

SyncML Implementation Conformance Statement DataSync v1.0.1

Draft 09-01-2003

Open Mobile Alliance
OMA_IOP_DMSYNC_SICS_DS101-2003-01-09-rev0.1

Continues the Technical Activities
Originated in the SyncML Initiative



This document is considered confidential and may not be disclosed in any manner to any non-member of the Open Mobile Alliance™, unless there has been prior explicit Board approval.

This document is a work in process and is not an approved Open Mobile Alliance™ conformance statement. This document is subject to revision or removal without notice.

A list of errata and updates to this document is available from the Open Mobile Alliance™ Web site,

© 2003, Open Mobile Alliance Ltd. All rights reserved.

Terms and conditions of use are available from the Open Mobile Alliance™ Web site at <http://www.openmobilealliance.org/copyright.html>.

You may use this document or any part of the document for internal or educational purposes only, provided you do not modify, edit or take out of context the information in this document in any manner. You may not use this document in any other manner without the prior written permission of the Open Mobile Alliance™. The Open Mobile Alliance authorises you to copy this document, provided that you retain all copyright and other proprietary notices contained in the original materials on any copies of the materials and that you comply strictly with these terms. This copyright permission does not constitute an endorsement of the products or services offered by you.

The Open Mobile Alliance™ assumes no responsibility for errors or omissions in this document. In no event shall the Open Mobile Alliance be liable for any special, indirect or consequential damages or any damages whatsoever arising out of or in connection with the use of this information.

This document is available online in PDF format at <http://www.openmobilealliance.org/>.

Known problems associated with this document are published at <http://www.openmobilealliance.org/>.

Comments regarding this document can be submitted to the Open Mobile Alliance™ in the manner published at <http://www.openmobilealliance.org/documents.html>

| Document History | |
|---|---------|
| OMA_IOP_DMSYNC_SICS_DS101-2003-01-09-rev0.1 | Current |

Table of contents

| | |
|---|----|
| 1 Introduction | 4 |
| 2 Product Information | 5 |
| 2.1 Device and Contact Information | 5 |
| 2.2 Content Formats Supported | 5 |
| 3 Server Conformance Tables | 6 |
| 3.1 Representation Common Use Elements | 6 |
| 3.2 Representation Message container elements | 6 |
| 3.3 Data description elements | 7 |
| 3.4 Representation Protocol command elements | 7 |
| 3.5 Device Info | 7 |
| 3.6 Meta Info | 8 |
| 3.7 Protocol | 9 |
| 3.8 Authentication | 9 |
| 3.9 MIME header types | 9 |
| 4 Client Conformance Tables | 10 |
| 4.1 Representation Common Use Elements | 10 |
| 4.2 Representation Message container elements | 10 |
| 4.3 Data description elements | 11 |
| 4.4 Representation Protocol command elements | 11 |
| 4.5 Device Info | 11 |
| 4.6 Meta Info | 12 |
| 4.7 Protocol | 13 |
| 4.8 Authentication | 13 |
| 4.9 MIME header types | 14 |
| 5 Transport Conformance | 15 |
| 5.1 HTTP Transport | 15 |
| 5.2 OBEX Transport | 16 |
| 5.3 WSP Transport | 16 |
| 6 Additional Information | 17 |
| 7 References | 18 |

1 INTRODUCTION

The purpose of this statement is to define a methodology for showing conformance with the SyncML Representation protocol [1], SyncML Sync Protocol [2] and appropriate transport. Vendors filling in this form will mark the items with either YES or NO, indicating whether the items are implemented or not. Mandatory items marked NO MUST have explanatory text.

NOTE: Server must be able to deal with the two cases of packages 1 & 3 being sent separately and combined.

Please use section 6 to provide any additional information with regards to your Implementation Conformance Statement. Please do not annotate the SCR items in the following sections.

