

# UK Standard for CDRs

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This document defines a standard specification for the supply of wholesale billing data, for the UK telecom marketplace. The specification covers outbound, inbound and mobile call detail records (CDRs) and also recurring and fixed service charges. The specification was developed following a consultation between the UK's leading telecoms billing vendors.

**Version 1.5**

Moderated by the Federation  
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Federation of  
Communication  
Services

# Standard CDR Format

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**Version 1.5**

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## 1. Introduction

This document outlines a UK industry standard for the billing data files used to define the wholesale voice and data products supplied by an operator. The standard covers file formats for both call detail record (CDRs) and also service charge records. The document gives resellers and CPs the information they require in order to bill their end-user customers.

This standard includes two file formats covering the following services:

### *Call Charges (Section 3)*

- **Fixed Line and VOIP CDR (Section 4)**
- **Mobile CDR (Section 5)**
- **Inbound calls (including Inbound Legs of multi-leg calls) (Section 6)**

### *Service Charges*

- **Service Charge Output (Section 7)**

The files contain the core billing data for onward billing and other common billable event records.

## 2. General Format

All files to be standard text files (PC ASCII encoding), each record terminated by a carriage return and line feed characters. All fields are comma delimited and field values are qualified with “double quotes”. NULL values for optional fields should still be presented with quotations, e.g.: “”. No header or footer rows presented.

### **Call Charges CDR format**

The format for call charges covered in the following sections 3-6 is identical in each scenario. The CDR provider may choose to provide all call types mixed together in a single file(s) as described in section 3. Alternatively, different services may be separated into different files as described in sections 4-6.

The ‘Call Type’ identifier is key to determine whether the call record is Outbound, Inbound, Mobile etc.

In many cases a ‘Call Class’ may be used to identify the charge group that should be applied when rating the call. The CDR provider should also publish a list of call classes it uses in conjunction with the standard format.

### **Service Charges CDR format**

The service charge format is purely used for fixed and recursive charges e.g. Line rentals, License fees, set-up charges etc.

## Revision History

Version	Section	Change	Date
1.0		First Draft of suggested standard CDR format Structure	23/05/2012
1.1	All	Updated following meeting of billing vendors 29/05/2012	08/06/2012
1.2	All	Updated following meeting of billing vendors 22/08/2012	22/08/2012
1.3	All	Merged all call formats into one.	18/09/2012
1.4	All	Document formatting and added new field	20/09/2012
1.5	3-7	Added Account Ref to file name	12/11/2012

### 3. General Format for any Call Detail Records (CDR)

#### 3.1 Purpose of this format

To be used when producing a CDR for calls made of any type e.g. Fixed Line, VOIP services, Mobile, Outbound etc. It is possible for all these call types to be mixed together in one file.

#### 3.2 File naming convention

The file must be named in the following way:

**RID\_Monthly\_Calls\_AAAAAA\_DDMMYYYY\_SSSSS\_CCCCC\_VV.txt**

**Or**

**RID\_Daily\_Calls\_AAAAAA\_DDMMYYYY\_SSSSS\_CCCCC\_VV.txt**

Where monthly, DDMMYYYY represents the billing period date (last day of the month in which the calls were made). Where daily, DDMMYYYY represents the day on which the calls were made.

“Calls” = this denotes that the file can contain mixed data of different call types

RID = RID code of CDR provider

AAAAAA = An account reference the CDR provider can use to denote the receiver of the CDR i.e. the reseller. (no limit on number of digits i.e. size of number).

SSSSS = sequence number (no limit on number of digits i.e. size of number). Every file produced for a particular customer (regardless of type), should have a sequence number increasing by 1 as each subsequent file is produced.

CCCCC = record count (no limit on number of digits i.e. size of number)

VV = The version of the standard that has been used. This should be set to “V1”

Example:

Monthly: **ZZZ\_Monthly\_Calls\_ABC001\_31012012\_13\_189\_V1.txt**

Daily: **ZZZ\_Daily\_Calls\_ABC001\_29062012\_394\_21125\_V1.txt**

#### 3.3 CDR Format

The table below shows the columns required.

