLS -3	The user-ID is the base for every contact list management operation. (Primary key)	М	М	
MCLS -4	The request primitive either contains only Contact-	М	N/A	
	List-ID and Receive-List, or contains Contact-List-			
	ID and Receive-List and Contact-List-Props, or			
	contains Contact-List-ID and Receive-List and Add-			
	Nick-List, or contains Contact-List-ID and Receive-			
	List and Remove-Nick-List.			
MCLS -5	If the Receive-List is 'T', the User-Nick-List is included in the ListManageResponse.	N/A	М	
MCLS -6	If the Receive-List is 'F', the User-Nick-List is not	N/A	М	
	included in the ListManageResponse.			
MCLS -7	If the request contains only Contact-List-ID and	Μ	N/A	
	Receive-List, the Receive -List is set 'T'.			
MCLS -8	If the request contains only Contact-List-ID and	N/A	М	
	Receive-List, the server returns the properties and			
	the User-Nick-List on the requested contact list.			
MCLS -9	If the request contains Contact-List-ID and	N/A	М	

	Receive-List and Contact-List-Props, the server applies the new properties to the requested contact list. The response contains the new properties.			
MCLS -10	If the request contains Contact-List-ID and Receive-List and Add-User-Nick-List and the user- ID does not exist in the contact list, the specified user-IDs and nicknames are added to the contact list.	N/A	М	
MCLS -11	If the request contains Contact-List-ID and Receive-List and Add-User-Nick-List, and the user ID already exists in the contact list, the provided nicknames are replaced for those user-IDs that already exist in the contact list.	N/A	М	
MCLS -12	If the request contains Contact-List-ID and Receive-List and Remove-Nick-List, the specified user-IDs and their corresponding nicknames are removed from the corresponding contact list.	N/A	М	
MCLS -13	If the request contains Contact-List-ID and Receive-List and Remove-Nick-List, and there are user-IDs in the list that do not exist in the contact list, the transaction does not fail	N/A	М	
MCLS -14	If a contact list's 'Default' property has been changed from 'F' to 'T', the previous default contact list's 'Default' property is changed from 'T' to 'F'.	N/A	М	
MCLS -15	If the server supports the feature of automatic subscription / unsubscription and "AutoSubcribe" has been requested 'T', when a new user is added to the contact list, the server subscribes to the presence attributes (specified in the original subscription request for the contact list) of this user.	N/A	M	
MCLS -16	If the server supports the feature of automatic subscription / unsubscription, in case that more than one contact list contain the same User-ID, when the User-ID is removed from one of the contact list, the server unsubscribes to the user's presence attributes that do not apply to the user's other subscriptions but only apply to this contact list from which the user is removed.	N/A	М	

#### **11.6. Create attribute list transaction**

Req#	Description	C- Req	S- Req	Reference
CALI-1	When CreateAttributeListRequest is sent to the SAP, the SAP responds with a Status primitive.	N/A	М	
CALI-2	If the attribute list exists on the server, the server overwrites it without indicating error.	N/A	М	
CALI-3	If the attribute list does not exist on the server, the server creates it.	N/A	М	
CALI-4	If the Default-List element indicates Yes, the attribute list is associated with the default attribute list.	N/A	М	
CALI-5	If the attribute list is empty (i.e.: it does not contain any presence attributes), the server SHALL regard this is a valid list to be associated with indicated user(s), contact list(s) and/or default list. This means that the priority rules for attributes list also apply for this list.	N/A	М	

### 11.7. Delete attribute list transaction

Description	C-	S-	Reference
the SAP responds with a Status primitive.	N/A	IVI	
If the attribute list does not exist on the server, the	N/A	М	
server does not indicate error in the Status primitive.			
If the attribute list exists on the server, the server	N/A	М	
deletes it.			
The attribute list is deleted from every user specified in the User-ID-List element.	N/A	М	
The attribute list is deleted from every contact list	N/A	М	
specified in the Contact-List-ID-List element.			
If the Default-List element indicates Yes, the default	N/A	М	
	When DeleteAttributeListRequest is sent to the SAP, the SAP responds with a Status primitive. If the attribute list does not exist on the server, the server does not indicate error in the Status primitive. If the attribute list exists on the server, the server deletes it. The attribute list is deleted from every user specified in the User-ID-List element. The attribute list is deleted from every contact list specified in the Contact-List-ID-List element.	ReqWhen DeleteAttributeListRequest is sent to the SAP, the SAP responds with a Status primitive.N/AIf the attribute list does not exist on the server, the server does not indicate error in the Status primitive.N/AIf the attribute list exists on the server, the server deletes it.N/AThe attribute list is deleted from every user specified in the User-ID-List element.N/AThe attribute list is deleted from every contact list specified in the Contact-List-ID-List element.N/A	ReqReqWhen DeleteAttributeListRequest is sent to the SAP, the SAP responds with a Status primitive.N/AMIf the attribute list does not exist on the server, the server does not indicate error in the Status primitive.N/AMIf the attribute list exists on the server, the server deletes it.N/AMThe attribute list is deleted from every user specified in the User-ID-List element.N/AMThe attribute list is deleted from every contact list specified in the Contact-List-ID-List element.N/AMIf the Default-List element indicates Yes, the defaultN/AM

