

**Code Subsidiary Document
No. 0201:
Settlement Timetable and
Reporting**

Table of Contents

1.	Purpose and Scope	4
1.1	Purpose	4
1.2	Scope	4
2.	Settlement Timetable and Reporting Description.....	5
2.1	Provision of the Settlement Timetable for each Year.....	5
2.2	Provision of the Wholesaler Tariff Data.....	5
2.3	Settlement Run Types	5
2.4	Settlement Report Distribution	8
2.5	Aggregated Settlement Report.....	11
2.6	Disaggregated Settlement Report	11
3.	Process Diagrams	18
4.	Interface and timetable requirements.....	19
A	Appendix: Aggregated Settlement Reports	22
A.1	Introduction.....	22
A.2	File Naming.....	22
A.3	Detailed Field Specification.....	22
A.4	File Content	23
A.5	File Ordering.....	24
B.	Appendix: Disaggregated Settlement Reports	25
B.1	Introduction.....	25
B.2	Settlement Report Parts.....	25
B.3	File Format.....	25
B.4	File Naming.....	25
B.5	Disaggregated Report Part 1 - File Content	26
B.6	Disaggregated Report Part 1 - File Ordering	28
B.7	Disaggregated Report Part 2 - File Content	30
B.8	Disaggregated Report Part 2 - File Ordering	32
B.9	Disaggregated Report Part 3 - File Content	33
B.10	Disaggregated Report Part 3 - File Ordering.....	34
B.11	Disaggregated Report Part - 4 File Content	35
B.12	Disaggregated Report Part 4 - File Ordering.....	36

Definitions

Unless expressly stated otherwise, for the purposes of this CSD:

- (a) terms defined in the Wholesale-Retail Code Part 1 (Objectives, Principles and Definitions) shall apply; and
- (b) capitalised terms relating to the titles of Data Items or Data Transactions described in CSD 0301 (Data Catalogue) shall have the meaning attributed therein.

For the purposes of this CSD only, the following capitalised terms shall have the following meaning:

Definitions	
Term	Definition
"Settlement Timetable"	the timetable published by the Market Operator in accordance with Section 2.1.1 of this CSD

1. Purpose and Scope

1.1 Purpose

- 1.1.1 This document describes how the Market Operator will produce the Settlement Timetable and provide Settlement Reports for all Planned Settlement Runs and Unplanned Settlement Runs in accordance with the Settlement Timetable.

1.2 Scope

- 1.2.1 The document describes the timetable for Settlement Runs, and the format, content and naming convention for the Settlement Reports associated with each Settlement Run. Detailed processes and procedures for undertaking the calculation of daily charges are set out in CSD 0207 (Charge Calculation, Allocation and Aggregation). The processes and procedures for aggregating the daily charges into Reports for an Invoice Period are set out in this CSD.

2. Settlement Timetable and Reporting Description

2.1 Provision of the Settlement Timetable for each Year

2.1.1 On or before the 1st February of each Year, the Market Operator will publish a timetable (the “Settlement Timetable”) for the next Year. The Settlement Timetable will detail the earliest calendar date on which the Market Operator will plan to carry out each Planned Settlement Run and the calendar date of issue of the corresponding Settlement Report to Trading Parties in any Year.

2.1.2 The Settlement Timetable shall be consistent with the requirements in Section 2.3.

2.1.3 The Market Operator shall not carry out any Settlement Run before the date set out in the Settlement Timetable.

2.2 Provision of the Wholesaler Tariff Data

2.2.1 Each Wholesaler will provide and update the Market Operator with Wholesaler Tariff Data in accordance with CSD 0208 (Creation and update of Wholesaler Tariff Data).

2.3 Settlement Run Types

Planned Settlement Runs

2.3.1 The Market Operator will calculate the Primary Charges payable by each Retailer to each Wholesaler in respect of each Invoice Period by performing the Planned Settlement Runs. The Market Operator will perform at least five (5) Settlement Runs for each Invoice Period being P1, R1, R2, R3, and the Final Settlement Run, RF. Additionally, in relation to the first six (6) Invoice Periods after the Go Live Date, the Market Operator will also publish an R4. The Market Operator will publish the corresponding Settlement Reports as follows:

- (a) P1 – the provisional Settlement Report, which will be issued sixteen (16) Business Days before the start of the Invoice Period to which the Settlement Report relates;
- (b) R1 – the first Settlement Report, which will be issued four (4) Business Days after the end of the Invoice Period to which the Settlement Report relates;

- (c) R2 – the second Settlement Report, which will be issued four (4) Business Days after the end of the Month which is the second Month after the Invoice Period to which the Settlement Report relates;
- (d) R3 – the third Settlement Report, which will be issued four (4) Business Days after the end of the Month which is the eighth Month after the Invoice Period to which the Settlement Report relates;
- (e) R4 – the fourth Settlement Report, which will be issued in relation to the first six (6) Invoice Periods following the Go Live Date, on the fourth Business Day of the Month which is fourteen Months after the Invoice Period to which the Settlement Report relates; and
- (f) RF - the Final Settlement Report, which will be issued four (4) Business Days after the end of the Month which is the sixteenth Month after the Invoice Period to which the Settlement Report relates.

2.3.2 The Market Operator shall plan to carry out the P1 Settlement Run no earlier than nineteen (19) Business Days before the Invoice Period to which the Settlement Report relates.

2.3.3 In the Settlement Run P1, the Market Operator will calculate a forecast of the Primary Charges that will be payable by each Retailer in respect of each Supply Point Registered to it during the Invoice Period.

2.3.4 The Market Operator shall plan to carry out the R1, R2, R3, R4 and RF Settlement Runs on or after the first day Month in which the Settlement Report shall be published.

2.3.5 The Market Operator's calculations in respect of the R1, R2, R3, R4 and RF Settlement Runs will factor in all new and updated Data Items submitted to it relating to a Supply Point's SPID Data, Meter Data and Service Component Data, including, in particular, all the Meter Reads which have been submitted. The Settlement Reports generated by the Market Operator will therefore become progressively more accurate.