Field	Column Name	Description	Example	Mandatory Field	Field Size Max
1	Call Type	The type of call being made. For example call types: V = outbound voice call,	“V”	Yes	4

		<p>VOIP = Voice over IP call  D = Data/ISDN Call  C = Conference call  N = Inbound call (billable)  I = Standard Inbound call (usually not billable e.g. Raw call data)  U = Unanswered call  B = Busy Call  X = Call failed  M = Mobile call (made from mobile device)  G = GPRS Data</p>			
2	Call Cause Definition required.	<p>Further defines a call from just being a certain call type.</p> <p>For example call type V can be used for both fixed line and NGN outbound calls. If the call cause is 0 then you know it is a fixed line call. If the call cause is 1 then you know it is an NGN outbound call.</p>	"0"	No	1
3	Customer Identifier (CLI)	<p>An identifier to which the call charge can be allocated.</p> <p>This is most commonly the customer Caller Line Identity (CLI). It must start with 0 if an actual UK telephone number, else can be a reference number e.g. an IP address or email address.</p>	"01234567890"	Yes	100
4	Telephone Number Dialed (or the caller's number for inbound calls)	<p>Telephone number called.</p> <p>All national numbers contain leading zeros, all international have two leading zeros.</p> <p>The convention of using 000 for international data calls should NOT be used</p> <p>A Telephone number must be set. The only exception to this rule is when a call class has been used to identify the charging group.</p>	"01234567890"	Yes	50
5	Call Date	Date call is made DD/MM/YYYY	"31/12/2012"	Yes	10
6	Call Time	Time call is made HH:MM:SS	"09:15:30"	Yes	10
7	Duration	Duration of the call in whole seconds	"237"	Yes	6
8	Bytes Transmitted	Only applies if Call type is G otherwise zero. Number of bytes of data transmitted. Numeric.	"12000"	No	20
9	Bytes Received	Only applies if Call type is G otherwise zero. Number of bytes of data received. Numeric.	"12000"	No	20
10	Description	Destination description	"London"	No	100
11	Chargecode	A destination description used on supplier's billing system to bill the call.	"UK Local"	No	100
12	Time Band	<p>The time band within which the call was made.</p> <p>Typically: Peak, OffPeak, Weekend, Special1, Special2, Special3, Special4 (optional)</p>	"Peak"	No	10

13	Salesprice	Sales price in pence no currency symbols to be included. This is the final sales price for the call after any bundles have been applied  Numeric (up to 4 decimal places).	"12.5"	No	9
14	Salesprice (pre-bundle)	This is the sales price <u>before</u> any bundle has been applied. If no bundle has been used, this field should be set to be the same as the Salesprice above.  Numeric (up to 4 decimal places) in pence no currency symbols to be included.	"12.5"	No	9
15	Extension	User's extension number, if known	"2142"	No	6
16	DDI	User's DDI number, if known	"01234567890"	No	50
17	Grouping ID	Common numeric identifier to group records to represent elements of a single call. For example connections in a single conference call, or multiple legs of a single inbound call.	"1"	No	100
18	Call Class (Feature)	Alpha numeric code referencing how the call should be billed. Used for when the dialling code of the dialled number cannot be used to rate the call.  For example: <ul style="list-style-type: none"> <li>a) Mobile class associated with the call.</li> </ul> This field alone determines how this call is charged.  <ul style="list-style-type: none"> <li>b) There are some kinds of calls (e.g. Operator assistance and reverse charges) that cannot be rated by number dialled. A unique call class should be allocated for each of these and used here. Typically this field could contain the feature codes that BT use to define certain call types e.g.</li> </ul> "BT312CR" = Call Return "BT313OACA" = Op Assistance - Chg Advice "BT313RCCA" = Reverse Charge - Chg Advice  The supplier the CDR file should also provide a list of all call classes that can be used.	"BT313OACA"	No (but Yes if calltype is 'M')	50
19	Carrier	Text description of the carrier from which the call originated. This may be required by the recipient of the CDR file for accurate rating. For example, when a call is routed via a CPS carrier or via BT Wholesale.	"Gamma"	No	150

20	Recording	Flag used to determine if call is recorded or not 1= Recorded 0 = Not recorded "" = Not recorded	"0"	No	1
21	VAT	Flag to define if VAT is applied. S = Standard Z = Zero Rate	"S"	Yes	1
22	Country of Origin	The country handling roamed calls. This must follow a standard – internationally recognised 3 character country codes. (ISO 3166-1 alpha-3 standard)	"GBR"	No	3
23	Network	Mobile network. This is a required field if Calltype is M	"O2"	No	10
24	Retail tariff code	Retail tariff code – to represent buy tariff used.  Values may be determined by provider. A complete list of available values should be made available.	"BB"	No	3
25	Remote Network	The network handling roamed calls. As code or full network description.	"TC"	No	50
26	APN	Access Point Name for GPRS Calls Not required for non-GPRS calls	"Blackberry"	No	15
27	Diverted Number	Number the NGN number is diverted (mapped) to.	"01234567890"	No	15
28	Ring time	Presented where available Duration of the ring time in whole seconds	"75"	No	10
29	RecordID	A unique id of the record	"2314-132A23145782345"	No	25

### 3.4 Call rating rules/ logic

Calls are rated by means of the dialled number. If the chargeband for rating cannot be derived by the dialled number then the call class may be used instead. Where a call class is used it will take precedence over rating via the dialled number.