# 11.8. Get attribute list(s) transaction

Req#	Description	C- Req	S- Req	Reference
GALS-1	When GetAttributeListRequest is sent to the SAP, and no error occurs, the SAP responds with a GetAttributeListResponse primitive.	N/A	М	
GALS-2	If default attribute list has been created, it is delivered in the GetAttributeListResponse transaction.	М	М	
GALS-3	If the request contained Contact-List-ID-List, the server will send only the attribute list(s) associated with the particular contact list(s).	N/A	М	
GALS-4	If the request contained User-ID-List, the server will send only the attribute list(s) associated with the particular user(s).	N/A	М	
GALS-5	If the request contains neither the Contact-List-ID-List element nor the User-ID-List element, then all contact lists, user-ID associations are delivered.	N/A	М	

## 11.9. Get presence transaction

Req#	Description	C- Reg	S- Req	Reference
GETPR-1	When GetPresenceRequest is sent to the SAP, and no error occurs, the SAP responds with a GetPresenceResponse primitive.	N/A	М	
GETPR-2	The request refers to either specific user IDs or contact lists.	М	N/A	
GETPR-3	The request does not refer to screen name(s).	М	N/A	
GETPR-4	If the request does not contain presence attribute-list, the SAP delivers all available and authorized presence attributes.	N/A	М	
GETPR-5	If the request contains presence attribute list, the SAP delivers only the authorized subset of the requested attributes.	N/A	М	
GETPR-6	If the Result indicates unsuccessful transaction, the Presence-Value-List element is not present in the primitive.	N/A	М	
GETPR-7	The GetPresenceResponse primitive refers only to users, not to contact-lists	N/A	М	

# 11.10. Update presence transaction

Req#	Description	C- Req	S- Req	Reference
UPDPR-1	When UpdatePresenceRequest is sent to the SAP,	N/A	М	
	the SAP responds with a Status primitive.			
UPDPR-2	The PRSE updates the provided values in the	N/A	М	
	server.			

## 11.11. Subscribe presence transaction

Req#	Description	C-	S-	Reference
		Req	Req	
SUBPR-1	When SubscribePresenceRequest is sent to the SAP, the SAP responds with a Status primitive.	N/A	М	
SUBPR-2	The request refers either to specific user-ID(s) or to contact-list(s), or to both.	Μ	N/A	
SUBPR-3	The request does not refer to screen name(s).	М	N/A	
SUBPR-4	If the request refers to the contact list, the server subscribes to each individual user currently in the contact list.	N/A	М	
SUBPR-5	If the request does not contain presence attribute- list, the SAP delivers all and authorized available presence attributes.	N/A	М	
SUBPR-6	If the request contains presence attribute list, the SAP delivers only the authorized subset of the requested attributes.	N/A	М	
SUBPR-7	The SAP sends the requested values to the client.	N/A	0	
SUBPR-8	If the subscription was successful, the server sends initially all requested and authorized attributes in the PresenceNotificationRequest primitive to the requesting user	N/A	М	
SUBPR-9	While the subscription is active, the server sends PresenceNotificationRequest primitivesto the requesting user when the other party updates its presence information.	N/A	М	
SUBPR-10	If all the presence attributes specified in the request are already subscribed, server responds with Status primitive that contains Successful result code.	N/A	М	
SUBPR-11	If "AutoSubscribe" is set 'T', but the server does not support the feature of automatic subscription / unsubscription and the normal subscription to the contact list succeeds, the server returns a part ial success response (201) which includes the detailed error code 760 "AutoSubscribe not supported".	N/A	М	
SUBPR-12	If "AutoSubscribe" is set 'T', but the server does not support the feature of automatic subscription / unsubscription and the normal subscription to the contact list fails, the server returns a multiple error response (900) which includes the detailed error code 760 "AutoSubscribe not supported".	N/A	М	
SUBPR-13	If the "AutoSubscribe" is set 'F', the server performs the normal subscription behavior to the contact list. If the server supports automatic subscription / unsubscription feature, the feature is disabled for the contact list.	N/A	М	

Req#	Description	C- Reg	S- Rea	Reference
UNSPR-1	When UnsubscribePresenceRequest is sent to the PRSE, the PRSE responds with a Status primitive.	N/A	M	
UNSPR-2	The request refers either to specific user-ID(s) or to contact-list(s), or to both.	М	N/A	
UNSPR-3	The request does not refer to screen name(s).	М	N/A	
UNSPR-4	After the specified subscriptions have been unsubscribed, the server does stops delivering presence updates of the unsubscribed users.	N/A	М	

#### 11.12. Unsubscribe presence transaction

#### **11.13. Presence notification transaction**

Req#	Description	C-	S-	Reference
		Req	Req	
PRNOT-1	When SAP sends PresenceNotificationRequest to the	М	N/A	
	client, the client responds with a Status primitive.			
PRNOT-2	The notification refers only to users, not to contact-	N/A	М	
	lists.			
PRNOT-3	The notification includes the subscribed values.	N/A	0	
PRNOT-4	The notification does not include users that are not	N/A	М	
	subscribed by the user.			
PRNOT-5	If the subscription did not contain presence-attribute -	N/A	М	
	list, the PresenceNotificationRequest contains all			
	available and authorised presence attributes.			
PRNOT-6	If the subscription did contain presence attribute list,	N/A	М	
	the SAP delivers only the authorized subset of the			
	requested attributes.			