2 PRODUCT INFORMATION

2.1 Device and Contact Information

| | |
|------------------------|--------------------------------|
| Device Name & Version: | SureWave SyncServer 3.1 |
| Company: | JP Mobile, Inc. |
| Contact Name: | Kiran Ganji |
| Contact Phone: | 972-277-8370 |
| Contact Email: | kiran.ganji@jpmobile.com |
| Product is: | CLIENT[] SERVER[X] |
| Transports supported: | HTTP[X] WSP[] OBEX[] |
| OBEX support: | IrDA[] Bluetooth[] |

Notes:

- The contents of the [Device Name & Version] field will appear in the List of compliant products on the SyncML web page.
- OBEX support for RS232 and USB is not defined scoped out within the SyncML bindings specifications. Devices cannot claim these transports until the specifications have been updated.

2.2 Content Formats Supported

NOTE: If a server supports a data type listed below, it must also support the associated content format.

| Data Type | Content Format | Supported (Y/N) |
|---|--------------------------|-----------------|
| Contact | vCard 2.1 | Y |
| | vCard 3.0 (optional) | N |
| Calendar | vCalendar 1.0 | Y |
| | iCalendar 2.0 (optional) | N |
| Memos | text/plain | Y |
| Tasks | vTodo 1.0 | N |
| Email | message/rfc822 | N |
| | message/rfc2822 | N |
| | message/rfc2045 | N |
| Other (Please specify any other supported data types) | | |

3 SERVER CONFORMANCE TABLES

NOTE: Server SHOULD be able to log the XML and WBXML documents sent between the server and a client.

3.1 Representation Common Use Elements

This section contains the ICS proforma for the Static Conformance Requirements for the Representation Common Use Elements.

| Command | Required of Server | | Implemented in Server | |
|------------|--------------------|-----------|-----------------------|-----------|
| | Sending | Receiving | Sending | Receiving |
| Archive | MAY | MUST | NO | YES |
| Chal | MUST | MUST | YES | YES |
| Cmd | MUST | MUST | YES | YES |
| CmdID | MUST | MUST | YES | YES |
| CmdRef | MUST | MUST | YES | YES |
| Cred | MUST | MUST | YES | YES |
| Final | MUST | MUST | YES | YES |
| Lang | MAY | MAY | NO | NO |
| LocName | MAY | MAY | YES | YES |
| LocURI | MUST | MUST | YES | YES |
| MsgID | MUST | MUST | YES | YES |
| MsgRef | MUST | MUST | YES | YES |
| NoResp | MAY | MUST | YES | YES |
| NoResults | MAY | MAY | YES | YES |
| RespURI | MAY | MUST | YES | YES |
| SessionID* | MUST | MUST | YES | YES |
| SftDel | MAY | MAY | NO | NO |
| Source | MUST | MUST | YES | YES |
| SourceRef | MUST | MUST | YES | YES |
| Target | MUST | MUST | YES | YES |
| TargetRef | MUST | MUST | YES | YES |
| VerDTD | MUST | MUST | YES | YES |
| VerProto | MUST | MUST | YES | YES |

*The maximum length of a SessionID is 4 bytes. Note that a client having an 8 bit incrementing SessionID counter is enough for practical implementations.

3.2 Representation Message container elements

This section contains the ICS Proforma for the Static Conformance Requirements for the Message Container elements.

| Command | Required of Server | | Implemented in Server | |
|----------|--------------------|-----------|-----------------------|-----------|
| | Sending | Receiving | Sending | Receiving |
| SyncML | MUST | MUST | YES | YES |
| SyncHdr | MUST | MUST | YES | YES |
| SyncBody | MUST | MUST | YES | YES |

3.3 Data description elements

This section contains the ICS Proforma for the Static Conformance Requirements for the Data Description elements.

| Command | Required of Server | | Implemented in Server | |
|---------|--------------------|-----------|-----------------------|-----------|
| | Sending | Receiving | Sending | Receiving |
| Data | MUST | MUST | YES | YES |
| Item | MUST | MUST | YES | YES |
| Meta | MUST | MUST | YES | YES |

3.4 Representation Protocol command elements

This section contains the ICS Proforma for the Static Conformance Requirements for the Protocol Command elements.

