### MARKET CODE CHANGE PROPOSAL

<table>
<thead>
<tr>
<th>Market Code Change Proposal Ref (Assigned by CMA)</th>
<th>MCCP082 (Issue 294)</th>
<th>Version Number (Assigned by CMA)</th>
<th>1.0</th>
</tr>
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**Title of the change**: Expansion of CS Error Codes

#### 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.

<table>
<thead>
<tr>
<th>Company</th>
<th>Org ID if assigned</th>
<th>Signature</th>
<th>Date</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMA</td>
<td></td>
<td></td>
<td>06/04/11</td>
<td>Gary Craig</td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>Name</th>
<th>Email Address</th>
<th>Telephone and or Mobile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gary Craig</td>
<td><a href="mailto:gary.craig@cmascotland.co.uk">gary.craig@cmascotland.co.uk</a></td>
<td>01786468867</td>
</tr>
</tbody>
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#### 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)

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)
Background

User error when submitting Transact ions to the Central Systems has been far higher than initially anticipated. Since market opening in April 2008 there have been over 200,000 transactions returned by the Central Systems to participants with an error code.

The Metering Working group identified that the returning of error codes by the Central Systems with generic text associated with them is an issue. All participants sought enhancements to the Central Systems validation process so that more specific text would accompany error codes when a transaction was submitted with incorrect data i.e. the text would explain the reason for the transaction failing system validation.

Current Central Systems Functionality

When a transaction is sent to the Central Systems it undergoes system validation. If the transaction is successful a T009.0 (Licensed Provider) or T009.1 (Wholesaler) transaction is generated with an “Ok” message. If a transaction is not successful i.e. it contains incorrect data and fails validation the T009 is returned with an accompanying two letter error message e.g. AA. The Error Codes and accompanying text are contained in CSD0301 – Data Transaction Catalogue.

In terms of Central Systems functionality only the two letter error code is returned via the HVI. The two letter error code and accompanying text is returned via the LVI and displayed on the Message Activity Dashboard e.g. AA “SPID Service Type (Tag) does not match a Licensed Provider's licence”.

A number of error codes that are returned when a transaction fails validation are generic in nature. An example of this is DB – “Invalid Operation”. The DB error code has been returned over 19,000 times to participants since market opening.

Required System Change

Where possible, the Central Systems validation processes will be changed so that an error code is returned in a T009.0 or T009.1 that has less generic text associated with it. Amongst other things this text will indicate whether a transaction has failed because a required data item is missing from a transaction or whether a data item was incorrectly submitted in a transaction. The system will be changed to introduce new error codes and associated text along with existing error code text being amended or replaced to be more specific. This will have the following impact:

- The HVI
  1. New error codes will be introduced.
- The LVI
  2. New error codes will be introduced (mirroring the HVI) with associated text that provides a specific reason for a transaction failing validation.
  3. Current text associated with an existing error code being amended or replaced to be more specific.

The Detailed requirements currently being developed list out the individual registration validation steps in the Central Systems with the existing and the proposed error code going forwards. An updated Error Code Table from CSD0301 will also be provided listing all the Error Codes - existing, amended and new - along with the accompanying specific error code text.

Issues for consideration

The CMA considered a re-organisation of the way the error codes are presented in CSD0301. Currently they are in no logical presentational order, other than the BC-BZ range which all deal with meter read validation. This approach was rejected for several reasons:

1. The purpose of the code and accompanying text is to communicate what data item is wrong or missing, the presentational order of the codes in CSD0301 is irrelevant.
2. Changing the presentational order would require more software development and testing and therefore result in higher costs.
3. Changing the presentational order would mean amending a greater proportion of the existing codes which participants are already familiar with.
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)

**B** 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)

The Proposer should indicate which principles the change supports and whether there is any adverse effect on any principle(s).

- a) Proportionality
- b) Transparency
- c) Simplicity, cost-effectiveness and security
- d) Non-exclusivity
- e) Barriers to entry
- f) Customer contact
- g) Non-discrimination
- h) Not detrimental to Scottish Water’s core functions

This MCCP supports:

- a) Proportionality – More specific error codes should allow participants to identify missing or erroneous data items included in a transaction more effectively and increase the efficiency of the transaction resubmission process for both HVI and LVI users.
- b) Transparency - the change would provide better visibility of those data items that are missing or erroneous along with an improved audit trail
- c) Simplicity, cost-effectiveness and security – The amendment and addition of error codes and error code text is a relatively straightforward change to the software and to test. The large number of changes proposed means that economies of scale will be delivered by undertaking all of the changes at once.

**C** IMPACT – required under Market Code Part 8.7.1 (ii) (d), (f) and (g)

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:

- a) Central Systems
- b) Trading Party’s systems
- c) CMA Interfaces/ Processes
- d) Trading Party’s business processes

CSD0301 will need to be updated to include new error codes and associated text. Where text is being updated on existing error codes this will also be included.

- a) Central Systems – Changes as set out in Section A
- b) Trading Party’s Systems - Participants will need to update their HVI system to reflect any new double letter error code. LVI only users will not be impacted.

**D** DRAFT LEGAL TEXT – required under Market Code Part 8.7.1 (ii) (d)

To be provided (CSD0301)

3. IMPLEMENTATION DETAILS - PROPOSED IMPLEMENTATION DATE OR LEAD TIME

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.

These changes will be introduced in September 2011 as part of the CMA Software Release September 2011.

4. ANY OTHER COMMENTS