



Open Metering System ERRATA

Issue 4.0.1 / 2016-06

RELEASE



Document History

Version	Date	Comment	Editor
0.1	2015-09-29	Initial version for discussion in OMS AG1	A. Bolder
0.9	2015-12-28/29	Approved version filled with identified bugs from Todo-List	A. Bolder
4.0.1	2016-03-01	Adjustment on versioning; additional entries	A. Bolder
4.0.1	2016-06	Approval by OMS AG1, ready for release	A. Bolder



Table of contents

Document History 2

Table of contents 3

List of figures..... 3

List of tables..... 3

1 Introduction 4

2 ERRATA 5

List of figures

List of tables

Table 1 – ERRATA to OMS Specification Vol. 2 version 4.02 5

1 Introduction

The OMS-Group is a community of interest of associations, presently figawa and KNX, with enterprises in the area of metering relevant to accounting. With the 'Open Metering System Specification' (OMS-Specification) the OMS-Group has developed an open, vendor independent standard for communications interfaces and basic requirements.

This OMS-Specification is available in <http://www.oms-group.org/download4all>.

To ensure a continuous maintenance of the OMS Specification, this ERRATA list is introduced. It contains all relevant issues which have occurred in the application of the OMS Specification which need clarification or correction.

10 This ERRATA list will be worked into the next release of the OMS Specification.



2 ERRATA

Table 1 – ERRATA to OMS Specification Vol. 2 version 4.02

No.	Date of contribution	Page # Line # (e.g. 49 17)	Reference		Type of comment ¹	Comment	Change	Status
			Clause/ Sub-clause (e.g. 3.1)	Fig./ Table (e.g. Table 1)				
1	2014-03-27	7 -	N.1.3		te	The Current Message Counter C (LSB first) is stated 'B3 0A 00 00', which is not correct.	The Current Message Counter C (LSB first) for the example shall be 'B3 04 00 00'.	Approved

¹ Type of comment: ge = general te = technical ed = editorial



No.	Date of contribution	Reference		Type of comment ¹	Comment	Change	Status
		Page # Line # (e.g. 49 17)	Clause/ Sub-clause (e.g. 3.1)				
2	2014-03-27	64 -	G.5	Table G4	te The hex coded bytes in the example for a Compact Load Profile are not calculated correctly. The following code for the Data field 'Variable length' is wrong. 8Dh 04h 93h 1Fh 0Ah 72h FEh 90h 00h D6h 00h 4Ch 01h 02h 01h	The correct code for the Data field 'Variable length' is listed below: 8Dh 04h 93h 1Fh 0Ah 7Ah FEh 44h 01h 14h 02h 32h 03h 58h 02h	Approved
3	2014-09-18	13 -	B.2.2		te Wrong name for Data point MM5! and VIB-Type MM05.	Replace 'Last Storage number' by 'Size of storage block'.	Approved



No.	Date of contribution	Reference		Type of comment ¹	Comment	Change	Status
		Page # Line # (e.g. 49 17)	Clause/ Sub-clause (e.g. 3.1)				
4	2014-09-18	6 -	B.2.2		Footnote 13 is no longer correct.	Replace text of footnote 13 by: Refer to [EN13737-3:2013]	2.1.1.1.1.1.1 New In discussion Rejected Approved Solved in v



No.	Date of contribution	Reference		Type of comment ¹	Comment	Change	Status
		Page # Line # (e.g. 49 17)	Clause/ Sub-clause (e.g. 3.1)				
5	2014-09-18	2.1.1.1.1 33 - 37 - 40 -	N.1.1 N.3.1 N.4 N.5 N.6		te In Annex N all the table titles named 'AES Key according to FIPS 197 (LSB first)' are not correct. Calculation requires usage of the keys with MSB first.	1. Throughout Annex N change table titles 'AES Key according to FIPS 197 (LSB first):' to 'AES Key according to FIPS 197 (see 9.1):' 2. Add a new clause in main document in Section 9.1 Overview: 'Byte order of keys: If nothing else is declared the keys are presented in the order they are used for encryption, authentication and key derivation. Which means the byte outside left is the most significant byte of the key. NOTE: According to the typical byte order on the M-Bus a key is always transmitted with least significant byte first.'	Approved
6	2014-09-18	27 -	N.3.1		ed Table named 'RF adapter' refers to water meter in line 3 of the table.	Replace 'Serial number water meter' by 'Serial number RF adapter' in line 3 of the table named 'RF adapter'.	Approved
7	2014-09-18	31 -	N.3.4		te Table named 'RSP-UD (M-Bus with Encryption)' has wrong OMS M-Bus frame Content in Byte No 10 'Serial No (BCD) (=12345678)'.	Replace 'Serial No (BCD) (=12345678)' by 'Serial No (BCD) (=55667788)' in column 'OMS M-Bus frame Content' of Byte No 10.	Approved
8	2014-09-18	38	6.2.6	Table 19	te Initial value of the Message Counter has to be harmonized with the actual draft of the European Standard and the requirements of the .German Federal Office for Information Security.	From OMS-Vol2 v4.1 on the initial value of the Message Counter shall be '0' instead of '1'.	In discussion
9	2015-02-03	8 - 9 -	A.3.2		te In the description the formula symbol for active power import is stated as (+A). A is the formula symbol for active work. The formula symbol for active power import is (+P).	Change all formula symbols behind 'active power' from 'A' to 'P'.	Approved