Unplanned Settlement Runs

- 2.3.6 The Market Operator may also carry out Unplanned Settlement Runs in accordance with Section 4.13 of the Market Terms. The Unplanned Settlement Runs are Corrective Settlement Runs, Post RF Settlement Runs and Dispute Settlement Runs. Each Unplanned Settlement Run will relate to a Planned Settlement Run. For the avoidance of doubt, when the Market Operator carries out any Unplanned Settlement Run, it will only be in respect of a specific Wholesaler-Retailer pair.
- 2.3.7 When the Market Operator carries out any Corrective Settlement Run it will be a complete recalculation in respect of all the Supply Points for the applicable Wholesaler-Retailer pair for the specified Invoice Period. The Settlement Run will therefore take account of the specific Data Items which have been corrected, as well as any other changes to SPID Data arising from the normal course of business since the date on which the Planned Settlement Run was carried out.
- 2.3.8 When the Market Operator carries out any a Post RF Settlement Run or Dispute Settlement Run, it will only be in relation to the specified set of combinations of Supply Points and Service Components which have been identified as containing Data Items which have been corrected or have been in dispute (as applicable). The Market Operator's calculations will therefore factor in only the new and updated Data Items submitted to it relating to these combinations of Supply Points and Service Components.
- 2.3.9 In respect of any Post RF Settlement Run or Dispute Settlement Run, it may be necessary for the Market Operator to accommodate a series of such Post RF Settlement Runs or Dispute Runs in respect of the set of combinations of Supply Points and Service Components for a number of consecutive Invoice Periods.

Labelling of Settlement Reports

- 2.3.10 The Market Operator shall label every Planned Settlement Report it issues with a label which is the same as the type of the Settlement Run: P1, R1, R2, R3, R4 or RF.
- 2.3.11 When the Market Operator issues an Unplanned Settlement for a particular Wholesaler-Retailer pair, the Market Operator shall distinguish the Unplanned

Settlement Report from the original Planned Settlement Report by appending, successively for each reissue of the same run type for the same Invoice Period for the same Wholesaler-Retailer pair:

- (a) a hyphen ('-'); and
- (b) an integer or integers denoting the reissue number,

such that (for example) successive Unplanned Settlement Reports which relate to an RF Settlement Report would be labelled "RF-1", "RF-2", "RF-3" and so on.

- 2.3.12 In numbering a sequence of such Unplanned Settlement Reports, the Market Operator shall not distinguish between the different types of Unplanned Settlement Runs. For example, the Settlement Report "RF-1" could refer to a Corrective Settlement Run, while the Settlement Report "RF-2" could refer to a Dispute Settlement Run.

Test Settlement Runs

- 2.3.13 Whenever the Market Operator carries out any tests using the Market Operator Systems which include Settlement Runs or Settlement Reports in accordance with CSD 0501 (Change Management (new releases)), the Market Operator shall ensure that the Settlement Runs and Settlement Reports are clearly labelled as such. The reports shall be labelled by appending the suffix "-TXX" to the run type, where the "XX" is any code for the test as chosen by the Market Operator. The Market Operator shall also ensure that within each test report, the field labelled "Test" is set to "Y". For the avoidance of doubt, any such reports have no standing and will not be used for invoicing purposes.

2.4 Settlement Report Distribution

- 2.4.1 Following the completion of each Settlement Run and before the provision of the Settlement Reports to the Wholesalers and Retailers, the Market Operator shall as a minimum carry out the following steps to provide assurance on the integrity of each Settlement Report:
- (a) Undertake an examination of the internal reporting provided by the Central Systems on the outcome of the Settlement Run to confirm that:

- (i) no changes were made to any data which could affect any of the Settlement Calculations apart from the generation of Central System Generated Reads during the Settlement Run in accordance with CSD 0207 (Charge Calculation, Allocation and Aggregation); and
 - (ii) charge calculations were carried out for all the Supply Points as required by CSD 0207 (Charge Calculation, Allocation and Aggregation);
- (b) Monitor any exceptions reported, including those reported in accordance with Appendix C4 of CSD 0207 (Charge Calculation, Allocation and Aggregation); and
- (c) Undertake an examination of the results of the charge calculations to confirm that the:
 - (i) results are not unexpected; and
 - (ii) the number of Supply Points for which charges have been calculated for each Wholesaler and Retailer is not unexpected.

2.4.2 The Market Operator shall manage any exceptions reported in accordance with the requirements of Section C of CSD 0207 (Charge Calculation, Allocation and Aggregation), including as applicable, notifying them to a Trading Party for the Trading Party to review in accordance with Section 4.2.4 of the Market Terms. It is not necessary for any such exceptions to be dealt with before the publication of the Settlement Reports by the Market Operator.

2.4.3 Following investigation of any Data Items notified to it under Section 4.2.4 of the Market Terms, the Trading Party should correct any inaccurate Data Items in accordance with CSD 0105 (Error Rectification and Retrospective Amendments).

2.4.4 The Market Operator will provide separate Settlement Reports for each Wholesaler and Retailer pair which has at least one Supply Point Registered in common for which settlement charges have been computed. The Settlement Reports will set out the Primary Charges payable by that Retailer to that Wholesaler as calculated in accordance with CSD 0207 (Charge Calculation, Allocation and Aggregation).

