

MARKET CODE CHANGE PROPOSAL				Form Version 1.2
Market Code Change Proposal Ref (Assigned by CMA)		MCCP053	Version Number (Assigned by CMA)	3.0
Title of the change		Enduring Rollover Solution		
1. GENERAL DETAILS		Proposers are reminded that Change Proposals must be countersigned by the Proposer's Contract Manager or the person designated by the signatory to the Market Code Framework /Accession Agreement		
Company:	CMA	Org ID if assigned:		
Signature:		Date:	28 th September 2010	
		Name:	David Nicol	
Contact details for the Proposal - the contact should be able to deal with queries regarding this Market Code Change Proposal and need not be the same person who has countersigned the Change Proposal				
Name:		David Nicol		
Email Address:		david.nicol@cmascotland.co.uk		
Telephone and or Mobile:		01786 468 865		
Number of Associated Documents	02 +CSDS +MC	Name or link to documents	MCCP053 Appendices - Detailed Requirements_v6.doc MCCP053 Rollover Algorithm Specification Draft 3.docx Additionally, changes to CSD202, 203, 205, 207 and the Market Code have been circulated including changes to all the changes associated with the March 2011 release.	
If the MCCP will also affect the Operational Code, an OCCP must also be raised				
Indicate if there is an associated OCCP		NO	OCCP Ref: CMA use only	
URGENT – IF PROPOSER HAS INDICATED THIS MCCP IS URGENT, STATE REASONS HERE The CMA Chief Executive will review this information and make a decision as to whether to take this MCCP forward as urgent as defined as under Market Code Part 8.7.1 (ii) (e)				
2. MARKET CODE CHANGE PROPOSAL DETAILS				
A	ISSUE or DEFECT WHICH THIS MARKET CODE CHANGE PROPOSAL SEEKS TO ADDRESS required under Market Code Part 8.7.1 (ii) (b)			

Previous Approach

In December 2008, the CMA put forward MCCP019 as an interim measure to detect and resolve certain meter rollovers which the Central Systems were failing to detect. The Central Systems had been designed on the premise that it would be possible for the Central Systems to accurately determine when a meter rolled provided that:

- Trading Parties submitted regular and accurate meter readings;
- and that the Central Systems held accurate information about the number of meter dial digits.

Experience at that time showed this was not possible in practice.

The algorithm used by the Central Systems to detect meter rollovers makes the assumption that the meter reading submitted before the meter rollover will begin with the digits "99" and that the meter reading submitted immediately after the rollover will begin with the digits "00". It is now understood that there are four main drivers which prevent the existing algorithm from automatic detection in the CS:

- The existing algorithm is tightly prescriptive;
- Meter reads not collected as frequently as required by the Market Code;
- The existence of "Fast Meters", where many meters have been installed for which the expected meter advance between meter reads is a significant proportion of the meter range (many with over 20% of the range)
- Poor meter reading history – from cutover, from subsequent poor reads, or from meter swaps which are not submitted to the CMA in the required timescales.

Since the acceptance of MCCP019, the CMA has operated a manual process of agreeing candidate rollovers with the Trading Parties, and then inserting interpolated reads into the meter reading history to trigger the rollover algorithm.

This manual process is not sustainable. It also suffers from the significant disadvantage that undetected rollovers will still persist in the CS for a period of time until the process eliminates them – reducing the accuracy of settlements.

Enduring Solution

This MCCP puts forward at a high level the outline of a proposed enduring solution. The Appendices includes more detailed proposals. As with the existing manual process, responsibility for identifying rollovers will primarily remain with the Trading Parties.

Meter Rollovers inside the CS will be identified by a "Rollover Flag". Logic will be inserted into the CS to appropriately set the flag when meter reads are submitted. The logic to set the flag will comprise automatic rollover detection together with a system to query the Trading Party submitting the meter read in cases of uncertainty. Changes will be made to the system to ensure that the Rollover Flag is stored, displayed on the LVI, and appropriately passed on with meter readings which the CS distributes.

There are then two key aspects to the proposed solution:

1. *The development of an improved rollover detection algorithm; and*
2. *System Development to remove the current manual workaround.*

These are described at a high level below.