### 3.5 Example CDR file

Below is an example file following the standard format:

```
"V", "0", "01999887000", "01999878333", "28/01/2012", "10:37:23", "233", "", "", "Hampton", "UK
Local", "Peak", "0.8", "0.8", "654", "01999887654", "", "UKL", "Talk
Talk", "", "S", "", "", "", "", "", "", "", "778789"
```

```
"VOIP", "0", "Brianb@M1.com", "02086019080", "28/01/2012", "10:39:23", "345", "", "", "On-Net", "On-
Net", "Peak", "0.0", "0.0", "", "", "", "ON", "Talk Talk", "1", "S", "", "", "", "", "", "", "8011229"
```



## 4. Fixed Line and VOIP CDR

### 4.1 Purpose of this example

This example demonstrates how to create a CDR file purely for outbound calls made from Fixed Line and VOIP services.

### 4.2 File naming convention

The file must be named in the following way:

**RID\_Monthly\_Outbound\_AAAAAA\_DDMMYYYY\_SSSSSS\_CCCCCC\_VV.txt**

**Or**

**RID\_Daily\_Outbound\_AAAAAA\_DDMMYYYY\_SSSSSS\_CCCCCC\_VV.txt**

Where monthly, DDMMYYYY represents the billing period date (last day of the month in which the calls were made). Where daily, DDMMYYYY represents the day on which the calls were made.

“Outbound” = this denotes that the file can contains only data for outbound call types

RID = RID code of CDR provider

AAAAAA = An account reference the CDR provider can use to denote the receiver of the CDR i.e. the reseller. (no limit on number of digits i.e. size of number).

SSSSSS = sequence number (no limit on number of digits i.e. size of number). Every file produced for a particular customer (regardless of type), should have a sequence number increasing by 1 as each subsequent file is produced.

CCCCC = record count (no limit on number of digits i.e. size of number)

VV = The version of the standard that has been used. This should be set to “V1”

Example:

Monthly: **ZZZ\_Monthly\_Outbound\_ABC001\_31012012\_13\_189\_V1.txt**

Daily: **ZZZ\_Daily\_Outbound\_ABC001\_29062012\_394\_22121\_V1.txt**

### 4.3 CDR Format

The table below shows the columns required.

Field	Column Name	Description	Example	Mandatory Field	Field Size Max
1	Call Type	The type of call being made. For example call types: V = outbound voice call,	“V”	Yes	4

		<p>VOIP = Voice over IP call  D = Data/ISDN Call  C = Conference call  U = Unanswered call  B = Busy Call  X = Call failed</p>			
2	Call Cause Definition required.	<p>Further defines a call from just being a certain call type.</p> <p>For example call type V can be used for both fixed line and NGN outbound calls. If the call cause is 0 then you know it is a fixed line call. If the call cause is 1 then you know it is an NGN outbound call.</p>	"0"	No	1
3	Customer Identifier (CLI)	<p>An identifier to which the call charge can be allocated.</p> <p>This is most commonly the customer Caller Line Identity (CLI). It must start with 0 if an actual UK telephone number, else can be a reference number e.g. an IP address or email address.</p>	"01234567890"	Yes	100
4	Telephone Number	<p>Telephone number called.</p> <p>All national numbers contain leading zeros, all international have two leading zeros.</p> <p>The convention of using 000 for international data calls should NOT be used</p> <p>A Telephone number must be set. The only exception to this rule is when a call class has been used to identify the charging group.</p>	"01234567890"	Yes	50
5	Call Date	Date call is made DD/MM/YYYY	"31/12/2012"	Yes	10
6	Call Time	Time call is made HH:MM:SS	"09:15:30"	Yes	10
7	Duration	Duration of the call in whole seconds	"237"	Yes	6
8	Bytes Transmitted	<p>Only applies if Call type is G otherwise zero.</p> <p>Number of bytes of data transmitted. Numeric.</p> <p>Not Applicable for fixed line, VoIP etc.</p>	""	No	20
9	Bytes Received	<p>Only applies if Call type is G otherwise zero.</p> <p>Number of bytes of data received. Numeric.</p> <p>Not Applicable for fixed line, VoIP etc.</p>	""	No	20
10	Description	Destination description	"London"	No	100
11	Chargecode	A destination description used on supplier's billing system to bill the call.	"UK Local"	No	100
12	Time Band	<p>The time band within which the call was made.</p> <p>Typically: Peak, OffPeak, Weekend, Special1, Special2, Special3, Special4 (optional)</p>	"Peak"	No	10
13	Salesprice	Sales price in pence no currency symbols to	"12.5"	No	9