### 11.14. Get watcher list transaction

Req#	Description	C- Req	S- Req	Reference
GETWL-1	When GetWatcherListRequest is sent to the SAP, and no error occurs, the SAP responds with a GetWatcherListResponse primitive.	N/A	М	
GETWL-2	The server includes the user-IDs of all users that are subscribing to any of the requesting user's presence information.	N/A	М	
GETWL-3	The server adds the watcher history period in the GetWatcherListResponse.	N/A	0	

#### 11.15. Reactive presence authorization request transaction

Req#	Description	C- Rea	S- Rea	Reference
REREQ-1	When PresenceAuthRequest is sent to the client, the client responds with a Status primitive.	M	N/A	

# 11.16. Reactive presence authorization of user transaction

Req#	Description	C- Reg	S- Reg	Reference
REAUT-1	When PresenceAuthUser is sent to the SAP, the SAP responds with a Status primitive.	N/A	M	
REAUT-2	The user-ID identifies the same user that requested the reactive presence authorisation with PresenceAuthRequest primitive.	N/A	М	
REAUT-3	If the Acceptance element in the request indicates Yes, the server allows the specific user to access the presence attributes specified in the Presence- Attribute-List element.	N/A	М	
REAUT-4	If the Acceptance element in the request indicates No, the server does not allow the specific user to access the presence attributes specified in the Presence-Attribute -List element.	N/A	М	
REAUT-5	Those attributes that have been requested but not specified in the response PresenceAttribute-List element remain in their original state.	N/A	М	
REAUT-6	If the Presence-Attribute-List element is missing or empty the Acceptance element applies to all available presence attributes.	N/A	М	

## **11.17. Cancel presence authorization transaction**

Req#	Description	C- Req	S- Req	Reference
CAAUT-1	When CancelAuthRequest is sent to the SAP, the SAP responds with a Status primitive.	N/A	М	
CAAUT-2	After cancellation, the server does not allow the specific user to get the previously requested presence attributes.	N/A	М	
CAAUT-3	After cancellation, the server sends new authorization request if the specific user again requests access to the publisher's presence attributes.	N/A	М	

#### 11.18. Get reactive authorization status transaction

Req#	Description	C- Req	S- Req	Reference
GETAUT-1	When GetReactiveAuthStatusRequest is sent to the SAP, and no error occurs, the SAP responds with a GetReactiveAuthStatusResponse primitive.	N/A	М	
GETAUT-2	The response contains a list with the status of reactive authorizations.	N/A	М	
GETAUT-3	If the request contains a list of user IDs, the response only returns the status of reactive authorization for those users.	N/A	М	
GETAUT-4	If the reactive authorization status applies to all available attributes, the server does not return a PresenceSubList element.	N/A	М	

# **12. Instant Messaging Service Element Requirement**

# 12.1. Functional requirements

Req#	Description	C-	S-	Service
		Req	Req	Reference
IMSE-1	Support for setting delivery method	0	М	SETD
IMSE-2	Support for send message transaction	М	М	MM
IMSE-3	Support for 'push'-ing messages	0	М	PUSH
IMSE-4	Support for 'pull'-ing messages	0	М	PULL
IMSE-5	Support for either pushing or pulling messages	М	М	
IMSE-6	Support for get list of messages transaction	0	0	GETLM
IMSE-7	Support for reject message transaction	0	0	REJCM
IMSE-8	MessageInfo element requirements	М	М	MIER
IMSE-9	Support for new message transaction	0	М	NEWM
IMSE-10	Support for message notification transaction	0	М	NOTIF
IMSE-11	Support for get message transaction	0	М	GETM
IMSE-12	Support for delivery status report transaction	0	М	MDELIV
IMSE-13	Support for forward message transaction	0	М	FWMSG
IMSE-14	Support for get list of blocked entities transaction	0	0	GLBLU
IMSE-15	Support for block entity transaction	0	0	BLENT

## 12.2. Set delivery method transaction

Req#	Description	C- Req	S- Req	Reference
SETD-1	When SetDeliveryMethodRequest is sent to the SAP, the SAP responds with a Status primitive.	N/A	М	
SETD-2	If the group-ID is present in the request, the delivery method will be applied to that specific group only.	0	0	
SETD-3	If the delivery method is "Notify/Get", only notifications are sent to the client, the actual messages are pulled from the server using the GetMessageRequest primitive.	М	М	
SETD-4	If the delivery method is "Push", notifications are not sent to the client, but the actual messages are pushed without request, except in requirements below.	М	М	
SETD-5	The Accepted -Content-Length is present in the primitive only when the Delivery-Method element indicates "Push".	М	N/A	
SETD-6	If the message size is larger than the "Accepted- Content-Length", the server uses "Notify/Get" instead of "Push" even if the current setting indicates "Push".	N/A	М	
SETD-7	If the content type is application/vnd.wap.mms- message, the server uses "Notify/Get" instead of "Push" even if the current setting indicates "Push".	N/A	М	