1. *The development of an improved rollover detection algorithm*

- The CMA will take the lead, and propose an improved meter rollover detection algorithm. It is expected that there will be two main components in the proposal:
 - A partial relaxation of the existing rule whereby successive reads of the form 99xx – 00yy (for a four digit meter) are deemed to be a rollover.
 - Incorporation of a meter advance test into the rollover algorithm. The current meter advance test for a meter read to be accepted is that the new meter advance must be within 20% - 200% of the previous advance (compare the SVG paper which uses 0%-200%). However, the CMA do not currently use a meter advance test as part of the rollover detection algorithm.

2. *System Development to remove the current manual workaround*

- The Introduction of an automated system into the Central Systems to detect the remaining "ambiguous cases" in respect of meter rollover, and to return messages to the relevant Trading Party so that in these cases, the Trading Party can either:

	<ul style="list-style-type: none"> ○ Confirm that a rollover has taken place; or ○ Confirm that a rollover has not taken place. <p>In essence, this would allow for some automation of the existing manual rollover process, and ensure that undetected meter rollovers do not enter the Central Systems before the status (rollover or not) of the meter read has been confirmed.</p>								
B	<p>DESCRIPTION OF NATURE AND PURPOSE OF THE CHANGE AND HOW IT MEETS THE MARKET CODE OBJECTIVES AND PRINCIPLES FOR THE MARKET DOCUMENTS required under Market Code Part 8.7.1 (ii) (c)</p> <p>The Proposer should indicate which principles the change supports and whether there is any adverse effect on any principle(s).</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">a) Proportionality</td> <td style="width: 50%;">e) Barriers to entry</td> </tr> <tr> <td>b) Transparency</td> <td>f) Customer contact</td> </tr> <tr> <td>c) Simplicity, cost-effectiveness and security</td> <td>g) Non-discrimination</td> </tr> <tr> <td>d) Non-exclusivity</td> <td>h) Not detrimental to Scottish Water's core functions</td> </tr> </table> <p>The proposals are proportional to the underlying issues caused by rollover, provide for transparency of whether a meter read is or is not a rollover, and are not detrimental to Scottish Water's core functions.</p>	a) Proportionality	e) Barriers to entry	b) Transparency	f) Customer contact	c) Simplicity, cost-effectiveness and security	g) Non-discrimination	d) Non-exclusivity	h) Not detrimental to Scottish Water's core functions
a) Proportionality	e) Barriers to entry								
b) Transparency	f) Customer contact								
c) Simplicity, cost-effectiveness and security	g) Non-discrimination								
d) Non-exclusivity	h) Not detrimental to Scottish Water's core functions								
C	<p>IMPACT – required under Market Code Part 8.7.1 (ii) (d), (f) and (g)</p> <p>The Proposer should indicate the sections of the Market Code affected, whether the Operational Code or CSDs, Wholesale Services Agreement or License is impacted and whether there are likely to be implications on:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">a) Central Systems</td> <td style="width: 50%;">c) CMA Interfaces/ Processes</td> </tr> <tr> <td>b) Trading Party's systems</td> <td>d) Trading Party's business processes</td> </tr> </table> <p>The proposals will affect sections of the CSDs in respect of meter reads and validations.</p> <p>The proposals will affect the Central Systems, Trading Party's systems, CMA Interfaces/Process and Trading Party's business process.</p>	a) Central Systems	c) CMA Interfaces/ Processes	b) Trading Party's systems	d) Trading Party's business processes				
a) Central Systems	c) CMA Interfaces/ Processes								
b) Trading Party's systems	d) Trading Party's business processes								
D	<p>DRAFT LEGAL TEXT – required under Market Code Part 8.7.1 (ii) (d)</p> <p>CSD0202, 0203, 0205 and 0207 have been updated to reflect the change.</p>								
3. IMPLEMENTATION DETAILS - PROPOSED IMPLEMENTATION DATE OR LEAD TIME									
<p>Timescale must not overlap with the period of consultation with the Commission and should take account of the impacts identified in Section C. Any quoted lead time should commence from date of approval.</p>									
4. ANY OTHER COMMENTS									

The full text of the objectives and principles for the Market Code are set out in The Water Services (Codes and Services) Directions 2007 which can be downloaded from the Commission's website (http://www.watercommissioner.co.uk/view_Directions.aspx)