		be included. This is the final sales price for the call after any bundle have been applied  Numeric (up to 4 decimal places).			
14	Salesprice (pre-bundle)	This is the sales price <u>before</u> any bundle has been applied. If no bundle has been used, this field should be set to be the same as the Salesprice above.  Numeric (up to 4 decimal places) in pence no currency symbols to be included.	"12.5"	No	9
15	Extension	User's extension number, if known	"2142"	No	6
16	DDI	User's DDI number, if known	"01234567890"	No	50
17	Grouping ID	Common numeric identifier to group records to represent elements of a single call. For example connections in a single conference call, or multiple legs of a single inbound call.	"1"	No	100
18	Call Class (Feature)	Alpha numeric code referencing how the call should be billed. Used for when the dialling code of the dialled number cannot be used to rate the call.  For example: <ul style="list-style-type: none"> <li>a) Mobile class associated with the call.</li> </ul> This field alone determines how this call is charged.  <ul style="list-style-type: none"> <li>b) There are some kinds of calls (e.g. Operator assistance and reverse charges) that cannot be rated by number dialled. A unique call class should be allocated for each of these and used here. Typically this field could contain the feature codes that BT use to define certain call types e.g.</li> </ul> "BT312CR" = Call Return "BT313OACA" = Op Assistance - Chg Advice "BT313RCCA" = Reverse Charge - Chg Advice  The supplier the CDR file should also provide a list of all call classes that can be used.	"BT313OACA"	No (but Yes if calltype is 'M')	50
19	Carrier	Text description of the carrier from which the call originated. This may be required by the recipient of the CDR file for accurate rating. For example, when a call is routed via a CPS carrier or via BT Wholesale.	"Gamma"	No	150
20	Recording	Flag used to determine if call is recorded or	"1"	No	1

		not 1= Recorded 0 = Not recorded "" = Not recorded			
21	VAT	Flag to define if VAT is applied. S = Standard Z = Zero Rate	"S"	Yes	1
22	Country of Origin	The country handling roamed calls. This must follow a standard – internationally recognised 3 character country codes. (ISO 3166-1 alpha-3 standard)  Only used with mobile calls	""	No	3
23	Network	Mobile network. This is a required field if Calltype is M.	""	No	10
24	Retail tariff code	Retail tariff code – to represent buy tariff used. Values may be determined by provider. A complete list of available values should be made available.  Not required for non-mobile calls	""	No	3
25	Remote Network	The network handling roamed calls. As code or full network description.  Not required for non-mobile calls	""	No	50
26	APN	Access Point Name for GPRS Calls Not required for non-GPRS calls	""	No	15
27	Diverted Number	Number the NGN number is diverted (mapped) to.	""	No	15
28	Ring time	Presented where available Duration of the ring time in whole seconds	""	No	10
29	RecordID	A unique id of the record	"2314-132A23145782346"	No	25

#### 4.4 Call rating rules/ logic

Calls are rated by means of the dialled number. If the chargeband for rating cannot be derived by the dialled number then the call class may be used instead. Where a call class is used it will take precedence over rating via the dialled number.

#### 4.5 Example CDR file

Below is an example file following the standard format:

```
"v","0","01999887000","01999878333","28/01/2012","10:37:23","233","","","Hampton","UK
Local","Peak","0.8","0.8","654","01999887654","","UKL","Talk
Talk","","S","","","","","","","778789"

"VOIP","0","Brianb@M1.com","02086019080","28/01/2012","10:39:23","345","","","On-
Net","On-Net","Peak","0.0","0.0","","","ON","Talk
Talk","1","S","","","","","","","8011229"
```

## 5. Mobile CDR Output

### 5.1 Purpose of this example

This example demonstrated how to create a CDR file purely for mobile calls (including GPRS).

