Witness test

Measured Central Management System:

Test date: 13/08/2019 & 30/11/2020

Location: ELEXON Offices & Remote

Facilitator: Kevin Spencer

Witness: Adam Jessop

Testing: Telematics BrightCity System

Description:

BrightCity, the Central Management System (CMS) is a management solution for smart lighting systems. Telematics is seeking approval to use this Central Management System as the CMS part of an equivalent meter in Great Britain.

1. System Requirements

Test Ref	Requirement / Details	Requirement Reference	Comment	Complies
Test Group 1	**Configuration Control**			
Test 1.1	CMS software version	Non-functional	1.50.202005311927	Pass

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Test 1.2	CMS operating platform and version	Non-functional	See report (Test 1.2.)	
Test Group 2	**System Security**			
Test 2.1	HHDC	4.5.2.3 (i)	Witnessed (Figures 3 and 4 of Test Evidence) Created account with password	Pass
Test 2.2	Suppliers	4.5.2.3 (i)	As above	Pass
Test 2.3	Customers	4.5.2.3 (i)	As above	Pass
Test 2.4	MA	Functional	As above	Pass
Test Group 3	**Synchronisation to UTC**	4.5.2.3 (k)	We witnessed the correct times in the system and on the event logs.	Pass

2. Data Input and Storage Requirements

Test Ref	Requirement / Details	Requirement Reference	Comment	Complies
Test Group 4a	**Detailed Inventory information**			
Test 4.1	Add, delete, modify manually or electronically:	Functional	Inventory information was reviewed during the Witness Test, but screenshots have also been provided in section 2.4 of Test Evidence	Pass

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Test 4.1.1	Road Reference	Functional	See 4.1	Pass
Test 4.1.2	Town, Parish, District	Functional	See 4.1	Pass
Test 4.1.3	Road Name	Functional	See 4.1	Pass
Test 4.1.4	Location	Functional	See 4.1	Pass
Test 4.1.5	Unit Type	Functional	See 4.1	Pass
Test 4.1.6	Unit Identity	Functional	See 4.1	Pass
Test 4.1.7	CMS Unit Reference	Functional	See 4.1	Pass
Test 4.1.8	Charge Code	Functional	See 4.1	Pass
Test 4.1.9	Number of Items	Functional	See 4.1	Pass
Test 4.1.10	Switch Regime	Functional	See 4.1	Pass
Test 4.1.11	Number of Controls	Functional	See 4.1	Pass
Test 4.1.12	Control Charge Code	Functional	See 4.1	Pass
Test 4.1.13	Ordinance Survey Grid ref 'East' or Latitude	Functional	See 4.1	Pass
Test 4.1.14	Ordinance Survey Grid ref 'North' or Longitude	Functional	See 4.1	Pass

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Test 4.1.15	Exit Point	Functional	See 4.1	Pass
Test 4.2	Audit Trail	Functional	See 4.1	Pass
Test Group 4b	**Inventory control information**			
Test 4.3	Add, delete, modify manually or electronically:	Functional		Pass
Test 4.3.1	Sub-Meter ID	Functional	See 4.1	Pass
Test 4.3.2	Effective From Date	Functional	See 4.1	Pass
Test 4.3.3	CMS Unit Reference	Functional	See 4.1	Pass
Test 4.3.4	Number of Items	Functional	See 4.1	Pass
Test 4.3.5	Switch Regime	Functional	See 4.1	Pass
Test 4.3.6	Charge Code	Functional	See 4.1	Pass
Test 4.4	Audit Trail	Functional		Pass
Test Group 5	**Equipment control information**			
Test 5.1	Add, delete, modify manually or electronically	Functional	See 4.1	Pass
Test 5.1.1	CMS Unit Reference	Functional	See 4.1	Pass

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Test 5.1.2	Sum of CMS Controller devices	Functional	See 4.1	Pass
Test 5.1.3	Switch Regime	Functional	See 4.1	Pass
Test 5.1.4	Charge Code	Functional	See 4.1	Pass
Test 5.2	Audit Trail	Functional	See 4.1	Pass

3. Process Requirements

Test Ref	Requirement / Details	Requirement Reference	Comment	Complies
Test Group 6	**CMS Issue Instructions**			
Test 6.1	Scenario 1	4.5.2.3 (b)	Note that the event logs provided (20190813001) were from the original witness test in August 2019. Records of the testing such as energy recorded on the measuring device are currently inaccessible due to Elexon office closure. Elexon passed Telematics at the time though and the records were within the permitted variance tolerance. MPEG files (x26) are available on request which provide Telematics performing these steps remotely. Events:	Pass