## 12.3. Send message transaction

Req#	Description	C- Req	S- Req	Reference
SENDM-1	When SendMessageRequest is sent to the SAP, and no error occurs, the SAP responds with a SendMessageResponse primitive.	N/A	М	
SENDM-2	The MessageInfo structure identifies at least one recipient.	М	N/A	

SENDM-3	The MessageInfo structure identifies the sender.	0	N/A	
SENDM-4	The sending client is identified by Client-ID.	õ	N/A	
SENDM-5	The recipient(s) are a (list of) user(s) specified with	M	N/A	
	user-ID(s), contact list ID or screen name(s),	141		
	orgroup(s) specified by group-ID(s).			
SENDM-6	The sender is a single user specified with user-ID or	М	N/A	
	screen name.	141		
SENDM-7	If the message did not include DateTime element,	N/A	Μ	
02.02.0.1	the server adds the DateTime element to the	,		
	message.			
SENDM-8	The server delivers the instant message exactly to	N/A	Μ	
	the recipient(s), which have been accepted for			
	delivery.			
SENDM-9	If the validity period is present in the request, the	N/A	Μ	
	delivery is not requested after the specified time			
	has expired			
SENDM-10	If the content-type is not present in the primitive, the	М	Μ	
	content is handled assuming "text/plain" content-			
	type.			
SENDM-11	If the content encoding is not present in the	М	Μ	
	primitive, the content is handled assuming that it is			
	not encoded.			
SENDM-12	If the content is encoded, the content size indicates	М	Μ	
	the exact size in bytes after encoding.			
SENDM-13	If the server accepts the message for delivery the	N/A	M	
	SendMessageResponse contains the assigned			
	Message-ID.			
SENDM-14	If the server rejects the message delivery, the	N/A	М	
	SendMessageResponse does not contain the			
	Message-ID.			
SENDM-15	If the Delivery-Report-Request element is the	N/A	Μ	
	request indicates Yes, the server will send			
	DeliveryReportRequest primitive containing the			
	assigned Message-ID to the originator when the			
	message is delivered or retrieved.		N.4	
SENDM-16	If the recipient has been specified as screen	N/A	М	
	name(s), and the recipient user has not been joined			
	to the group when the message delivery is			
SENDM-17	imminent, the message is rejected.	N/A	M	
SENDIVI-17	If the message is targeted to a group, the message	IN/A	IVI	
SENDM-18	is rejected if the user has not joined to the group. The client does not include DateTime element in	М	N/A	
SEINDIVI-10		IVI	N/A	
SENDM-19	the MessageInfo structure of the request. The client does not include the MessageID element	М	N/A	
SENDIVI-19	in the MessageInfo structure of the request.	IVI	IN/A	
SENDM-20	The client does not include the MessageURI	М	N/A	
	element in the MessageInfo structure of the	IVI	11/7	
	request.			
SENDM-21	The WV server that receives the message for	N/A	M	
	delivery adds the DateTime element to the		141	
	MessageInfo structure.			
		1	1 1	

# 12.4. Get list of messages transaction

Req#	Description	C-	S-	Reference
		Req	Req	
GETLM-1	When GetMessageListRequest is sent from the client to the SAP, and no error occurs, the SAP responds with a GetMessageListResponse primitive.	N/A	М	

GETLM-2	The Group-ID element (if exists) indicates a single group specified with group-ID.	Μ	N/A	
GETLM-3	If the Group -ID element is present, the server sends the message-info of those messages that has been sent to the specified group.	N/A	0	
GETLM-4	If the Group -ID element is not present, the server sends the message-info of non-delivered instant messages from all users.	N/A	0	
GETLM-5	If the Message -Count element is present, the server does not send more message info structures than the value specified in Message -Count.	N/A	М	
GETLM-6	The response contains the requested message -info structure(s).	N/A	М	
GETLM-7	If the request is targeted to a group, the request is rejected if the user has not joined to the group.	N/A	М	

# 12.5. Reject message transaction

Req#	Description	C- Req	S- Req	Reference
REJCM-1	When RejectMessageRequest is sent from the client to the SAP, the SAP responds with a Status primitive.	N/A	М	
REJCM-2	The requested messages are removed from the server.	N/A	М	

## 12.6. Message-Info element requirements

Req#	Description	C- Req	S- Req	Reference
MIER-1	When a message is delivered to a user from another user the Sender Element contains the User-ID of the sender and the Recipient element contains the User- ID of the receiver.	N/A	М	
MIER-2	When a message is deliver ed to a user from a group the Sender Element contains the Screen-Name of the sender used in that group and the Recipient element contains the Group-ID of the group.	N/A	Μ	
MIER-3	When a private message is delivered to a user from another user in a group the Sender Element contains the Screen-Name of the sender used in that group and the Recipient element contains the Screen- Name used by the receiver in that group.	N/A	М	
MIER-4	For privacy reasons when an instant message is sent to multiple recipients, the server delivers the instant messages to every recipient without delivering the actual list of recipients. (The recipients are not revealed to each other.)	N/A	М	