| Command | Required of Server | | Implemented in Server | |
|----------|--------------------|-----------|-----------------------|-----------|
| | Sending | Receiving | Sending | Receiving |
| Add | MUST | MUST | YES | YES |
| Alert | MUST | MUST | YES | YES |
| Atomic | MAY | MAY | YES | YES |
| Copy | MAY | MUST | YES | YES |
| Delete | MUST | MUST | YES | YES |
| Exec | MAY | SHOULD | YES | YES |
| Get* | MUST | MUST | YES | YES |
| Map | MAY | MUST | YES | YES |
| MapItem | MAY | MUST | YES | YES |
| Put* | MUST | MUST | YES | YES |
| Replace | MUST | MUST | YES | YES |
| Result* | MUST | MUST | YES | YES |
| Search | MAY | MAY | YES | YES |
| Sequence | MAY | MUST | YES | YES |
| Status | MUST | MUST | YES | YES |
| Sync | MUST | MUST | YES | YES |

*Minimum requirement for a SyncML device is to support Put, Get, and Result when exchanging device information.

3.5 Device Info

This section contains the ICS Proforma for the Static Conformance Requirements for SyncML Device Information.

| Element Type | Required of Server | | Implemented in Server | |
|--------------|--------------------|-----------|-----------------------|-----------|
| | Sending | Receiving | Sending | Receiving |
| CTCap | SHOULD | MUST | YES | YES |
| CTType | MUST | MUST | YES | YES |

| | | | | |
|-------------|----------|--------|-----|-----|
| DataStore | MUST | MUST | YES | YES |
| DataType | MAY | MUST | YES | YES |
| DevID | MUST | MUST | YES | YES |
| DevInf | MUST | MUST | YES | YES |
| DevTyp | MUST | MUST | YES | YES |
| DisplayName | MAY | MAY | YES | YES |
| DSMem | MAY | SHOULD | YES | YES |
| Ext | MAY | MAY | YES | YES |
| FwV | MAY | SHOULD | YES | YES |
| HwV | MAY | SHOULD | YES | YES |
| Man | MAY | SHOULD | YES | YES |
| MaxGUIDSize | MUST NOT | MUST | YES | YES |
| MaxID | MAY | SHOULD | YES | YES |
| MaxMem | MAY | SHOULD | YES | YES |
| Mod | MAY | MAY | YES | YES |
| OEM | MAY | MAY | YES | YES |
| ParamName | SHOULD | MUST | YES | YES |
| PropName | SHOULD | MUST | YES | YES |
| Rx | MAY | MUST | YES | YES |
| Rx-Pref | MUST | MUST | YES | YES |
| SharedMem | SHOULD | MAY | YES | YES |
| Size | MAY | MUST | YES | YES |
| SourceRef | MUST | MUST | YES | YES |
| SwV | MAY | SHOULD | YES | YES |
| SyncCap | MUST | MUST | YES | YES |
| SyncType | MUST | MUST | YES | YES |
| Tx | MAY | MUST | YES | YES |
| Tx-Pref | MUST | MUST | YES | YES |
| ValEnum | SHOULD | MUST | YES | YES |
| VerCT | MUST | MUST | YES | YES |
| VerDTD | MUST | MUST | YES | YES |
| Xnam | MAY | MAY | YES | YES |
| Xval | MAY | MAY | YES | YES |

3.6 Meta Info

This section contains the ICS Proforma for the Static Conformance Requirements for SyncML Meta Information.

| Element Type | Required of Server | | Implemented in Server | |
|--------------|--------------------|-----------|-----------------------|-----------|
| | Sending | Receiving | Sending | Receiving |
| Anchor | MUST | MUST | YES | YES |
| EMI | MAY | MAY | YES | YES |
| Format | MUST | MUST | YES | YES |
| FreeID | MAY | MUST | YES | YES |
| FreeMem | MAY | MUST | YES | YES |
| Last | MUST | MUST | YES | YES |

| | | | | |
|------------|------|------|-----|-----|
| Mark | MAY | MAY | YES | YES |
| MaxMsgSize | MAY | MUST | YES | YES |
| Mem | MAY | MUST | YES | YES |
| MetInf | MUST | MUST | YES | YES |
| Next | MUST | MUST | YES | YES |
| NextNonce | MUST | MUST | YES | YES |
| SharedMem | MAY | MUST | YES | YES |
| Size | MAY | MAY | YES | YES |
| Type | MUST | MUST | YES | YES |
| Version | MUST | MUST | YES | YES |

