### MultiSpeak Version 3.0 Interoperability Assertion

Vendor(s)	Product	Product Version	Role	Batch Interface	Web Client Interfaces	Web Server Interfaces
DCSI	Optimum	0.1	MR			MR→CB
Milsoft Utility Solutions	WindMil	7.1	СВ		MR→CB	

Statement of Interoperable Functionality Between:

## Summary:

WindMil is capable of requesting AMR data from DCSI's Optimum using MultiSpeak web services. Assuming consumers in the WindMil model are assigned the appropriate meter numbers, WindMil can use this interface to determine which of those meters have DCSI AMR endpoints and the type of endpoint each meter has. WindMil can request the most recent meter readings or can request the meter data from all AMR supported meters on the system for a single, given day.

## **Prerequisites:**

For this interface to be useful, the user's electrical system must be modeled to the consumer level in WindMil. Each consumer in the WindMil model for which meter data is desired must have an associated meter number which corresponds to a meter number in DCSI's TNS software.

## **Specific Vendor Assertions:**

### 1) WindMil can request all AMR supported meters from Optimum.

*Importance to user:* The user can determine which consumers in the WindMil model have meters with DCSI AMR endpoints

*How Achieved:* The user selects the "Import AMR vendor tags" box in the AMR Data Importer in WindMil. When the Run button is clicked, WindMil calls the GetAMRSupportedMeters method on the MR-CB interface supported by Optimum. If Optimum reports that a meter is AMR supported, the appropriate AMR type will be visible in WindMil on the Consumer Data page of the Circuit Element Editor for the consumer having that meter number.

#### 2) WindMil can request meter readings from Optimum.

*Importance to user:* The user can retrieve kW demand and/or kWh readings for every AMR supported meter with an associated consumer in WindMil. This load data can be used directly by WindMil's engineering analysis functions, or it can be used indirectly to facilitate the allocation of load on the model. The WindMil user requests all readings taken by the AMR system on some given day.

*How Achieved:* The user selects the "Import AMR meter readings" box in the AMR Data Importer in WindMil and then chooses a date in the past for which he would like to receive meter readings. The user selects whether the readings should be imported into calculated load and/or billing load and chooses the appropriate billing load group for the imported data. When the Run button is clicked, WindMil calls the GetReadingsByDate method on the MR-CB interface supported by Optimum. The returned load data for each meter is stored in the fields the user requested.

#### Summary of Interoperability Test Results Interface #2A MR→CB

# Table 1Recommended MultiSpeak Methods

Method Name Importance to User		Supported by Server <sup>1</sup> (MR)	Supported by Client <sup>2</sup> (CB)	Verified Inter- operable <sup>3</sup>
GetMethods	Requests a list of methods supported by the server.	Х	Х	Х
PingURL Verifies that the server is running and reachable.		Х	Х	Х
CustomerChangedNotification	Notify customer information has changed.	Х		
GetAMRSupportedMeters	Requests a list of all AMR supported meters.	Х	Х	Х
GetHistoryLogByMeterNo	Requests data about meter events for a specific meter.			
GetHistoryLogsByDate	Requests all outage events occurring between two dates.		Х	
GetHistoryLogsByDateAndEventCode	Requests data about meter events for a specific event type and date range.			
GetHistoryLogsByMeterNoAndEventCode	Requests data about meter events for a specific meter and date range.			
GetReadingsByDate	Requests all meter readings taken between two dates.	Х	Х	Х
GetLatestReadingByMeterNo	Requests the most recent meter reading for a given meter.	Х		
GetReadingsByMeterNo	Returns all readings for a given meter taken between two dates.	Х		
IsAMRMeter	Verifies that a given meter has AMR	Х		
MeterAddNotification	Adds the supplied meter.	Х		
MeterChangedNotification	Notify meter information has changed.	Х		
MeterRemoveNotification	Removes the supplied meter.	Х		
ServiceLocationChangedNotification	Notify service location information has changed.	Х		

#### Summary of Interoperability Test Results Interface #2A MR→CB

# Table 2Optional MultiSpeak Methods

Method Name	Importance to User	Supported by Server <sup>1</sup> (MR)	Supported by Client <sup>2</sup> (CB)	Verified Inter- operable <sup>3</sup>
CancelDisconnectedStatus	Requests cancellation of disconnected status for specified meters.	Х		
CancelPlannedOutage	Requests cancellation of planned outage for specified meters.	Х		
CancelUsageMonitoring	Requests cancellation of zero usage monitoring for specified meters.	Х		
InitiateDisconnectedStatus	Initiate disconnected status for specified meters.	Х		
InitiateMeterReadByMeterNumber	Initiate meter reading for specified meter numbers.	Х		
InitiatePlannedOutage	Initiate planned outage between two dates for specified meters.	Х		
InitiateUsageMonitoring	Initiate zero usage monitoring for specified meters.	Х		
GetDomainMembers	Requests the members of a given domain (type of fixed information, such as all of the counties in the database).			
GetDomainNames	Requests the domains (lists of fixed information, such as the counties served, or the acceptable statusCodes for this installation).			
GetModifiedAMRMeters	Requests changes in AMR meters since a specific data exchange session.			
GetReadingsByBillingCycle	Requests all meter readings for the specified date range and billing cycle.	Х		

1) Supported by Server means that the server has demonstrated in some interoperability test (not necessarily with this client) that it can support the method.

2) Supported by Client means that the client has demonstrated in some interoperability test (not necessarily with this server) that it can call the method.

3) Verified Interoperable means that both the client and server have demonstrated in this interoperability test that they can usefully transfer data using this method.

Certified by:

For DCS Product Marketing Manager Name: Edward J. Kobeszka Date: January 23, 2006

For Milsoft Utility Solutions, Inc.:

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Vice President of Development Name: Luis Malave Date: January 23, 2006

Assertions Verified by:

Hann Hundanpuk

Name: Hannu Huhdanpaa <u>UISOL, Inc.</u> Testing Agent Date: January 23, 2006

Disclaimer:

The assertions made in this document are statements of the vendors offering the two products listed above. The Testing Agent has observed the software performing the tasks described in these vendor assertions.

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