# 12.7. NewMessage primitive

Req#	Description	C-	S-	Reference
		Req	Req	
NEWM-1	NewMessage primitive is used only when the selected delivery method is Push, and the length of the content is equal or smaller than the Accepted -	N/A	М	

NEWM-2	Content-Length. When NewMessage primitive is sent to the client, and no error occurs, the client responds with a MessageDelivered primitive.	м	N/A	
NEWM-3	The sender is identified by either User-ID (or Screen- Name.	N/A	М	
NEWM-4	The sending client is identified by Client-ID.	N/A	0	
NEWM-5	The content-related requirements are the same as defined in Send message transaction.	М	М	Chapter 12.3
NEWM-6	The MessageInfo structure refers to a message using MessageID	N/A	М	
NEWM-7	The MessageInfo structure refers to a message using MessageURI	N/A	М	
NEWM-8	The MessageInfo structure refers to a message using either MessageID or MessageURI but not both	N/A	М	
NEWM-9	The MessageInfo structure contains DateTime element	N/A	М	
NEWM-10	The MessageID refers to a message obtainable from IM service element	N/A	М	
NEWM-11	The MessageURI refers to a message not obtainable from IM service element	N/A	М	
NEWM-12	If MessageURI is present in the Message-Info struct in NewMessage, the NewMessage should not contain Content	N/A	М	

# 12.8. Message notification transaction

Req#	Description	C-	S-	Reference
		Req	Req	
NOTIF-1	When MessageNotification is sent to the client, the	М	N/A	
	client responds with a Status primitive.			
NOTIF-2	Either Message-ID or Message-URI is present.	N/A	М	

# 12.9. Get message transaction

Req#	Description	C- Req	S- Req	Reference
GETM-1	When GetMessageRequest is sent from the client to the SAP, and no error occurs, the SAP responds with a GetMessageResponse primitive.	N/A	М	
GETM-2	When the client receives GetMessageResponse primitive, and no error occurs, it sends MessageDelivered primitive to the SAP.	М	N/A	
GETM-3	When the SAP receives MessageDelivered primitive, it responds with a Status primitive to the client.	N/A	М	
GETM-4	The Message-IDs in the GetMessageRequest, GetMessageResponse, and MessageDelivered primitives are equal.	N/A	М	
GETM-5	The retrieved instant message is removed from the IMSE.	N/A	М	
GETM-6	The MessageInfo structure refers to a message using MessageID	N/A	0	
GETM-7	The MessageInfo structure refers to a message using MessageURI	N/A	0	
GETM-8	The MessageInfo structure refers to a message using either MessageID or MessageURI but not both	N/A	М	
GETM-9	The MessageInfo structure contains DateTime	N/A	М	

GETM-10	element The MessageID refers to a message obtainable from IM service element	N/A	М	
GETM-11	The MessageURI refers to a message not obtainable from IM service element	N/A	М	
GETM-12	If MessageURI is present in the Message-Info struct in GetMessageResponse, the GetMessageResponse should not contain Content	N/A	М	

#### 12.10. Delivery status report transaction

Req#	Description	C-	S-	Reference
		Req	Req	
MDELIV-1	When DeliveryReportRequest is sent to the client	М	N/A	
	from the SAP, the client responds with a Status primitive.			
MDELIV-2	The delivery status report is sent only if the client requested it when message is being sent.	N/A	М	
MDELIV-3	The server creates the delivery report indicating successful delivery when MessageDelivered primitive is received from client in case of point-to-point instant messaging.	N/A	М	
MDELIV-4	The server creates the delivery report indicating successful delivery when the GRSE has accepted the message for delivery in case of group messaging.	N/A	М	
MDELIV-5	The server creates the delivery report indicating unsuccessful delivery when the message is expired in the server in case of point-to-point messaging.	N/A	М	
MDELIV-6	The server creates the delivery report indicating unsuccessful delivery in case of unsuccessful NewMessage or MessageNotification transactions.	N/A	М	

#### 12.11. Forward message transaction

Req#	Description	C- Req	S- Req	Reference
FWMSG-1	When ForwardMessageRequest is sent from the client to the SAP, the SAP responds with a Status primitive.	N/A	Μ	
FWMSG-2	The requirements in SendMessage transaction are all required, except those related to message content.	М	М	Chapter 12.3

#### 12.12. Get list of blocked entities transaction

Req#	Description	C-	S-	Reference
		Req	Req	
GLBLU-1	When GetBlockedListRequest is sent to the SAP, and no error occurs, the SAP responds with a GetBlockedListResponse primitive.	N/A	М	
GLBLU-2	If the user has block-list on the server, the response contains Blocked-Entity-List.	N/A	М	
GLBLU-3	If the user does not have block-list on the server, the response does not contain Blocked-Entity-List.	N/A	М	
GLBLU-4	If the user has grant-list on the server, the response	N/A	М	

contains Granted-Entity-List. GLBLU-5 If the user does not have grant-list on the server, the response does not contain Granted -Entity-List.	N/A	М		
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#### 12.13. Block entities transaction