3.7 Protocol

This section contains the ICS Proforma for the Static Conformance Requirements for the Sync Protocol.

| Element Type | Server Requirements | |
|--|---------------------|-------------|
| | Required | Implemented |
| Support of 'two-way sync' | MUST | YES |
| Support of 'slow two-way sync' | MUST | YES |
| Support of 'one-way sync from client only' | MAY | NO |
| Support of 'refresh sync from client only' | MAY | NO |
| Support of 'one-way sync from server only' | MAY | NO |
| Support of 'refresh sync from server only' | MAY | NO |
| Support of 'sync alert' | MAY | NO |
| Support of multiple messages per package | MUST | YES |
| Support of combined package 1 and 3 | MUST | YES |

3.8 Authentication

This section contains the ICS Proforma for the Static Conformance Requirements for SyncML Authentication.

| Authentication Type | Server Requirements | |
|---------------------------|---------------------|-------------|
| | Required | Implemented |
| Basic (name and password) | MUST | YES |
| MD5 | MUST | YES |

3.9 MIME header types

This section contains the ICS Proforma for the Static Conformance Requirements for SyncML MIME Media Types.

| MIME Header Type | Server Requirements |
|------------------|---------------------|
|------------------|---------------------|

| | Required | Implemented |
|--------------------------------|----------|-------------|
| "application/vnd.syncml+xml" | MUST | YES |
| "application/vnd.syncml+wbxml" | MUST | YES |

4 CLIENT CONFORMANCE TABLES

4.1 Representation Common Use Elements

This section contains the ICS proforma for the Static Conformance Requirements for the Representation Common Use Elements.

| Command | Required of Client | | Implemented in Client | |
|------------|--------------------|-----------|-----------------------|-----------|
| | Sending | Receiving | Sending | Receiving |
| Archive | MAY | MAY | | |
| Chal | MAY | MUST | | |
| Cmd | MUST | MUST | | |
| CmdID | MUST | MUST | | |
| CmdRef | MUST | MUST | | |
| Cred | MUST | MUST | | |
| Final | MUST | MUST | | |
| Lang | MAY | MAY | | |
| LocName | MAY | MAY | | |
| LocURI | MUST | MUST | | |
| MsgID | MUST | MUST | | |
| MsgRef | MUST | MUST | | |
| NoResp | MAY | MUST | | |
| NoResults | MAY | MAY | | |
| RespURI | MAY | MUST | | |
| SessionID* | MUST | MUST | | |
| SftDel | MAY | MAY | | |
| Source | MUST | MUST | | |
| SourceRef | MUST | MUST | | |
| Target | MUST | MUST | | |
| TargetRef | MUST | MUST | | |
| VerDTD | MUST | MUST | | |
| VerProto | MUST | MUST | | |

*The maximum length of a SessionID is 4 bytes. Note that a client having an 8 bit incrementing SessionID counter is enough for practical implementations.

4.2 Representation Message container elements

This section contains the ICS Proforma for the Static Conformance Requirements for the Message Container elements.

| Command | Required of Client | | Implemented in Client | |
|----------|--------------------|-----------|-----------------------|-----------|
| | Sending | Receiving | Sending | Receiving |
| SyncML | MUST | MUST | | |
| SyncHdr | MUST | MUST | | |
| SyncBody | MUST | MUST | | |

4.3 Data description elements

This section contains the ICS Proforma for the Static Conformance Requirements for the Data Description elements.

| Command | Required of Client | | Implemented in Client | |
|---------|--------------------|-----------|-----------------------|-----------|
| | Sending | Receiving | Sending | Receiving |
| Data | MUST | MUST | | |
| Item | MUST | MUST | | |
| Meta | MUST | MUST | | |