### 5.2 File naming convention

The file must be named in the following way:

**RID\_Monthly\_Mobile\_AAAAAA\_DDMMYYYY\_SSSSS\_CCCCC.txt**

**Or**

**RID\_Daily\_Mobile\_AAAAAA\_DDMMYYYY\_SSSSS\_CCCCC.txt**

Where monthly, DDMMYYYY represents the billing period date (last day of the month in which the calls were made).

Where daily, DDMMYYYY represents the day on which the calls were made.

“Mobile” = this denotes that the file contains only data for calls made or received by mobile devices.

RID = RID code of CDR provider

AAAAAA = An account reference the CDR provider can use to denote the receiver of the CDR i.e. the reseller. (no limit on number of digits i.e. size of number).

SSSSS = sequence number (no limit on number of digits i.e. size of number). Every file produced for a particular customer (regardless of type), should have a sequence number increasing by 1 as each subsequent file is produced.

CCCCC = record count (no limit on number of digits i.e. size of number)

VV = The version of the standard that has been used. This should be set to “V1”

Example:

Monthly: **ZZZ\_Monthly\_Mobile\_ABC001\_31012012\_14\_684\_V1.txt**

Daily: **ZZZ\_Daily\_Mobile\_ABC001\_29062012\_395\_21087\_V1.txt**

### 5.3 CDR Format

The table below shows the columns required.

Field	Column Name	Description	Example	Mandatory Field	Field Size Max
1	Call Type	The type of call being made. For example call types:	“M”	Yes	4

		M = Mobile call (made from mobile device) G = GPRS Data			
2	Call Cause Definition required.	Further defines a call from just being a certain call type.  For example call type V can be used for both fixed line and NGN outbound calls. If the call cause is 0 then you know it is a fixed line call. If the call cause is 1 then you know it is an NGN outbound call.  Not required for mobile calls	""	No	1
3	Customer Identifier (CLI)	An identifier to which the call charge can be allocated. This is most commonly the customer Caller Line Identity (CLI). It must start with 0 if an actual UK telephone number, else can be a reference number e.g. an IP address or email address.	"07771567890"	Yes	100
4	Telephone Number	Telephone number called. All national numbers contain leading zeros, all international have two leading zeros.  The convention of using 000 for international data calls should NOT be used  A Telephone number must be set. The only exception to this rule is when a call class has been used to identify the charging group, in which case the field may be left blank "".	"01234567890"	Yes	50
5	Call Date	Date call is made DD/MM/YYYY	"31/12/2012"	Yes	10
6	Call Time	Time call is made HH:MM:SS	"09:15:30"	Yes	10
7	Duration	Duration of the call in whole seconds	"237"	Yes	6
8	Bytes Transmitted	Only applies if Call type is G otherwise zero. Number of bytes of data transmitted. Numeric.	"12000"	No	20
9	Bytes Received	Only applies if Call type is G otherwise zero. Number of bytes of data received. Numeric.	"12000"	No	20
10	Description	Destination description	"London"	No	100
11	Chargecode	A destination description used on supplier's billing system to bill the call.	"Mobile to UK Inland"	No	100
12	Time Band	The time band within which the call was made. Typically: Peak, OffPeak, Weekend, Special1, Special2, Special3, Special4 (optional)	"Peak"	No	10
13	Salesprice	Sales price in pence no currency symbols to be included. This is the final sales price for the call after any bundle have been applied  Numeric (up to 4 decimal places).	"12.5"	No	9

14	Salesprice (pre-bundle)	<p>This is the sales price <u>before</u> any bundle has been applied. If no bundle has been used, this field should be set to be the same as the Salesprice above.</p> <p>Numeric (up to 4 decimal places) in pence no currency symbols to be included.</p>	"12.5"	No	9
15	Extension	<p>User's extension number, if known</p> <p>Not required for mobile calls</p>	""	No	6
16	DDI	<p>User's DDI number, if known</p> <p>Not required for mobile calls</p>	""	No	50
17	Grouping ID	<p>Common numeric identifier to group records to represent elements of a single call. For example connections in a single conference call, or multiple legs of a single inbound call.</p> <p>Not required for mobile calls</p>	""	No	100
18	Call Class (Feature)	<p>Alpha numeric code referencing how the call should be billed. Used for when the dialling code of the dialled number cannot be used to rate the call.</p> <p>For example:</p> <ul style="list-style-type: none"> <li>a) Mobile class associated with the call.</li> </ul> <p>This field alone determines how this call is charged.</p> <ul style="list-style-type: none"> <li>b) There are some kinds of calls (e.g. Operator assistance and reverse charges) that cannot be rated by number dialled. A unique call class should be allocated for each of these and used here. Typically this field could contain the feature codes that BT use to define certain call types e.g.</li> </ul> <p>"BT312CR" = Call Return  "BT313OACA" = Op Assistance - Chg Advice  "BT313RCCA" = Reverse Charge - Chg Advice</p> <p>The supplier the CDR file should also provide a list of all call classes that can be used.</p>	"504"	Yes (only required if calltype is M or G)	50
19	Carrier	<p>Text description of the provider from which the call originated.</p> <p>This may be different to the mobile network if calls were provided by an aggregator.</p>	"Abzorb"	No	150