- 2.4.5 The Market Operator shall only issue Settlement Reports to a Wholesaler or Retailer where such Settlement Reports relate to the calculation of Primary Charges applicable to that Wholesaler or by that Retailer using the interface described in CSD 0403 (Interface for the provision of reports from the Market Operator to Trading Parties).
- 2.4.6 The Market Operator shall (as appropriate) produce:
- (a) a report setting out the aggregated Primary Charges for the Invoice Period as detailed in Section 2.5 of this CSD below (“the Aggregated Settlement Report”); and
 - (b) a report setting out the details of the Primary Charges for the Invoice Period as detailed in Section 2.6 of this CSD below (“the Disaggregated Settlement Report”).
- 2.4.7 For each Planned Settlement Run and each Corrective Settlement Run, the Settlement Report will comprise both the Aggregated Settlement Report and the Disaggregated Settlement Report. For the avoidance of doubt, where the Market Operator issues both the Aggregated Settlement Report and the Disaggregated Settlement Report, the Aggregated Settlement Report is the basis for the invoicing of Primary Charges.
- 2.4.8 For the avoidance of doubt, if before issuing the Settlement Reports for a specific Settlement Run the Market Operator has had to carry out the Settlement Run more than once, each pair of Aggregated Settlement Reports and Disaggregated Settlement Reports which the Market Operator issues will relate to the same instance of the Settlement Run.
- 2.4.9 Where the Market Operator issues any Unplanned Settlement Report in respect of a Post RF Settlement Run or Dispute Settlement Run, the Market Operator shall only issue the Disaggregated Settlement Report relating to the set of combinations of Supply Point and Service Components which have been recalculated. In such cases, the Disaggregated Settlement Report will be used by the Contracting Wholesaler for the purposes of invoicing the Contracting Retailer as set out in the Business Terms.

2.5 Aggregated Settlement Report

2.5.1 Each Aggregated Settlement Report will include the following information:

- (a) the name of the Wholesaler;
- (b) the name of the Retailer;
- (c) the Settlement Run type;
- (d) the Invoice Period;
- (e) the date and time at which the Settlement Run was carried out;
- (f) the Service Component;
- (g) the Tariff code;
- (h) the Tariff name;
- (i) the number of Supply Points charged under the Tariff;
- (j) the total number of Settlement Days for which the Supply Points were Registered as being supplied under the Tariff during the Invoice Period;
- (k) the Volume supplied;
- (l) the Primary Charges in respect of volumetric Charging Elements;
- (m) the Primary Charges in respect of non-volumetric Charging Elements; and
- (n) the test flag (which indicates whether this report was produced pursuant to any test or not).

2.5.2 The details of the field names and derivation of the fields in the Aggregated Settlement Report are set out in Appendix A.

2.6 Disaggregated Settlement Report

2.6.1 Each Disaggregated Settlement Report will be issued in four parts:

- (a) the first part in respect of all Service Components except for Trade Effluent Service Components;

- (b) the second part in respect of Trade Effluent Service Components;
- (c) the third part in respect of meter Volumes for meters within a Meter Network; and
- (d) the fourth part in respect of any calculation exceptions (including certain cases of undefined SPID Data) encountered during the settlement calculation, which the Market Operator has to report to the Wholesaler and Retailer in accordance with Appendix C4 of CSD 0207 (Charge Calculation, Allocation and Aggregation).

2.6.2 The first part of the Disaggregated Settlement Report provides Wholesale Charge information at Service Component level for the non-Trade Effluent Service Components. A separate detailed report line will be included for each Charging Element of each Service Component, and split further by individual meter and/or Volumetric Adjustment where applicable.

2.6.3 Each detailed report line for the first part of the Disaggregated Settlement Report will include the following items:

- (a) the name of the Wholesaler;
- (b) the name of the Retailer;
- (c) the Settlement Run type;
- (d) the Invoice Period;
- (e) the date and time at which the Settlement Run was carried out;
- (f) the SPID;
- (g) the SPID category;
- (h) the Service Component;
- (i) the Tariff code;
- (j) the Tariff name;
- (k) the Charging Element;

- (l) whether the premises were occupied or vacant;
- (m) whether the premises were subject to a Temporary Disconnection or not;
- (n) the number of days for the Charging Element/ vacancy/ Temporary Disconnection/ Special Agreement Factor combination;
- (o) the Volume supplied;
- (p) the actual Volume supplied;
- (q) the estimated Volume supplied;
- (r) the average capacity supplied;
- (s) the Special Agreement Factor;
- (t) the unit price;
- (u) the volumetric Primary Charges;
- (v) the non-volumetric Primary Charges;
- (w) the Meter Manufacturer;
- (x) the Manufacturer Meter Serial Number; and
- (y) the test flag.

2.6.4 The second part of the Disaggregated Settlement Report provides Wholesale Charges information at Service Component level for the Trade Effluent Service Components. A separate detailed report line will be included for each Charging Element of each Trade Effluent Discharge Point, and split further by individual meter and/or Volumetric Adjustments where applicable.

2.6.5 Each detailed report line for the second part of the Disaggregated Settlement Report will include the following items:

- (a) the name of the Wholesaler;
- (b) the name of the Retailer;

- (c) the Settlement Run type;
- (d) the Invoice Period;
- (e) the date and time at which the Settlement Run was carried out;
- (f) the SPID;
- (g) the DPID;
- (h) the Tariff code;
- (i) the Tariff name;
- (j) the Charging Element;
- (k) whether the premises were occupied or vacant;
- (l) whether the premises were subject to a Temporary Disconnection or not;
- (m) Ot (D6006);
- (n) St (D6007);
- (o) the number of days;
- (p) the Volume;
- (q) the Special Agreement Factor;
- (r) the unit price;
- (s) the volumetric Primary Charges;
- (t) the non-volumetric Primary Charges;
- (u) the Meter Manufacturer;
- (v) the Manufacturer Meter Serial Number; and
- (w) the test flag.

- 2.6.6 The third part of the Disaggregated Settlement Report provides a breakdown of meter Volumes for meters which are part of a Meter Network and shows the Volumes at both the Main Meter and each of the Sub Meters.
- 2.6.7 For the avoidance of doubt, the report will be provided to the Wholesaler and Retailer at the premises for the Main Meter, since it relates to their Volume calculations. The report will be not provided to the any Wholesaler or Retailer at the premises of the Sub-Meter. In case where Water and Sewerage Wholesalers are different, the report should be provided to both Wholesalers. If the Water and Sewerage Retailers are different, then the report will be provided to both Retailers.
- 2.6.8 Each detailed report line for the third part of the Disaggregated Settlement Report will include the following items:
- (a) the name of the Wholesaler;
 - (b) the name of the Retailer;
 - (c) the Settlement Run type;
 - (d) the Invoice Period;
 - (e) the total number of Settlement Days for the Supply Point which were supplied under the Tariff by the Retailer during the Invoice Period;
 - (f) the SPID applying to the Main Meter;
 - (g) the Meter Manufacturer of the Main Meter;
 - (h) the Meter Manufacturer Serial Number of the Main Meter;
 - (i) the Meter Manufacturer of the Sub Meter;
 - (j) the Meter Manufacturer Serial Number of the Sub Meter;
 - (k) the Volume for the meter;
 - (l) the actual Volume for the meter;
 - (m) the estimated Volume for the meter; and
 - (n) the test flag.