No.	Date of contribution	Reference		Type of comment ¹	Comment	Change	Status	
		Page # Line # (e.g. 49 17)	Clause/ Sub-clause (e.g. 3.1)					Fig./ Table (e.g. Table 1)
10	2015-02-03	5 -	B.2.1		te	In the example the formula symbol for active power import is stated as (+A). A is the formula symbol for active work. The formula symbol for active power import is (+P).	Change the formula symbol behind 'active power import' from '(+A)' to '(+P)'.	Approved
11	2015-02-03	8 - 9 - 14 - 15 -	B.2.2		te	In the description the formula symbol for active power import is stated as (+A). A is the formula symbol for active work. The formula symbol for active power import is (+P).	Change all formula symbols behind 'active power' from 'A' to 'P'.	Approved
12	2015-02-03	42 -	N.6		te	In the telegram example 'RSP-UD (wM-Bus - Appl. Error)' the Status bit "any appl. error" is not set by mistake.	Change Byte No. 18 from ',00h' to '02h'.	Approved
13	2015-02-03	44 -	N.7		te	In the telegram example 'ACC-DMD (wM-Bus)' the Status bit "any appl. error" is set by mistake.	Change Byte No. 26 from ',02h' to '00h'.	Approved
14	2015-04-16	28	N.3.2		te	In the telegram example 'ACC-NR (wM-Bus)' the C Field byte has the wrong value.	Replace '44h in Normal mode' by '47h in Normal Mode' in column 'OMS wM-Bus frame Content' of Byte No 2. Change Byte No. 2 from ',44h' to '47h'.	Approved



No.	Date of contribution	Reference		Type of comment ¹	Comment	Change	Status
		Page # Line # (e.g. 49 17)	Clause/ Sub-clause (e.g. 3.1)				
15	2015-06-24	50 10	8.6		<p>te</p> <p>The source for the OMS Error Codes is EN 13757-3:2004. Unfortunately these codes have changed from version 2004 to version 2013. This was caused by a harmonization of the Error Codes throughout the EN 13757 standards family now also including EN 13757-5. The result is released in the new 2013 version. OMS follows this with the generation 4 specification.</p> <p>Whereas the OMS spec for generation 3 requires the old values (e.g. 14_h / 20_d) the respective OMS Compliance Test will not check these Error Codes. Therefore the recommendation is to implement the new values (e.g. 20_h / 32_d) named in EN 13757-3:2013 to have new devices to be compliant with the new version.</p>	No change	Approved
16	2015-10-09	14 -	B.2.2		<p>te</p> <p>The M-Bus Tag PW1! does not support combined heat/cooling meters. This shall be an optional possibility.</p>	Add the letter 'O' for 'optional' to the column 'Comb. Heat/Cooling (0Dh)' for the M-Bus Tag PW1!.	Approved
17	2015-10-09	13 -	B.2.2		<p>te</p> <p>The M-Bus Tag PJ1! does not support combined heat/cooling meters. This shall be an optional possibility.</p>	Add the letter 'O' for "optional" to the column 'Comb. Heat/Cooling (0Dh)' for the M-Bus Tag PJ1!.	Approved
18	2015-10-09	16 -	B.2.2		<p>te</p> <p>The M-Bus Tag VF1! does not support combined heat/cooling meters. This shall be an optional possibility.</p>	Add the letter 'O' for "optional" to the column 'Comb. Heat/Cooling (0Dh)' for the M-Bus Tag VF1!.	Approved
19	2015-10-09	16 -	B.2.2		<p>te</p> <p>The M-Bus Tags TC1! and TC2! do not support heat cost allocators. This shall be an optional possibility.</p>	Add the letter 'O' for "optional" to the column 'HCA (08h)' for the M-Bus Tags TC1! and TC2!.	Approved