Req#	Description	C-	S-	Reference
		Req	Req	
BLENT-1	When BlockEntityRequest is sent to the SAP, the	N/A	Μ	
	SAP responds with a Status primitive.			
BLENT-2	Entities that are specified in the Block-Entity-List	N/A	М	
	element are added to the block-list.			
BLENT-3	Entities that are specified in the Unblock-Entity-List	N/A	М	
	element are removed from the block-list.			
BLENT-4	Entities that are specified in the Grant-Entity-List	N/A	Μ	
	element are added to the grant-list.			
BLENT-5	Entities that are specified in the Ungrant-Entity-List	N/A	М	
	element are removed from the grant-list.			
BLENT-6	Support for turning on and off the use of Block-Entity-	N/A	Μ	
	List			
BLENT-7	Support for turning on and off the use of Grant-Entity-	N/A	Μ	
	List			
BLENT-8	If Blocked-Entity-List is in use, all messages or	N/A	Μ	
	invitations coming from user(s) on the list are			
	removed on the server (not delivered).			
BLENT-9	If Granted-Entity-List is in use, only messages or	N/A	Μ	
	invitations coming from user(s) on the list are			
	delivered to the user, All other messages or			
	invitations are removed on the server (not delivered).			
BLENT-10	If both Blocked-Entity-List and Granted-Entity-List are	N/A	Μ	
	in use at the same time, Blocked-Entity-List has			
	priority over Granted-Entity-List.			
BLENT-11	User-IDs, Screen -Names and Group-IDs are	0	М	
	supported.			

# **13. Group Service Element Requirement**

## 13.1. Functional requirements

Req#	Description	C- Req	S- Req	Reference
GRSE-1	Support for group creation transaction	0	0	CREAG
GRSE-2	Support for group deletion transaction	0	0	DELGR
GRSE-3	Support for get group properties transaction	0	0	GETGP
GRSE-4	Support for set group properties transaction	0	0	SETGP
GRSE-5	Support for get group members transaction	0	0	GETGM
GRSE-6	Support for add group members transaction	0	0	ADDGM
GRSE-7	Support for remove group members transaction	0	0	RMVGM
GRSE-8	Support for member access rights transaction	0	0	MBRAC
GRSE-9	Support for subscribe group notice transaction	0	0	SUBGCN
GRSE-10	Support for group change notification transaction	0	0	GRCHN
GRSE-11	Support for join group transaction	М	М	MG
GRSE-12	Support for leave group transaction	М	М	MG
GRSE-13	Support for reject user(s) from group transaction	0	0	REJEC
GRSE-14	Support for get joined users transaction	0	0	GETJU

#### **13.2. Create group transaction**

Req#	Description	C- Req	S- Req	Reference
CREAG-1	When CreateGroupRequest primitive is sent to the server, the SAP responds with a Status primitive.	N/A	М	
CREAG-2	The group with the specified properties is created on the server.	N/A	Μ	
CREAG-3	The created group type is Private.	М	М	
CREAG-4	The requesting user (owner) has Administrator privileges in the newly created group.	N/A	М	
CREAG-5	If the value of the Join-Group flag is 'T' (true), the user is joined to the group after successful group creation.	N/A	М	
CREAG-6	If the value of the Subscribe -Notif is 'T' (true) and the server supports the function, the user starts receiving group change notifications after successfully joining the group.	N/A	М	

#### 13.3. Delete group transaction

Req#	Description	C-	S-	Reference
		Req	Req	
DELGR-1	When DeleteGroupRequest primitive is sent to the	N/A	М	
	server, the SAP responds with a Status primitive.			
DELGR-2	The Group-ID refers to a private group.	М	N/A	
DELGR-3	The requesting user has Administrator privileges in	М	М	
	the particular group.			
DELGR-4	The specified group is deleted from the server.	N/A	М	
DELGR-5	The delete request for a public group is rejected.	N/A	М	

# 13.4. Get group properties transaction

Req#	Description	C- Req	S- Req	Reference
GETGP-1	If the receiving party does not understand a custom group property, it will ignore it without generating an error.	М	М	
GETGP-2	When GetGroupProps Request primitive is sent to the server, and no error occurs, the SAP responds with a GetGroupPropsResponse primitive.	N/A	0	
GETGP-3	The GetGroupPropsResponse primitive contains the group properties of the requested group.	N/A	М	
GETGP-4	It the user has own properties defined for a group, the GetGroupPropsResponse primitive contains the user's own properties of the requested group.	N/A	М	
GETGP-5	If the group is closed and the user is not in the members' list, the transaction is rejected	N/A	М	
GETGP-6	If the 'Validity' property is retrieved and the 'AutoDelete' property is 'T', the returned value of 'Validity' property is the remaining time period for which the group is valid.	N/A	М	

# 13.5. Set group properties transaction

Req#	Description	C- Req	S- Req	Reference
SETGP-1	When SetGroupPropsRequest primitive is sent to the server, the SAP responds with a Status primitive.	М	М	
SETGP-2	It the user has Administrator access rights, the new group properties of the group are set on the server.	N/A	М	
SETGP-3	The new own user properties of the group are set on the server.	N/A	М	
SETGP-4	Read-only properties are not set.	N/A	М	
SETGP-5	If the group is closed and the user is not in the members' list, the transaction is rejected.	N/A	М	
SETGP-6	Own properties of group members are kept on the server between group sessions.	N/A	М	
SETGP-7	Own properties of users that are not members of a group are kept on the server between group sessions	N/A	0	
SETGP-8	If the "AutoDelete" property is set 'F', the 'Validity' value is ignored and the group is not deleted automatically. In this case, the group is considered permanent. The "permanency" of a group is subject to the local policy of maximum lifetime defined by server vendor or operator.	N/A	м	
SETGP-9	If the "AutoDelete" property is set 'T' and the "Validity" value is zero (0), the group is automatically deleted if all joined users have left the group.	N/A	М	
SETGP-10	If the "AutoDelete" property is set 'T' and the "Validity" value is greater than zero (0), the timing takes place. The "Validity" value is changing and reflects the remaining time period for which the group is valid.	N/A	М	