4.4 Representation Protocol command elements

This section contains the ICS Proforma for the Static Conformance Requirements for the Protocol Command elements.

| Command | Required of Client | | Implemented in Client | |
|----------|--------------------|-----------|-----------------------|-----------|
| | Sending | Receiving | Sending | Receiving |
| Add | SHOULD | MUST | | |
| Alert | MUST | MUST | | |
| Atomic | MAY | MAY | | |
| Copy | MAY | MAY | | |
| Delete | MUST | MUST | | |
| Exec | MAY | MAY | | |
| Get* | SHOULD | MUST | | |
| Map | MUST | MAY | | |
| MapItem | MUST | MAY | | |
| Put* | MUST | MUST | | |
| Replace | MUST | MUST | | |
| Result* | MUST | SHOULD | | |
| Search | MAY | MAY | | |
| Sequence | MAY | MAY | | |
| Status | MUST | MUST | | |
| Sync | MUST | MUST | | |

*Minimum requirement for a SyncML device is to support Put, Get, and Result when exchanging device information.

4.5 Device Info

This section contains the ICS Proforma for the Static Conformance Requirements for SyncML Device Information.

| Element Type | Required of Client | | Implemented in Client | |
|--------------|--------------------|-----------|-----------------------|-----------|
| | Sending | Receiving | Sending | Receiving |
| CTCap | MUST | SHOULD | | |
| CTType | MUST | MUST | | |
| DataStore | MUST | MUST | | |
| DataType | MAY | MAY | | |
| DevId | MUST | MUST | | |
| DevInf | MUST | MUST | | |
| DevTyp | MUST | MUST | | |
| DisplayName | MAY | MAY | | |
| DSMem | SHOULD | MAY | | |
| Ext | MAY | MAY | | |
| FwV | SHOULD | MAY | | |
| HwV | SHOULD | MAY | | |
| Man | SHOULD | MAY | | |
| MaxGUIDSize | MUST | MUST NOT | | |
| MaxID | SHOULD | MAY | | |
| MaxMem | SHOULD | MAY | | |
| Mod | MAY | MAY | | |
| OEM | MAY | MAY | | |
| ParamName | SHOULD | SHOULD | | |
| PropName | MUST | SHOULD | | |
| Rx | MAY | MUST | | |
| Rx-Pref | MUST | MUST | | |
| SharedMem | SHOULD | MAY | | |
| Size | MAY | MAY | | |
| SourceRef | MUST | MUST | | |
| SwV | SHOULD | MAY | | |
| SyncCap | MUST | MUST | | |
| SyncType | MUST | MUST | | |
| Tx | MAY | MUST | | |
| Tx-Pref | MUST | MUST | | |
| ValEnum | MUST | SHOULD | | |
| VerCT | MUST | MUST | | |
| VerDTD | MUST | MUST | | |
| Xnam | MAY | MAY | | |
| Xval | MAY | MAY | | |

4.6 Meta Info

This section contains the ICS Proforma for the Static Conformance Requirements for SyncML Meta Information.

| Element Type | Required of Client | | Implemented in Client | |
|--------------|--------------------|-----------|-----------------------|-----------|
| | Sending | Receiving | Sending | Receiving |
| Anchor | MUST | MUST | | |
| EMI | MAY | MAY | | |

| | | | | |
|------------|--------|------|--|--|
| Format | MUST | MUST | | |
| FreeID | SHOULD | MAY | | |
| FreeMem | SHOULD | MAY | | |
| Last | MUST | MUST | | |
| Mark | MAY | MAY | | |
| MaxMsgSize | MAY | MUST | | |
| Mem | SHOULD | MAY | | |
| MetInf | MUST | MUST | | |
| Next | MUST | MUST | | |
| NextNonce | MAY | MUST | | |
| SharedMem | SHOULD | MAY | | |
| Size | MAY | MAY | | |
| Type | MUST | MUST | | |
| Version | MAY | MAY | | |