No.	Date of contribution	Reference		Type of comment ¹	Comment	Change	Status																											
		Page # Line # (e.g. 49 17)	Clause/ Sub-clause (e.g. 3.1)					Fig./ Table (e.g. Table 1)																										
20	2015-12-10	10 -	A.3.2	te	<p>M-Bus Tag PW7! is actually connected with the OBIS code 1-0:16.7.0*255. According to OMS-Spec. Vol.2 Annex B v4.0.2.A MB-Tag PW7! is coded with VIB-Types PW07 and PW08. An example of such an M-Bus Data point is 0C AA FC 10 12 00 00 00 which corresponds to a value of +1,2 kW. According to EN13757-3:2013 the elements are defined as follows:</p> <ul style="list-style-type: none"> • 0C is DIF 8 digit BCD • AAh is a VIF for the unit 0.1 kW • FCh is an orthogonal VIFE with a link to the combinable VIFE-Extension table (Table 31 in EN13757-3:2013) • 10h corresponds to <table border="1"> <tr> <td>E001 0000</td> <td>accumulation of abs. value for both positive and negative contribution (absolute count)^a</td> </tr> <tr> <td>E001 0001 – E111 1111</td> <td>Reserved</td> </tr> </table> <p>^a This extension is used in special case if the meter index counts up independent of the polarity of the meter (for both directions).</p> <p>According to footnote 'a' this data point always provides a positive value. But 1-0:16.7.0*255 shall provide positive as well as negative values. For that reason the OBIS code 1-0:16.7.0*255 does not correspond with MB-Tag PW7!.</p>	E001 0000	accumulation of abs. value for both positive and negative contribution (absolute count) ^a	E001 0001 – E111 1111	Reserved	<p>Replace 1-0:16.7.0*255 for MB-Tag PW7! in OMS-Spec. Vol.2 Annex A by</p> <p>Meter reading 0 1-0:16.7.0*255 Active power absolute (P), instantaneous value, total PW7!</p> <p>Add new MB-Tag for existing OBIS code 1-0:16.7.0*255.</p> <p>Add a new entry in OMS-Spec. Vol.2 Annex A:</p> <p>Meter reading 0 1-0:16.7.0*255 Active power delta (import – export) (P), instantaneous value, total PW8!</p> <p>Define new MB-Tag PW8! in OMS-Spec. Vol.2 Annex B MB-Tag-List</p> <table border="1"> <tr> <td>1-0:16.7.0*255</td> <td>Meter reading</td> <td>PW8!</td> <td>Active power delta (import – export) (P), instantaneous value, total</td> <td>INT, BCD</td> <td>0 0 0 no</td> <td>PW09, PW10</td> <td></td> </tr> </table> <p>Define two new VIB-Types PW08 and PW09 in OMS-Spec. Vol.2 Annex B VIB-Type list</p> <table border="1"> <tr> <td>PW09</td> <td>1010 1nnn</td> <td>1111 1100</td> <td>0000 1100</td> <td>kW</td> <td>10e-6 ... 10e+1</td> <td>delta</td> </tr> <tr> <td>PW10</td> <td>1111 1011</td> <td>1010 100n</td> <td>1111 1100</td> <td>0000 1100</td> <td>kW</td> <td>10e+2 ... 10e+3</td> <td>delta</td> </tr> </table>	1-0:16.7.0*255	Meter reading	PW8!	Active power delta (import – export) (P), instantaneous value, total	INT, BCD	0 0 0 no	PW09, PW10		PW09	1010 1nnn	1111 1100	0000 1100	kW	10e-6 ... 10e+1	delta	PW10	1111 1011	1010 100n	1111 1100	0000 1100	kW	10e+2 ... 10e+3	delta	Approved
E001 0000	accumulation of abs. value for both positive and negative contribution (absolute count) ^a																																	
E001 0001 – E111 1111	Reserved																																	
1-0:16.7.0*255	Meter reading	PW8!	Active power delta (import – export) (P), instantaneous value, total	INT, BCD	0 0 0 no	PW09, PW10																												
PW09	1010 1nnn	1111 1100	0000 1100	kW	10e-6 ... 10e+1	delta																												
PW10	1111 1011	1010 100n	1111 1100	0000 1100	kW	10e+2 ... 10e+3	delta																											
				Wählen Sie ein Element aus.			Wählen Sie ein Element aus.																											