2.6.9 The fourth part of the Disaggregated Settlement Report provides an exception report in accordance with Appendix C4 of CSD 0207 (Charge Calculation, Allocation and Aggregation).

2.6.10 Each detailed report line for the fourth part of the Disaggregated Settlement Report will include the following items:

- (a) the name of the Wholesaler;
- (b) the name of the Retailer;
- (c) the Settlement Run type;
- (d) the Invoice Period;
- (e) the date and time at which the Settlement Run was carried out;
- (f) the SPID;
- (g) the Service Component;
- (h) the Tariff code;
- (i) the Charging Element;
- (j) the SPID Data items and variable name(s) that were involved in the exception;
- (k) the Settlement Day on which the exception occurred;
- (l) the nature of the exception – eg “undefined”; and
- (m) the test flag.

2.6.11 The detail of the Disaggregated Settlement Report is set out in Appendix B.

Issuing of the Settlement Report

2.6.12 Each Settlement Report will be issued as a single ‘zip’ file. The zip file will contain both the Aggregated Settlement Report (where issued) and the Disaggregated Settlement Report. The file name will have the format WWW_RRR_YYYY_MM_TTT.zip where:

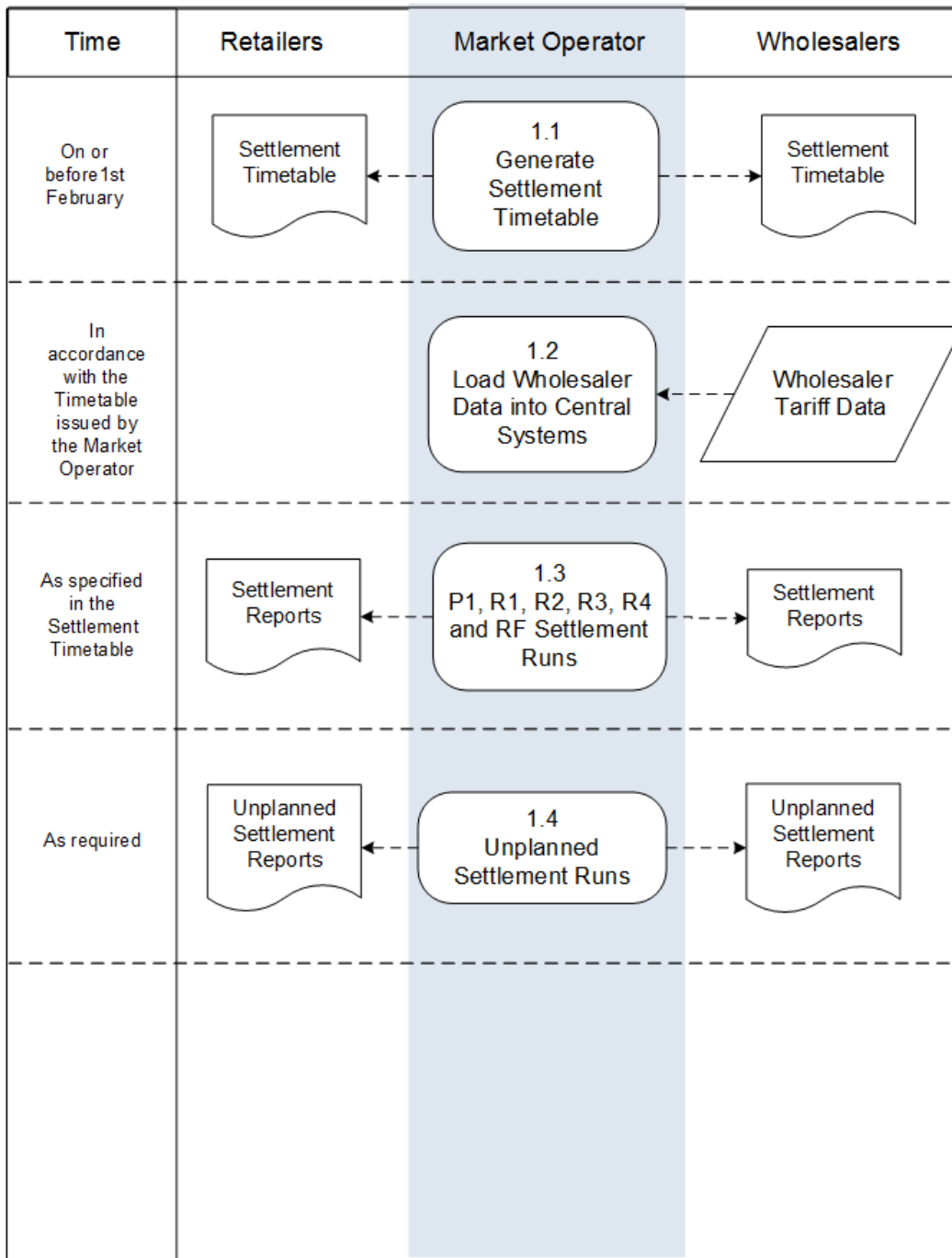
- (a) WWW – indicates the Wholesaler;
- (b) RRR – indicates the Retailer;
- (c) YYYY_MM – indicates the Invoice Period, with YYYY being the year as a four digit integer, and MM being the month as a zero padded two digit integer, with “01” representing January and so on; and
- (d) TTT – indicates the type of the run, for example “R1”, “R2-2”, or “R3-TA1”.