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		Galaxy:	
		8:30 @ 100%	
		8:40 @ 75%	
		8:50 @ 50%	
		9:00 @ 0%	
		Lora:	
		14:15 @ 100%	
		14:25 @ 75%	
		14:35 @ 50%	
		14:45 @ 0%	
		Nema Pro Mesh:	
		9:15 @ 100%	
		9:20 @ 75%	
		9:25 @ 50%	
		9:30 @ 0%	

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Test 6.2	Scenario 2	4.5.2.3 (b)	See 6.1	Pass
Test 6.3	Scenario 3 - Control Failure	4.5.2.3 (b)	All 3 nodes from test 6.1 had the same dimming profile applied. All gateways were disconnected 5 minutes before the first event, losing the connection to all 3 nodes. The information is sent once connection is re-established and is available in the version 2 event logs. See event logs 20200917001 for events of test scenario 1 but control failure test steps missing. MPEG videos are available on request Events: 15:05 @ 100% 15:15 @ 75% 15:25 @ 50% 15:35 @ 0%	Pass

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Test 6.4	Scenario 4 – Revised Data after control failure (following day)	4.5.2.3 (b) 4.5.2.3 (c)	See event logs: 20200917002 for missing events now available in version 2 event log.	Pass
Test 6.5	Receive Response (optional)	Functional		
Test Group 7	**Record operational switching times and power levels**		For Test Group 7 please see Test Evidence in Attachment C.	
Test 7.1	Scenario 1 - Switch Regime 999	4.5.2.3 (b) 4.5.2.3 (c)		
Test 7.2	Scenario 2 - Switch Regime 998	4.5.2.3 (b) 4.5.2.3 (c)		
Test 7.3	Scenario 3 - Control Failure	4.5.2.3 (b) 4.5.2.3 (c)		
Test 7.4	Scenario 4 – Revised Data after control failure (following day)	4.5.2.3 (b) 4.5.2.3 (c)		
Test 7.5	Audit Trail	4.5.2.3 (j)		
Test Group 8	**Generate Operational Event Log**		For Test Group 8 please see Test Evidence in Attachment C.	
Test 8.1	Scenario 1 - Switch Regime 999	4.5.2.3 (b) 4.5.2.3 (c)		

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Test 8.2	Scenario 2 - Switch Regime 998	4.5.2.3 (b) 4.5.2.3 (c)		
Test 8.3	Scenario 3 - Control Failure	4.5.2.3 (b) 4.5.2.3 (c)		
Test 8.4	Scenario 4 – Revised Data after control failure (following day)	4.5.2.3 (c)		
Test 8.5	Available daily (Separate CMS and MA System)	4.5.2.3 (b)		
Test 8.6	On Request (Integrated CMS and MA System)	4.5.2.3 (c)		
Test 8.7	Audit Trail	4.5.2.3 (j)		
Test Group 9	**Volume and Performance**			
Test 9.1	Compliance with operational timescales	Functional		Pass

4. Data Output Requirements

Test Ref	Requirement / Details	Requirement Reference	Comment	Complies
Test Group 10	**Operational Event Log**		See Audit Trail	

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Test 10.1	File Format		4.5.2.3 (c)	Evidence available in event logs provided	Pass
Test 10.2		Filename	4.5.2.3 (c)	See 10.1	Pass
Test 10.3		Header identifier	4.5.2.3 (c)	See 10.1	Pass
Test 10.4		Sub-Meter ID	4.5.2.3 (c)	See 10.1	Pass
Test 10.5		Date	4.5.2.3 (c)	See 10.1	Pass
Test 10.6		Version	4.5.2.3 (c)	See 10.1	Pass
Test 10.7		CMS Unit reference	4.5.2.3 (c)	See 10.1	Pass
Test 10.8		Time	4.5.2.3 (c)	See 10.1	Pass
Test 10.10		Percentage of base power	4.5.2.3 (c)	See 10.1	Pass
Test 10.10		Information Flag	4.5.2.3 (c)	See 10.1	Pass
Test 10.11		Trailer	4.5.2.3 (c)	See 10.1	Pass

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