4.7 Protocol

This section contains the ICS Proforma for the Static Conformance Requirements for the Sync Protocol.

| Element Type | Client Requirements | |
|--|---------------------|-------------|
| | Required | Implemented |
| Support of 'two-way sync' | MUST | |
| Support of 'slow two-way sync' | MUST | |
| Support of 'one-way sync from client only' | MAY | |
| Support of 'refresh sync from client only' | MAY | |
| Support of 'one-way sync from server only' | MAY | |
| Support of 'refresh sync from server only' | MAY | |
| Support of 'sync alert' | MAY | |
| Support of multiple messages per package | MUST | |
| Support of combined package 1 and 3 | MAY | |

4.8 Authentication

This section contains the ICS Proforma for the Static Conformance Requirements for SyncML Authentication.

Note: that authentication is only required for SyncHdr, optional for datastore.

| Authentication Type | Client Requirements | |
|---------------------------|---------------------|-------------|
| | Required | Implemented |
| Basic (name and password) | MUST | |
| MD5 | MUST | |

4.9 MIME header types

This section contains the ICS Proforma for the Static Conformance Requirements for SyncML MIME Media Types.

Note: the client MUST support one of the two MIME header types.

| MIME Header Type | Client Requirements | |
|--------------------------------|---------------------|-------------|
| | Required | Implemented |
| "application/vnd.syncml+xml" | MUST if no wbxml | |
| "application/vnd.syncml+wbxml" | MUST if no xml | |

5 TRANSPORT CONFORMANCE

5.1 HTTP Transport

Vendors should fill this section out ONLY if their product uses the HTTP Transport.

NOTE that the tables only indicate the required data.

| Method | Requirements | |
|--------|--------------|-------------|
| | Required | Implemented |
| POST | MUST | YES |

| General Headers | Requirements | |
|----------------------------------|--------------|-------------|
| | Required | Implemented |
| Cache-Control: no-store, private | MUST | YES |
| Transfer-Encoding: chunked | MUST | YES |

| Request Headers | Requirements | |
|---------------------|------------------------|-------------|
| | Required | Implemented |
| Accept | MUST | YES |
| Accept-Charset | MUST | YES |
| Authorization | MUST | YES |
| Proxy-Authorization | MUST if a proxy client | NO |
| User-Agent | MUST | YES |

| Response Headers | Requirements | |
|---------------------|----------------------|-------------|
| | Required | Implemented |
| Authentication-Info | MUST | YES |
| Proxy-Authenticate | MUST if proxy client | NO |
| WWW-Authenticate | MUST | YES |

5.2 OBEX Transport

Vendors should fill this section out ONLY if their product uses the OBEX Transport

Note that these definitions of client and server are the OBEX definition, not the SyncML definition.

NOTE that the tables only indicate the required data.

| Method | OBEX Server Requirements | |
|------------|--------------------------|-------------|
| | Required | Implemented |
| GET | MUST | |
| PUT | MUST | |
| CONNECT | MUST | |
| DISCONNECT | MUST | |
| ABORT | MUST | |

| Method | OBEX Client Requirements | |
|------------|--------------------------|-------------|
| | Required | Implemented |
| GET | MUST | |
| PUT | MUST | |
| CONNECT | MUST | |
| DISCONNECT | MUST | |