Actions to be taken in respect of each Settlement Report

2.6.13 Each Trading Party shall examine the part 4 of the Disaggregated Settlement Report for each Invoice Period. The Data Owner shall treat the provision of this Report as a request by the Market Operator to review the accuracy of the Data Items under Section 4.2.4 of the Market Terms. Following investigation of the Data Items, the Data Owner should correct any inaccurate Data Items in accordance with CSD 0105 (Error Rectification and Retrospective Amendments).

3. Process Diagrams

Settlement Timetable



4. Interface and timetable requirements

Step Ref	When	Requirement	From	To	Information
1.1	On or before 1 st February	Provide Settlement Timetable to all Retailers and Wholesalers	Market Operator	Wholesalers and Retailers	Settlement Timetable for all Settlement Reports to be provided in the next Year

Step Ref	When	Requirement	From	To	Information
1.2	In accordance with CSD 0208 (Creation and update of Wholesaler Tariff Data)	Load and verify Wholesaler Tariff Data	Wholesaler	Market Operator	Wholesaler Tariff Data

Step Ref	When	Requirement	From	To	Information
1.3	As specified in the Settlement Timetable	Planned Settlement Reports P1, R1, R2, R3, R4, RF.	Market Operator	Wholesalers and Retailers	Settlement Reports
1.4	As required	Unplanned Settlement Reports	Market Operator	Wholesalers and Retailers who have submitted a request	Unplanned Settlement Report

A Appendix: Aggregated Settlement Reports

A.1 Introduction

A.1.1 This Appendix describes the detailed format for the Aggregated Settlement Report.

A.1.2 File Format

A.1.3 The report will be a CSV file with the following attributes:

- (a) the file will have “windows style” lines that end in carriage return, line feed;
- (b) there will be a single header record;
- (c) the records will be comma separated;
- (d) each record will contain the same number of lines;
- (e) any records which contain a line-break, a double-quote, and/or commas will be quoted; and
- (f) a double-quote character in a field will be represented by two double-quote characters.

A.2 File Naming

A.2.1 The file name will have the format A_WWW_RRR_YYYY_MM_TTT.csv where:

- (a) A - indicates that the file is the Aggregated Settlement Report;
- (b) WWW – indicates the Wholesaler;
- (c) RRR – indicates the Retailer;
- (d) YYYY_MM – indicates the Invoice period, with YYYY being the year as a four digit integer, and MM being the month as a zero padded two digit integer, with “01” representing January etc.;
- (e) TTT – indicates the type of the run, for example “R1” ,“R2-2”, or “R3-TA1”.

A.3 Detailed Field Specification

A.3.1 The detailed field specifications are provided in the table below. The following conventions apply:

- (a) strings are all ASCII strings;
- (b) Volumes, prices and charges should be given to 4 decimal places;
- (c) where a Volume, price or charge has a positive value, but is less than one, the number should be displayed with a leading zero.

A.4 File Content

Aggregated Report		
	Field Header	Description and Derivation
a	Wholesaler	Identity of the Wholesaler. The same organisation code used to identify the Wholesaler in transactions to and from the Market Operator.
b	Retailer	Identity of the Retailer. The same organisation code used to identify the Retailer in transactions to and from the Market Operator.
c	Run	The Settlement Run type e.g. P1, R1, R2, R3, R4, RF, or in the case of Unplanned Settlement Runs RF-1 etc.
d	Period	The Invoice Period (year and month) as YYYY-MM where MM represents the zero padded two digit integers 01, 02, 03, ... 12.
e	Timestamp	The date and time the Settlement Run was commenced at in local time in ISO format: YYYY-MM-DDThh:mm where MM, DD, hh and mm are all zero padded integers in the range 01-12, 01-31, 00-23 and 00-59 respectively.
f	Component	The code for the Service Component as specified in CSD 0301 (Data Catalogue).
g	Tariff	The code for the Tariff as submitted in accordance with CSD 0208 (Creation and update of Wholesaler Tariff Data).
h	Name	The name for the Tariff which was applicable at the date of the Invoice Period.
i	Number	The number of Supply Points charged under the Tariff during the Invoice Period.
j	Days	The number of days in the Invoice Period that the Wholesaler/ Retailer/ Service Component/ Tariff combination was in effect.
k	Volume	Only applies to volumetric Charging Elements. The sum of the applicable Derived Daily Volume for the meter or Volumetric Adjustment.

Aggregated Report		
	Field Header	Description and Derivation
l	V_Charge	Only applies to volumetric Charging Elements. The Primary Charges in £.
m	NV_Charge	Only applies to non-volumetric Charging Elements. The Primary Charges in £.
n	Test	Test flag. "Y" if the run was a test, "N" for production runs.

A.5 File Ordering

A.5.1 The lines in the Aggregated Settlement Report will be consistently ordered as follows:

- (a) Service Component;
 - (i) Potable Water;
 - (ii) Non-Potable Water;
 - (iii) Assessed Water;
 - (iv) Unmeasured Water;
 - (v) Water Charge Adjustments;
 - (vi) Metered Sewerage;
 - (vii) Unmeasured Sewerage;
 - (viii) Surface Water Drainage Services;
 - (ix) Highway Drainage Services;
 - (x) Trade Effluent;
 - (xi) Sewerage Charge Adjustment;
- (b) the Tariff;
 - (i) alpha-numerically on the Tariff code.

B. Appendix: Disaggregated Settlement Reports

B.1 Introduction

B.1.1 This Appendix describes the detailed format for the Disaggregated Settlement Report.

B.2 Settlement Report Parts

B.2.1 Each Disaggregated Settlement Report will be issued in four parts:

- (a) the first part in respect of all Service Components except for Trade Effluent Service Components;
- (b) the second part in respect of Trade Effluent Service Components;
- (c) the third part in respect of Meter Networks; and
- (d) the fourth part in respect of settlement exceptions to be reported to the Wholesaler and Retailer in accordance with Appendix C4 of CSD 0207 (Charge Calculation, Allocation and Aggregation).