# **13.6. Get group members transaction**

Req#	Description	C- Req	S- Req	Reference
GETGM-1	When GetGroupMembersRequest primitive is sent to the server, and no error occurs, the SAP responds with a GetGroupMembersResponse primitive.	N/A	0	
GETGM-2	Only users with Administrator or Moderator access rights can get the list.	N/A	М	
GETGM-3	The GetGroupMembersResponse primitive contains the list of group members.	N/A	М	
GETGM-4	If the group is restricted and the requesting user is not in the members' list, the transaction is rejected.	N/A	М	

#### 13.7. Add group members transaction

Req#	Description	C- Req	S- Req	Reference
ADDGM-1	When AddGroupMembersRequest primitive is sent to the server, the SAP responds with a Status primitive.	N/A	М	
ADDGM-2	Only users with Administrator or Moderator access rights can add users.	N/A	М	
ADDGM-3	The specified members are added to the group with User access right.	N/A	М	
ADDGM-4	Adding a group member who is already in the group will be ignored and is not considered to be an error.	N/A	М	
ADDGM-5	If the group is closed and the user is not in the members' list, the transaction is rejected.	N/A	М	

#### 13.8. Remove group members transaction

Req#	Description	C- Req	S- Req	Reference
RMVGM-1	When RemoveGroupMembersRequest primitive is sent to the server, the SAP responds with a Status primitive.	N/A	М	
RMVGM-2	Only users with Administrator or Moderator access rights can remove users.	N/A	М	
RMVGM-3	The specified members are removed from the group.	N/A	М	
RMVGM-4	Removing a group member who is not in the group will be ignored and is not considered to be an error.	N/A	М	

#### 13.9. Member access rights transaction

Req#	Description	C-	S-	Reference
		Req	Req	
MBRAC-1	When MemberAccessRequest primitive is sent to the server, the SAP responds with a Status primitive.	N/A	М	
MBRAC-2	Only users with Administrator access rights can	N/A	М	
	modify access rights.			
MBRAC-3	The users are identified by user-lds.	М	М	
MBRAC-4	The creator (owner) of the group has always	N/A	М	
	Administrator access rights, his/her access rights			

MBRAC-5	cannot be modified. The new access rights are applied to the specified users.	N/A	М
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## **13.10.** Subscribe group change notification transaction

Req#	Description	C- Req	S- Req	Reference
SUBGCN-	When SubscribeGroupNoticeRequest primitive is sent	N/A	0	
1	to the server, and no error occurs, the SAP responds with a SubscribeGroupNoticeResponse primitive.			
SUBGCN- 2	If the SubscribeGroupNoticeRequest primitive requests get operation, the subscription state is not changed on the server, and the current status of the subscription is sent for the particular group.	N/A	М	
SUBGCN- 3	If the SubscribeGroupNoticeRequest primitive requests set operation, the SAP turns the subscription status on for the particular group.	N/A	0	
SUBGCN- 4	If the SubscribeGroupNoticeRequest primitive requests unset operation, the SAP turns the subscription status off for the particular group.	N/A	М	
SUBGCN- 5	The server automatically turns the group change subscription off when the joined user/member to whom the subscription belongs leaves (or removed from) the particular group.	N/A	М	

# 13.11. Group change notification transaction

Req#	Description	C- Re q	S- Re q	Referenc e
GRCHN -1	When the client receives GroupChangeNotice primitive, it responds to the SAP with a Status primitive.	Μ	N/A	
GRCHN -2	When the Welcome Note has been changed, group change notification is not sent.	N/A	М	
GRCHN -3	When the server internally updates the Validity of a group, group change notification is not sent.	N/A	М	
GRCHN -4	When an administrator/moderator updates the Validity of a group, group change notification is sent to all members (with active subscription) and to all joined users (with active subscription).	N/A	М	
GRCHN -5	When any other properties of a group than Welcome Note and Validity (server internal update) have been changed, group change notification is sent to all group members (with active subscription) and to all joined users (with active subscription).	N/A	М	
GRCHN -6	When the users own properties have been changed, only that particular user will receive GroupChangeNotice primitive from the SAP (if he/she has active group change subscription).	N/A	М	
GRCHN -7	When some users have left or joined the group all joined users (with active subscription) will receive GroupChangeNotice	N/A	Μ	

GRCHN -8	primitive from the SAP. The GroupChangeNotice primitive contains information about the changed properties and/or joined/left users.	М	м	
GRCHN -9	For those users who have recently joined the group and have their ShowID property set to 'T', their user ID and screen name are delivered in the Joined-User-List element.	N/A	М	
GRCHN -10	For those users who have recently joined the group and have their ShowID property set to 'F' only their screen name is delivered in the Joined-User-List element.	М	М	