		This may be required by the recipient of the CDR file for accurate rating. For example, when a call is routed via a CPS carrier or via BT Wholesale.			
20	Recording	Flag used to determine if call is recorded or not 1= Recorded 0 = Not recorded "" = Not recorded	"0"	No	1
21	VAT	Flag to define if VAT is applied. S = Standard Z = Zero Rate	"S"	Yes	1
22	Country of Origin	The country handling roamed calls. This must follow a standard – internationally recognised 3 character country codes. (ISO 3166-1 alpha-3 standard)	"GBR"	No	3
23	Network	Mobile network.	"O2"	Yes (only required if calltype is M or G)	10
24	Retail tariff code	Retail tariff code – to represent buy tariff used.  Values may be determined by provider. A complete list of available values should be made available.	"BB"	No	3
25	Remote Network	The network that handling roamed calls. As code or full network description.	"TC"	No	50
26	APN	Access Point Name for GPRS Calls Not required for non-GPRS calls	"Blackberry"	No	15
27	Diverted Number	Number the NGN number is diverted (mapped) to. Not required for mobile calls	""	No	15
28	Ring time	Presented where available Duration of the ring time in whole seconds  Not required for mobile calls	""	No	10
29	RecordID	A unique id of the record	"2314-132A23145782347"	No	25

#### 5.4 Call rating rules/ logic

Calls are rated by means of using the call class provided.

#### 5.5 Example CDR file

Below is an example file following the standard format:

```
"M", "", "07114467900", "01999878333", "27/01/2012", "10:39:23", "987", "", "", "Mobile Inland", "Mobile to UK Inland", "Peak", "0", "12.5", "", "", "", "504", "O2", "", "S", "GBR", "O2", "BB", "", "", "", "", ""

"G", "", "07114467900", "", "28/01/2012", "10:32:21", "0", "56000000", "3100000", "GPRS UK", "GPRS UK", "Peak", "20.0", "20.0", "", "", "", "UKGPRS", "O2", "", "S", "GBR", "O2", "BB", "", "Blackberry", "", "", "2314-132A23145782347"
```



## 6. Inbound calls (including Inbound Legs of multi-leg calls)

### 6.1 Purpose of this example

This example demonstrated how to create a CDR file purely for the received element of an inbound call.

### 6.2 File naming convention

The file must be named in the following way:

**RID\_Monthly\_Inbound\_AAAAAA\_DDMMYYYY\_SSSSSS\_CCCCCC\_VV.txt**

**Or**

**RID\_Daily\_Inbound\_AAAAAA\_DDMMYYYY\_SSSSSS\_CCCCCC\_VV.txt**

Where monthly, DDMMYYYY represents the billing period date (last day of the month in which the calls were made). Where daily, DDMMYYYY represents the day on which the calls were made.

“Inbound” = this denotes that the file can contains only data for Inbound call types e.g. NGN

RID = RID code of CDR provider

AAAAAA = An account reference the CDR provider can use to denote the receiver of the CDR i.e. the reseller. (no limit on number of digits i.e. size of number).

SSSSSS = sequence number (no limit on number of digits i.e. size of number). Every file produced for a particular customer (regardless of type), should have a sequence number increasing by 1 as each subsequent file is produced.

CCCCC = record count (no limit on number of digits i.e. size of number)

VV = The version of the standard that has been used. This should be set to “V1”

Example:

Monthly: **ZZZ\_Monthly\_Inbound\_ABC001\_31012012\_15\_1684\_V1.txt**

Daily: **ZZZ\_Daily\_Inbound\_ABC001\_29062012\_396\_200165\_V1.txt**

### 6.3 CDR Format

The table below shows the columns required.