B.3 File Format

B.3.1 Each part of the report will be a CSV file with the following attributes:

- (a) the file will have “windows style” lines that end in carriage return, line feed;
- (b) there will be a single header record;
- (c) the records will be comma separated;
- (d) each record will contain the same number of lines;
- (e) any records which contain a line-break, a double-quote, and/or commas will be quoted; and
- (f) a double-quote character in a field will be represented by two double-quote characters.

B.4 File Naming

B.4.1 The file names will have the format Dn_WWW_RRR_YYYY_MM_TTT.csv where:

- (a) Dn defines the file type, where n is an integer (1,2,3,4) indicating the relevant part of the report;
- (b) WWW – indicates the Wholesaler;

- (c) RRR – indicates the Retailer;
- (d) YYYY_MM – indicates the Invoice Period, with YYYY being the year as a four digit integer, and MM being the month as a zero padded two digit integer, with “01” representing January etc;
- (e) TTT – indicates the type of the run, for example “R1”, “R2-2” or “R3-TA1”.
- (f) The detailed field specifications are provided in the tables below. The following conventions apply:
 - (i) strings are all ASCII strings;
 - (ii) Volumes, prices and charges should be given to 4 decimal places; and
 - (iii) where a Volume, price or charge has a positive value, but is less than one, the number should be displayed with a leading zero.

B.5 Disaggregated Report Part 1 - File Content

B.5.1 A detailed description of the field names and their content for the first part of the Disaggregated Settlement Report is given in the table below:

Disaggregated Report – Part 1		
	Field Header	Description and Derivation
a	Wholesaler	Identity of the Wholesaler. The same organisation code used to identify the Wholesaler in transactions to and from the Market Operator.
b	Retailer	Identity of the Retailer. The same organisation code used to identify the Retailer in transactions to and from the Market Operator.
c	Run	The Settlement Run type e.g. P1, R1, R2, R3, R4, RF in the case of Unplanned Runs RF-1 etc.
d	Period	The Invoice Period (year and month) as YYYY-MM where MM represents the zero padded two digit integers 01,02,03,...12.
e	Timestamp	The date and time the Settlement Run was commenced at in local time in ISO format: YYYY-MM-DDThh:mm where MM, DD, hh and mm are all zero padded integers in the range 01-12, 01-31, 00-23 and 00-59 respectively.
f	SPID	The unique identifier allocated to each Supply Point by the Market Operator.

Disaggregated Report – Part 1		
	Field Header	Description and Derivation
g	Category	The SPID category provides an abbreviation on whether the SPID is water only (WONLY), water with associated sewerage (WANDS), sewerage with associated water (SANDW) or sewerage only (SONLY).
h	Component	The code for the Service Component as specified in CSD 0301 (Data Catalogue).
i	Tariff	The code for the Tariff as appropriate, as submitted in accordance with CSD 0208 (Creation and update of Wholesaler Tariff Data).
j	Name	The name for the Tariff which was applicable at the date of the Invoice Period.
k	Element	The code for the Charging Element as specified in CSD 0207 (Charge Calculation, Allocation and Aggregation).
l	Vacant	This declares whether the premises for the SPID are vacant or not. "VACANT" indicates vacant, "OCCUPIED" indicates occupied.
m	Temporarily Disconnected	This declares whether the premises for the SPID are Temporarily Disconnected or not. "TRUE" indicates Temporary Disconnection, "FALSE" indicates the premises are not Temporarily Disconnected.
n	Days	The number of days in the Invoice Period that the Wholesaler/ Retailer/ SPID category/ Service Component/ Tariff / Charging Element/ Vacant/ Temporary Disconnection/ Special Agreement Factor and where applicable meter/ Volumetric Adjustment combination was in effect.
o	Volume	Only applies to volumetric Charging Elements. The sum of the applicable Derived Daily Volume for the meter or Volumetric Adjustment.
p	ActualV	Only applies to volumetric Charging Elements. The sum of the applicable Derived Actual Daily Volume.
q	EstimatedV	Only applies to volumetric Charging Elements. The sum of the applicable Derived Estimated Daily Volume.
r	Capacity	Only applies to Metered Water Standby Capacity and Metered Water Maximum Demand Charging Elements. The average capacity over the number of applicable days.

Disaggregated Report – Part 1		
	Field Header	Description and Derivation
s	SAF	Percentage factor applied to a Service Component where a Special Arrangement exists.
t	Price	Only applies to volumetric Charging Elements. The unit price in £/m ³ , except the Metered Water Standby Capacity and Metered Water Maximum Demand Charging Elements where the price in £/day per m ³ /day (please note, this is different from the price as stated in the tariff). The price is set to zero during any periods of vacancy and Temporary Disconnection provided that the charging method is such that charges are not applied during these periods.
u	V_Charge	Only applies to volumetric Charging Elements. The Primary Charges in £.
v	NV_Charge	Only applies to non-volumetric Charging Elements. The Primary Charges in £.
w	Manufacturer	Only applies to volumetric Charging Elements. For meters, the meter manufacturer. For Volumetric Adjustments, the string "VolAdjustment". For Volumes associated with Calculated Discharges, the string "CalcDischarge"
x	SerialNo	Only applies to volumetric Charging Elements. For meters, the Manufacturer Meter Serial Number. For Volumetric Adjustments, the reference provided with the Volumetric Adjustment. For Volumes associated with Calculated Discharges, the Calculated Discharge ID.
y	Test	Test flag. "Y" if the run was a test, "N" for production runs.