5.3 WSP Transport

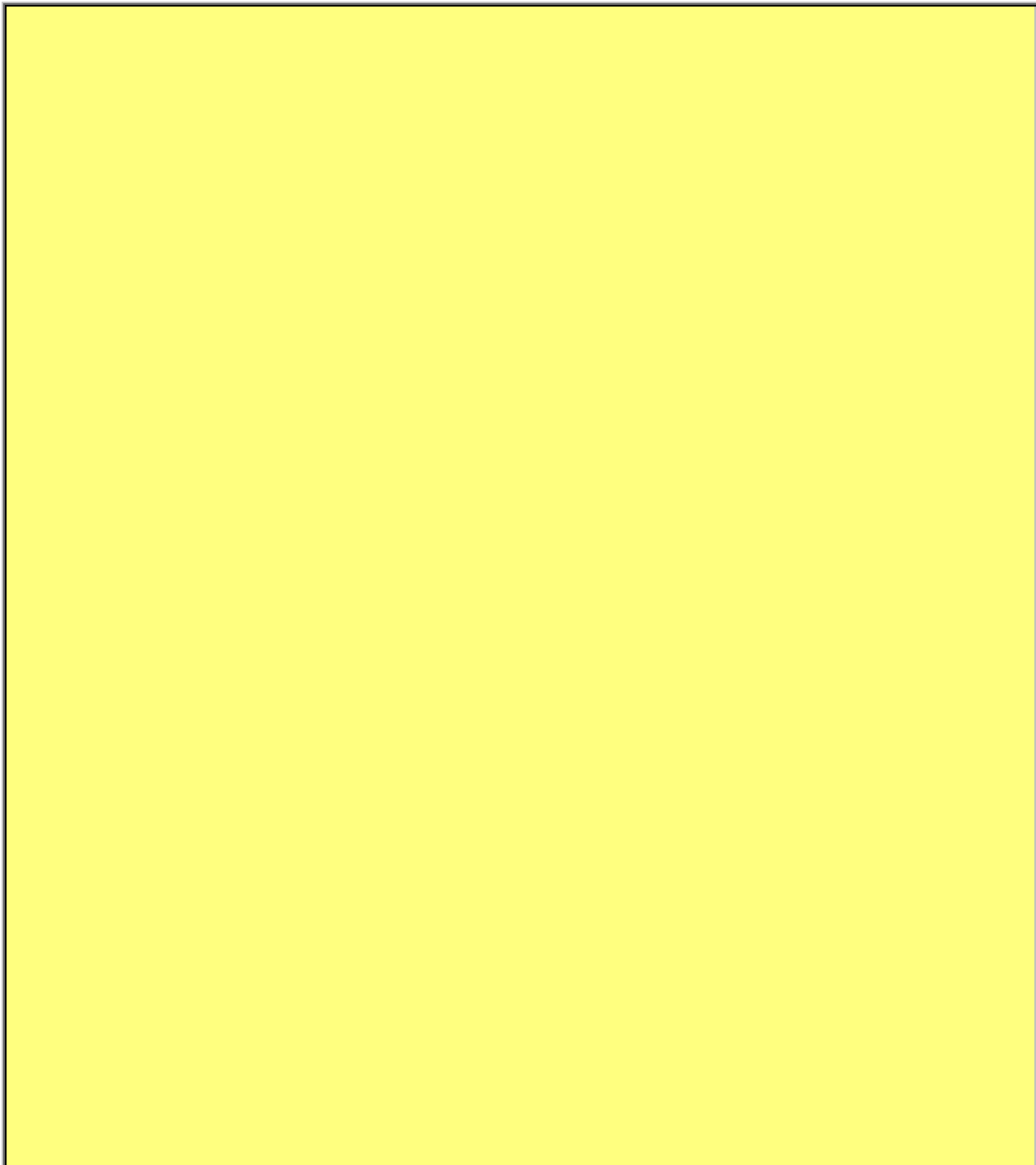
Vendors should fill this section out ONLY if their product uses the WSP Transport.

NOTE that the tables only indicate the required data.

| Method | Requirements | |
|--------|--------------|-------------|
| | Required | Implemented |
| POST | MUST | |

6 ADDITIONAL INFORMATION

Please use this section to provide any additional information with regards to your Implementation Conformance Statement. Please do not annotate the previous sections.



7 REFERENCES

- [1] [SyncML Representation Protocol, version 1.0.1](#)
- [2] [SyncML Sync Protocol, version 1.0.1](#)
- [3] [SyncML Meta-Information DTD, version 1.0.1](#)
- [4] [SyncML Device Information DTD, version 1.0.1](#)
- [5] [SyncML HTTP Binding, version 1.0.1](#)
- [6] [SyncML OBEX Binding, version 1.0.1](#)
- [7] [SyncML WSP Binding, version 1.0.1](#)