Field	Column Name	Description	Example	Mandatory Field	Field Size Max
1	Call Type	The type of call being made. For example call types:	“N”	Yes	4

		N = Inbound call (billable) I = Standard Inbound call (usually not billable e.g. Raw call data) U = Unanswered call B = Busy Call			
2	Call Cause Definition required.	Further defines a call from just being a certain call type.  This field is not relevant for inbound calls	""	No	1
3	Customer Identifier (CLI)	An identifier to which the call charge can be allocated. This is most commonly the customer Caller Line Identity (CLI). It must start with 0 if an actual UK telephone number, else can be a reference number e.g. an IP address or email address.	"08001234567"	Yes	100
4	Telephone Number Dialed (or the caller's number for inbound calls)	In the case of inbound calls is the Originating party number. It may be truncated or starred.  A Telephone number must be set. The only exception to this rule is when a call class has been used to identify the charging group.	"0123456"	Yes	50
5	Call Date	Date call is made DD/MM/YYYY	"31/12/2012"	Yes	10
6	Call Time	Time call is made HH:MM:SS	"09:15:30"	Yes	10
7	Duration	Duration of the call in whole seconds	"237"	Yes	6
8	Bytes Transmitted	Only applies if Call type is G otherwise zero. Number of bytes of data transmitted. Numeric. Not Applicable for Incoming calls	""	No	20
9	Bytes Received	Only applies if Call type is G otherwise zero. Number of bytes of data received. Numeric.  Not Applicable for Incoming calls	""	No	20
10	Description	Destination description	"Freephone"	No	100
11	Chargecode	A destination description used on supplier's billing system to bill the call.	"Freephone Diverted to National"	No	100
12	Time Band	The time band within which the call was made. Typically: Peak, OffPeak, Weekend, Special1, Special2, Special3, Special4 (optional)	"Peak"	No	10
13	Salesprice	Sales price in pence no currency symbols to be included. This is the final sales price for the call after any bundle have been applied  Numeric (up to 4 decimal places).	"12.5"	No	9
14	Salesprice (pre-bundle)	This is the sales price <u>before</u> any bundle has been applied. If no bundle has been used, this field should be set to be the same as the	"12.5"	No	9

		Salesprice above.  Numeric (up to 4 decimal places) in pence no currency symbols to be included.			
15	Extension	User's extension number, if known	""	No	6
16	DDI	User's DDI number, if known	""	No	50
17	Grouping ID	Common numeric identifier to group records to represent elements of a single call. For example connections in a single conference call, or multiple legs of a single inbound call.	"1"	No	100
18	Call Class (Feature)	Alpha numeric code referencing how the call should be billed. Used for when the dialling code of the dialled number cannot be used to rate the call. This is necessary if inbound calls attract different charging rates based on where they are terminating  For example: A = Standard inbound terminating on standard UK number FM1 = Inbound terminating on mobile FM1  The supplier the CDR file should also provide a list of all call classes that can be used.	"A"	No (but Yes if calltype is 'M')	50
19	Carrier	Text description of the carrier from which the call originated. This may be required by the recipient of the CDR file for accurate rating. For example, when a call is routed via a CPS carrier or via BT Wholesale.	"Gamma"	No	150
20	Recording	Flag used to determine if call is recorded or not 1= Recorded 0 = Not recorded "" = Not recorded	"0"	No	1
21	VAT	Flag to define if VAT is applied. S = Standard Z = Zero Rate	"S"	Yes	1
22	Country of Origin	The country handling roamed calls. This must follow a standard – internationally recognised 3 character country codes. (ISO 3166-1 alpha-3 standard)  Only used with mobile calls	""	No	3
23	Network	Mobile network. This is a required field if Calltype is M Only used with mobile calls	""	No	10
24	Retail tariff code	Retail tariff code – to represent buy tariff used. Values may be determined by provider. A complete list of available values should be	""	No	3

		made available. Only used with mobile calls			
25	Remote Network	The network handling roamed calls. As code or full network description. Only used with mobile calls	""	No	50
26	Carrier	Text description of the carrier from which the call originated. This may be required by the recipient of the CDR file for accurate rating. For example, when a call is routed via a CPS carrier or via BT Wholesale.	""	No	150
27	APN	Access Point Name for GPRS Calls Not required for non-GPRS calls	""	No	15
28	Diverted Number	Number the NGN number is diverted (mapped) to.	"01234567890"	No	15
29	Ring time	Presented where available Duration of the ring time in whole seconds	"75"	No	10
30	RecordID	A unique id of the record	"2314-132A23145782348"	No	25

#### 6.4 Call rating rules/ logic

Calls are rated by means of the dialled number which received the call. If the chargeband for rating cannot be derived by the dialled number then the call class may be used instead. Where a call class is used it will take precedence over rating via the dialled number.