B.6 Disaggregated Report Part 1 - File Ordering

B.6.1 The lines in the first part of the Disaggregated Settlement Report will be consistently ordered as follows:

- (a) SPID;

- (i) alpha-numerically;
- (b) Category;
 - (i) by “WANDS” and then by “WONLY” for the water SPID, by “SANDW” and then by “SONLY” for the sewerage SPID;
- (c) Service Component;
 - (i) Potable Water;
 - (ii) Non-potable Water;
 - (iii) Assessed Water;
 - (iv) Unmeasured Water;
 - (v) Water Charge Adjustments;
 - (vi) Metered Sewerage;
 - (vii) Unmeasured Sewerage;
 - (viii) Surface Water Drainage Services;
 - (ix) Highway Drainage Services;
 - (x) Sewerage Charge Adjustments;
- (d) the Tariff;
 - (i) alpha-numerically on the Tariff code;
- (e) the Charging Element;
 - (i) alpha-numerically on the charging element code;
- (f) Vacant;
 - (i) by “OCCUPIED” and then by “VACANT”;
- (g) Temporary Disconnection;
 - (i) by “FALSE” and then by “TRUE”;
- (h) SAF;
 - (i) numerically;
- (i) the Meter Manufacturer;

- (i) alpha-numerically;
- (j) the Manufacturer Meter Serial Number; and
- (i) alpha-numerically.

B.7 Disaggregated Report Part 2 - File Content

B.7.1 A detailed description of the field names and their content for the second part of the Disaggregated Settlement Report is given in the table below:

Disaggregated Report – Part 2 (Trade Effluent)		
	Field Header	Description and Derivation
a	Wholesaler	Identity of the Wholesaler. The same organisation code used to identify the Wholesaler in transactions to and from the Market Operator.
b	Retailer	Identity of the Retailer. The same organisation code used to identify the Retailer in transactions to and from the Market Operator.
c	Run	The Settlement Run type e.g. P1, R1, R2, R3, R4, RF or in the case Unplanned Runs RF-1 etc.
d	Period	The Invoice Period (year and month) as YYYY-MM where MM represents the zero padded two digit integers 01,02,03,....,12.
e	Timestamp	The date and time the Settlement Run was commenced at in local time in ISO format: YYYY-MM-DDThh:mm where MM, DD, hh and mm are all zero padded integers in the range 01-12, 01-31, 00-23 and 00-59 respectively.
f	SPID	The unique identifier allocated to each Supply Point by the Market Operator.
g	DPID	The identifier allocated to the Trade Effluent discharge by the Wholesaler.
h	Tariff	The code for the Tariff as appropriate, as submitted in accordance with CSD 0208 (Creation and update of Wholesaler Tariff Data).
i	Name	The name for the Tariff which was applicable at the date of the Invoice Period.
j	Element	The code for the Charging Element as specified in CSD 0207 (Charge Calculation, Allocation and Aggregation).
k	Vacant	This declares whether the premises for the SPID are vacant or not. "VACANT" indicates vacant, "OCCUPIED" indicates occupied.

Disaggregated Report – Part 2 (Trade Effluent)		
	Field Header	Description and Derivation
l	Temporarily Disconnected	This declares whether the premises for the SPID are Temporarily Disconnected or not. "TRUE" indicates Temporary Disconnection, "FALSE" indicates the premises are not Temporarily Disconnected.
m	Ot	The value of Ot for the discharge. Only applies to Trade Effluent operational Charging Element.
n	St	The value of St for the discharge. Only applies to Trade Effluent operational Charging Element.
o	Days	The number of days in the Invoice Period that the Wholesaler/ Retailer/ Service Component/ Tariff / Charging Element/ Vacant/ Temporary Disconnection/ Special Agreement Factor/ Ot/ St and where applicable meter/ Volumetric Adjustment combination was in effect.
p	Volume	<p>Only applies to volumetric Charging Elements. One of the following four components of the Volume Discharged:</p> $DDV_{Kd} \times MDVOL_{KTd};$ $- \sum_k (PA_{Td} \times DDV_{Kd} \times MDVOL_{KTd}) - (1 - PA_{Td}) \times ([\max(0, DA_{Td}) \times DAINC_{Td}] + FA_{Td}) \times (1 - VAC_d) \times (1 - TDISC_d) / DIY;$ <p>Note: The square bracket indicates the optional nature of the DA term in the equation;</p> $TEDDV_{Tvd}$ $TEDDV_{Tsd}$ <p>Note: There is one line per meter, one line for the allowances, one line for each Volumetric Adjustment and one line for each Calculated Discharge.</p>
q	SAF	Percentage factor applied to a Service Component where a Special Arrangement exists.
r	Price	<p>Only applies to volumetric Charging Elements. The unit price in £/m³.</p> <p>The price is set to zero during any periods of vacancy and Temporary Disconnection provided that the charging method is such that charges are not applied during these periods.</p>
s	V_Charge	Only applies to volumetric Charging Elements. The Primary Charges in £.
t	NV_Charge	Only applies to non-volumetric Charging Elements. The Primary Charges in £.

Disaggregated Report – Part 2 (Trade Effluent)		
	Field Header	Description and Derivation
u	Manufacturer	Only applies to volumetric Charging Elements. For meters, the meter manufacturer; for the term including PA _{Td} , DA _{Td} and FA _{Td} the string “Allowances”; for Volumetric Adjustments (TEDDV _{Tvd}) the string “VolAdjustment” and for Calculated Discharges (TEDDV _{Tsd}) the string “Calculated”.
v	SerialNo	Only applies to volumetric Charging Elements. For meters, the Manufacturer Meter Serial Number; for the term including PA _{Td} , DA _{Td} and FA _{Td} the string “Allowances”; for Volumetric Adjustments, the reference provided with the Volumetric Adjustments and for Calculated Discharges the unique name for the Calculated Discharge.
w	Test	Test flag. “Y” if the run was a test, “N” for production runs.

B.8 Disaggregated Report Part 2 - File Ordering

B.8.1 The lines in the second part of the Disaggregated Settlement Report will be consistently ordered as follows:

- (a) SPID;
 - (i) alpha-numerically;
- (b) DPID;
 - (i) alpha-numerically;
- (c) the Tariff;
 - (i) alpha-numerically on the Tariff code;
- (d) the Charging Element;
 - (i) alpha-numerically on the Charging Elements code;
- (e) Vacant;
 - (i) by “OCCUPIED” and then by “VACANT”;
- (f) Temporary Disconnection;
 - (i) by “FALSE” and then by “TRUE”;
- (g) SAF;
 - (i) numerically;
- (h) Ot;

- (i) numerically;
- (i) St;
- (i) numerically;
- (j) the Meter Manufacturer;
- (i) alpha-numerically;
- (k) the Manufacturer Meter Serial Number; and
- (i) alpha-numerically.

