CTI Billing Solutions Limited

Subscriber user guide

Analysis 7 1.10 – Core Front-office

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1.01	Published	19/08/2014	Ian Bridge	RM#3624-Adds note on report line wrapping to Cost analysis report
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Preface

Document definition

Objectives

This document describes how to use the functionality available in *Analysis 7 Core Front-office* release *v1.10*.

Audience

This guide is for *subscribers-users* only.

Related documents

Description	Reference
Analysis 7 v1.10 – Analysis OTS Deployment Process	MMOTSDEPP
Analysis 7 v1.10 – Admin user guide	MMOTSUGA
Analysis 7 v1.10 – Call, Charge & Currency Import Guide	MMOTSIMPG
Analysis 7 v1.10 – Data Interface Specification	MMOTSDIS
Analysis 7 v1.10 – Data Limits Document	MMOTSDL
Analysis 7 v1.10 – Data Description Document	MMOTSDD
Analysis 7 v1.10 – Deployment Process Document	MMOTSDEPG
Analysis 7 v1.10 – Help desk guide	MMOTSHDUG
Analysis 7 v1.10 – Product Specification – Core Back-office	MMOTSBPS
Analysis 7 v1.10 – Product Specification – Core Front-office	MMOTSFPS
Analysis 7 v1.10 – Sandbox user guide	MMOTSSBX
Analysis 7 v1.10 – Subscriber user guide	MMOTSUGS
Analysis 7 v1.10 – Translation Server Guide	MMOTSTSG

Documentation conventions and devices

General

This document refers to *CTI's Analysis 7* analytics solution as either *Analysis 7* or *A7*.

A7's functionality is often data-dependent, so some of the functionality described in this document may not be available in all deployments.

Terminology

Throughout this document the following terms refer to specific entities within *A7*.

Term	Explanation
Account	A management unit defined by the service-provider and used to collect *subscribers* into meaningful units.
Organisational	An organisational level within the billing structure. This is a service-provider defined management unit used to collect related *accounts* into a meaningful group. For example: In the case of a telecommunications solution, then all *Accounts* relating to a specific organisation may be grouped together as, say, the customer *Acme Corp*.
Service	The entity used by *subscribers* for which *usage charges* and other costs are incurred. In the case of a telecommunications solution, this may be a, for example, a Mobile Phone's Voice or Data service, a broadband link or a fixed line.
Service-provider	The organisation providing the *service* being consumed and billed. For example: In the case of a telecommunications solution the service provider would typically be a *Mobile Operator* (*MO*), or a *Mobile Virtual Network Operator* (*MVNO*).
Subscriber	A person, device or mechanism accessing and using the service and incurring *usage charges*. For example: In the case of a telecommunications solution, then a *Subscriber* may be a handset, tablet, laptop, TV or landline.
Subscriber-transaction	A single instance of *service* use by a *subscriber*. For example: In the case of a telecommunications solution, a *Subscriber-transaction* may be a call from a mobile-phone or landline.
User	A *subscriber, customer* or *service-provider representative* with assigned *A7 Sign-in credentials* and access to the *A7* application.

Structure

This document comprises:

- A title page – identifying the document and its subject matter;
- A preface – describing the document and its objectives;
- Contents pages – providing a means of navigating the document ;
- A document body – containing the content, which is arranged in a hierarchical structure comprising Parts, Chapters, Section and Topics.
- Appendices – containing supplemental material.

Images of screens and reports

Screen and report images are included for illustrative purposes only. They do not necessarily reflect the exact layout and functionality of the solution provided to a specific *service-provider*. All reasonable endeavours are made to ensure that data so displayed is either test data or anonymised data.

Typography

The following typographical conventions are used throughout this document.

Special notices

Hints and tips

Warning statements.

Supplementary information.