# 13.12. Join group transaction

Req#	Description	C-	S-	Reference
itteq#	Description	Req	Req	Kelelence
JOING-1	When JoinGroupRequest primitive is sent to the	N/A	M	
	server, and no error occurs, the SAP responds with a	1,7,7,		
	JoinGroupResponse primitive.			
JOING-2	Rejected users cannot join.	N/A	М	Chapter
				13.14
JOING-3	If the group is Open, any user can join it.	N/A	М	
JOING-4	If the group is Closed, only the group members can	N/A	М	
	join.			
JOING-5	If the JoinGroupRequest primitive contains the screen	N/A	0	
	name for the user, the requested screen name will be			
	used.			
JOING-6	If the JoinGroupRequest primitive does not contain the	N/A	0	
	screen name for the user, the server assigns a screen			
	name for the user.			
JOING-7	If the Joined-Request element in the	0	М	
	JoinGroupRequest primitive indicates Yes, the server			
	will include the currently joined users' list in the			
	response.			
JOING-8	The JoinGroupResponse primitive contains welcome-	N/A	0	
	note.	N1/A		
JOING-9	When the user has successfully joined the group, the	N/A	М	
	server will send all messages that are sent to the			
	particular group.	N1/A		
JOING- 10	If the value of the Subscribe -Notif is 'T' (true) and the	N/A	М	
10	server supports the function, the user starts receiving			
	group change notifications after successfully joining			
JOING-	the group. If the Own-Props element in the JoinGroupRequest	N/A	М	
11	primitive is present, the own user properties of the	IN/A		
	group are set on the server.			
JOING-	If a joined user or member has the ShowID property	N/A	0	
12	set to 'T', the user ID is delivered with the screen name		Ŭ	
	within the joined users' list.			
JOING-	If a joined user or member has the ShowID property	N/A	м	
13	set to 'F', only the screen name is delivered within the			
	joined users' list.			
			1	

### 13.13. Leave group transaction

Req# Description

C- S- Reference

		Req	Req	
LEAVEG-1	When the client sends LeaveGroupRequest primitive is sent to the server, and no error occurs, the SAP responds with a LeaveGroupResponse primitive.	N/A	М	
LEAVEG-2	When LeaveGroupResponse primitive is sent to the client without prior request, it responds with a Status primitive.	Μ	N/A	
LEAVEG-3	If the client initiated the leave group transaction, the LeaveGroupResponse primitive does not contain the Group -ID.	Μ	М	
LEAVEG-4	If the server initiated the leave group transaction, the LeaveGroupResponse primitive contains the Group- ID, and the Reason-Code element indicates why the user was forced to leave.	N/A	М	

# 13.14. Reject user(s) from group transaction

Req#	Description	C- Req	S- Reg	Reference
REJEC-1	When RejectListRequest primitive is sent to the SAP, and no error occurs, the SAP responds with a RejectListResponse primitive.	N/A	M	
REJEC-2	Only users with Administrator or Moderator access rights can add/remove users to/from the reject list.	N/A	М	
REJEC-3	The members specified in the Add-User-List element are added to the reject list.	N/A	М	
REJEC-4	The members specified in the Remove -User-List element are removed from the reject list.	N/A	М	
REJEC-5	Adding a member who is already in the list will be ignored and is not considered to be an error.	N/A	М	
REJEC-6	Removing a member who is not in the list will be ignored and is not considered to be an error.	N/A	М	
REJEC-7	If there are any rejected users that are currently joined, those users will be forced to leave the group	N/A	М	
REJEC-8	The response contains the list of users that are rejected.	N/A	М	

## 13.15. Get joined users transaction

Req#	Description	C-	S-	Reference
		Req	Req	
GETJM-1	When GetJoinedUsersRequest primitive is sent to	N/A	М	
	the server, and no error occurs, the SAP responds			
	with a GetJoinedUsersResponse primitive.			
GETJM-1	If the requesting user is not joined to the requested	N/A	Μ	
	group, the transaction is rejected.			
GETJM-2	If the requesting user has Administrator or Moderator	N/A	М	
	privileges, the GetJoinedUsersResponse primitive			
	contains the Admin -Map-List element.			
GETJM-3	If the requesting user has Administrator or Moderator	N/A	Μ	
	privileges, the User -IDs of the users are indicated in			
	the response disregarding the ShowID own group			
	property.			
GETJM-4	If the requesting user does not have Administrator or	N/A	М	
	Moderator privileges, the GetJoinedUsersResponse			
	primitive contains the User-Map-List element.			
GETJM-5	If the requesting user does not have Administrator or	N/A	Μ	
	Moderator privileges, the User-IDs only for those			

users are indicated in the response the	nat have the		
ShowID own group property turned o	on (True='T').		

# Appendix A. Static Conformance Requirements (Normative)

Not Applicable - the static conformance requirements are contained within the body of this document.

# Appendix B. Change History (Informative)

Type of Change	Date	Section	Description
Class 0	2003-Feb-21		Version 1.2