#### 6.5 Example CDR file

Below is an example file following the standard format:

```
"N","","08007766557","019998","23/01/2012","13:42:23","509","","","Freephone Inbound","0800 Inbound to National","Peak","1.3","","","1","0800Nat","","0","S","","","","","01999767936","75","2312"

"N","","08007766567","019922","23/01/2012","13:45:13","89","","","Freephone Inbound","0800 Inbound to Orange","Peak","15.4","","","1","0800Orange","Talk Talk","0","S","","","","","01999767222","32","23778"
```

## 7. Service Charge Output

### 7.1 Purpose of this format

To be used when producing a file which details fixed one off and rental charges.

### 7.2 File naming convention

The file must be named in the following way:

**RID\_Monthly\_Service\_AAAAAA\_DDMMYYYY\_SSSSS\_CCCCC\_VV.txt**

Where monthly, DDMMYYYY represents the billing period date (day when charges were issued).

“**Service**” = this denotes that the file can contains only data for service charges

RID = RID code of CDR provider

AAAAAA = An account reference the CDR provider can use to denote the receiver of the CDR i.e. the reseller. (no limit on number of digits i.e. size of number).

SSSSS = sequence number (no limit on number of digits i.e. size of number). Every file produced for a particular customer (regardless of type), should have a sequence number increasing by 1 as each subsequent file is produced.

CCCCC = record count (no limit on number of digits i.e. size of number)

VV = The version of the standard that has been used. This should be set to “V1”

Example:

Monthly: **ZZZ\_Monthly\_Service\_ABC001\_31012012\_16\_234\_V1.txt**

### 7.3 CDR Format

The table below shows the columns required.

Field	Column Name	Description	Format	Mandatory	Max Field
1	Customer CLI	An identifier to which the charge can be allocated. Must start with 0 if an actual UK telephone number, else can be a reference number (typically a SERVICE ID).	“01234567890”	Yes	100
2	From Date	Start Date (inclusive) of the billed period Service Charge DD/MM/YYYY	“01/12/2012”	Yes	10
3	To Date	End Date(inclusive)	“31/12/2012”	Yes	10

		billed period of the Service Charge, must be blank for a one-off charge DD/MM/YYYY			
4	Refund or rental already billed	Used to identify if the charge is a refund of a rental previously billed R= Refund Leave blank "" if not a refund	"R"	No	1
5	Quantity	Identifies the quantity of the given product/service charged for. Numeric and must always be 1 or more (not null or 0)	"10"	Yes	7
6	Frequency	The frequency the charge is to be applied in months. Numeric 0 – One off 1 - Monthly 3 – Quarterly 12 – Annual	"1"	Yes	2
7	Unit Cost	Sale price in pounds for one unit of the product or service. No currency sign showing . For a refund this will still be the positive sale price. Numeric (up to 2 decimal places)	"10.15"	Yes	10
8	Total Cost	Total sale price in pounds for product/service. No currency sign showing. Numeric (up to 2 decimal places)	"20"	Yes	10
9	Charge type class	Type of service charge, determines what rate to charge (e.g. call class for service charge)	"BUSLR"	No	50
10	Description	A Description of the Service Charge / product.	"CLIP Rental"	Yes	100
11	Service ID	Openreach service ID	"OI3000926890"	No	15
12	Account ref	Network Provider's Account reference	"SD43572786"	No	15
13	Carrier	Text description of the carrier from	"BT Openreach"	No	150

		which the call originated. This may be required by the recipient of the CDR file for accurate rating. For example, when a call is routed via a CPS carrier or via BT Wholesale.			
14	RecordID	A unique id of the record	"2314-132A23145782348"	No	25

#### 7.4 Example CDR file

Below is an example file following the standard format:

```
"01999767936","23/01/2012","31/01/2012","","1","1","10.00","2.58","BUSL","Business Line Rental","","89874484","BT Openreach","2314-132A23145782348"
```

```
"01999767900","01/01/2012","31/01/2012","R","15","1","12.00","180.00","ISDN30L","ISDN30 Line Rental","IO304848489","89874476","BT Openreach",""
```

```
"01999767936","01/01/2012","","","1","0","150.00","150.00","BUSIN","Business Line Install","","89874484","BT Openreach",""
```