Text appearance	Meaning / usage
Text like this	A cross-reference to a position within the document. *Topic 14.2.3 Duration range report (on page 68).*
Text like this	An object or feature name. The *Scheduled reports* tab, the *Main Menu*.
`Text list this`	A piece of text input via the keyboard. ▪ `/directory/path` ▪ **Input** `This is a description` as **Data description**
Text like this	An instruction or a numbered list of instructions. 1. Numbered lists are always instructions; 2. Don't forget
Text like this	▪ The name of the object of an action – a button or field Select **Data category** **Next** to continue.
[Text in square-brackets]	A key combination to be pressed: **[Enter]** or **[Tab]**

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Part One:

Introducing Analysis7

Chapters in Part Two:

This document is for *subscriber users* only.

Analysis 7 (A7) provides you, the subscriber user, with the ability to view and analyse billing information online, including the ability to view and create reports based on that billing information.

Using the solution, you can:

- View your latest usage;
- View trends;
- Create reports based on the billing information;
- Tag your usage as personal or business.

A note on browsers

Although CTI optimise *A7* for use with all browsers, its advanced functionality relies on web standards that older browser versions may not fully support.

This version of *A7* supports:

- IE 8, 9, 10 and 11;
- Firefox;
- Chrome.

See *Appendix A (on page II)* for full details on *Browser compatibility*.

CTI recommend using a screen resolution of 1280 x 1024 when viewing *A7*, although a minimum screen resolution of 1024 x 768 is supported.

1. A7 Overview

A7 provides analytical reports on *Usage* and *Charge-data*.

Access your data using A7's easy to use drill-down interface, coupled with intuitive reporting wizards for the production of pre-defined or custom reports.