B.9 Disaggregated Report Part 3 - File Content

B.9.1 A detailed description of the field names and their content for the third part of the Disaggregated Settlement Report is given in the table below:

Disaggregated Report – Part 3 (Meter Networks)		
	Field Header	Description and Derivation
a	Wholesaler	Identity of the Wholesaler. The same organisation code used to identify the Wholesaler in transactions to and from the Market Operator
b	Retailer	Identity of the Retailer. The same organisation code used to identify the Retailer in transactions to and from the Market Operator
c	Run	The Settlement Run type e.g. P1, R1, R2, R3, R4, RF or in the case of Unplanned Runs RF-1 etc.
d	Period	The Invoice Period (year and month) as YYYY-MM where MM represents the zero padded two digit integers 01,02,03...,12
e	Timestamp	The date and time the Settlement Run was commenced at in local time in ISO format: YYYY-MM-DDThh:mm where MM, DD, hh and mm are all zero padded integers in the range 01-12, 01-31, 00-23 and 00-59 respectively.
f	SPID	The unique identifier allocated to the Supply Point of the Main Meter.
g	MainManufacturer	The manufacturer of the Main Meter.
h	MainSerialNo	The serial number of the Main Meter.

Disaggregated Report – Part 3 (Meter Networks)		
	Field Header	Description and Derivation
i	SubManufacturer	The manufacturer of the Sub Meter. For the row which displays Volumes for the Main Meter, this column should be left blank.
j	SubSerialNo	The serial number of the Sub Meter. For the row which displays Volumes for the Main Meter, this column should be left blank.
k	Volume	The Daily Volume for the meter.
l	ActualV	The Actual Daily Volume for the meter.
m	EstimatedV	The Estimated Daily volume for the meter.
n	Test	Test flag. "Y" if the run was a test, "N" for production runs.

B.9.2 For the avoidance of doubt, if there are no lines of data to be reported in this part 3 of the Disaggregated Report, a report containing only the single header line shall be issued.

B.10 Disaggregated Report Part 3 - File Ordering

B.10.1 The lines in the third part of the Disaggregated Settlement Report will be consistently ordered as follows:

- (a) SPID;
 - (i) alpha-numerically;
- (b) the Main Meter Meter Manufacturer;
 - (i) alpha-numerically;
- (c) the Main Meter Manufacturer Meter Serial Number;
 - (i) alpha-numerically;
- (d) the Sub Meter Meter Manufacturer;
 - (i) alpha-numerically;
- (e) the Sub Meter Manufacturer Meter Serial Number; and

- (i) alpha-numerically.

B.11 Disaggregated Report Part - 4 File Content

B.11.1 A detailed description of the field names and their content for the fourth part of the Disaggregated Settlement Report is given in the table below:

Disaggregated Report – Part 4 (Exceptions)		
	Field Header	Description and Derivation
a	Wholesaler	Identity of the Wholesaler. The same organisation code used to identify the Wholesaler in transactions to and from the Market Operator.
b	Retailer	Identity of the Retailer. The same organisation code used to identify the Retailer in transactions to and from the Market Operator.
c	Run	The Settlement Run type e.g. P1, R1, R2, R3, R4, RF or in the case of Unplanned Runs RF-1 etc.
d	Period	The Invoice Period (year and month) as YYYY-MM where MM represents the zero padded two digit integers 01, 02, 03, ... 12.
e	Timestamp	The date and time the Settlement Run was commenced at in local time in ISO format: YYYY-MM-DDThh:mm where MM, DD, hh and mm are all zero padded integers in the range 01-12, 01-31, 00-23 and 00-59 respectively.
f	SPID	The unique identifier allocated to each Supply Point by the Market Operator.
g	Component	The code for the Service Component as specified in CSD 0301 (Data Catalogue).
h	Tariff	The code for the Tariff as submitted in accordance with CSD 0208 (Creation and update of Wholesaler Tariff Data).
i	Element	The code for the Charging Element as specified in CSD 0207 (Charge Calculation, Allocation and Aggregation).
j	Variable	The variable(s) which were the subject of the exception.
k	Date	For variables which are date dependent, the Settlement Days for which the exception occurred.
l	Exception	The nature of the exception – e.g.: “Undefined Variable” or “Invalid Variable Value”.

Disaggregated Report – Part 4 (Exceptions)		
	Field Header	Description and Derivation
m	Test	Test flag. “Y” if the run was a test, “N” for production runs.

B.11.2 For the avoidance of doubt, if there are no lines of data to be reported in this part 4 of the Disaggregated Report, a report containing only the single header line shall be issued.

B.12 Disaggregated Report Part 4 - File Ordering

B.12.1 The lines in the fourth part of the Disaggregated Settlement Report will be consistently ordered as follows:

- (a) SPID;
 - (i) alpha-numerically;
- (b) Service Component;
 - (i) Potable Water;
 - (ii) Non-Potable Water;
 - (iii) Assessed Water;
 - (iv) Unmeasured Water;
 - (v) Water Charge Adjustments;
 - (vi) Metered Sewerage;
 - (vii) Assessed Sewerage;
 - (viii) Unmeasured Sewerage;
 - (ix) Surface Water Drainage Services;
 - (x) Highway Drainage Services;
 - (xi) Trade Effluent;
 - (xii) Sewerage Charge Adjustments;
- (c) the Tariff;
 - (i) alpha-numerically on the Tariff code;
- (d) the Charging Element;
 - (i) alpha-numerically on the Charging Elements code;
- (e) variable;

- (i) alpha-numerically on variable;
- (f) date; and
 - (i) in date order.