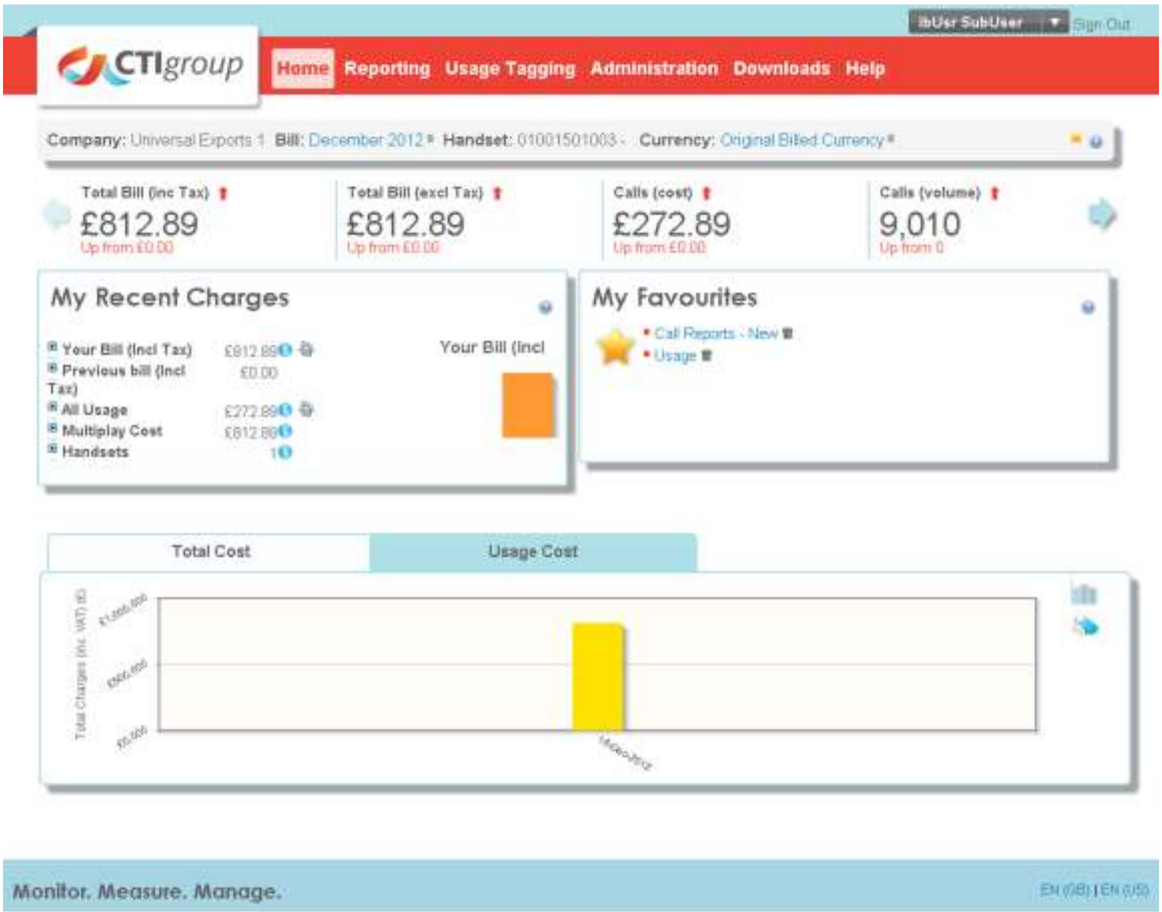


Figure 1: A7's Home page

Functionality is delivered through a series of feature-sets, which are accessed from the Main menu bar at the top of each page – *Table 1 (below)*.

The Home page – *Figure 1 (above)* – gives an at-a-glance summary of your account, and the Quick start section (on page 60) will help you get familiar with how to use A7's features.

Table 1: A7 feature sets

Feature	Functionality
Home	▪ My view; ▪ Headline summary; ▪ At-a-glance view of current and recent costs; ▪ Summary view of charges; ▪ Easy navigation links to favourite features.

Feature	Functionality

Reporting	▪ Main
	  ▪ View a portfolio of predefined reports analysing *Usage* and *Charge-data*;
	  ▪ Create and maintain custom reports (*My reports*) with the report wizard.
	▪ Trends:
	View graphical representations of *Usage* trends for comparative analysis.

Usage tagging	Tag business and personal usage. View and analyse tagged usage with: ▪ Standard reports; ▪ Custom reports via the reporting wizard.
Administration	▪ Create and maintain Currency conversion rates;
Download	▪ Usage data (Data export), ▪ Invoice data (invoices), ▪ Unbilled Calls files {optional module}.
Help	Access standard and custom support options.

2. Learning some key concepts

Before beginning to use *A7* you will need to know about some of its fundamental concepts, most important of these are:

- The *My subscribers* structure;
- *My view* and the *My view context.*

2.1. My subscribers structure

A7 uses a structure named *My subscribers* to present your billing data; it is a simple flat structure comprising each of the *subscribers* assigned to you.

Many users have only one subscriber, which is preselected whenever they access A7.

Those users with multiple subscribers can choose to view them collectively as a group – *All subscribers* is preselected – or individually by using *My view* to select a specific subscriber – as described in *Section 5.1 How do I choose what to view? (on page 14)*.

2.2. My view context

The billing-period you are interested in, the subscriber you want to see and the *currency type* all go towards determining the *My view context* – as described in *Section 8.1 My View (on page 22)*.

To choose the analysis context …

All those elements are easily accessible from the *My view* panel, displayed on most pages.

Think of the *My view context* as a pointer to the data being analysed.

Table 2: Elements that determine the My view context

Context control	Description
Billing-period	You can select from any of the billing-periods for which data has been loaded. Use the *Billing-period context controls* to select a specific period, for example to view a previous month's data;
Structure	*The My subscribers* structure is pre-selected for all *Subscriber users;* it cannot be changed.
Group	Visible only if you have multiple subscribers The *Group context is priest to All subscribers.* [1] *Use the expander control* to select (or search for) a specific subscriber or to (re)select the *All subscribers* group.
Subscriber	If you have only one subscriber this is priest and cannot be changed. If you have multiple subscribers, this item displays when you select a specific one. Use its expander control to change the selection or to reselect *All subscribers*.

[1] Some of the reports within *Reporting* and *Usage Tagging* are visible only if you select a specific subscriber, others are visible only if you are at the *All subscribers* level.

Context control	Description
Currency list	Visible only in multicurrency accounts The *Currency context control* presents all available *Currency conversion lists* for selection. If the selected subscriber contains only one currency, you can choose to view the data in its original currency.

3. What A7 looks like

3.1. General layout and navigation

A7 comprises a series of one or more *panels* presented on *pages* –accessed via the navigation tabs in the *Main menu bar*. In fact your first glimpse of A7 is likely to be the Home page, which comprises five distinct panels.

Navigate and use the features by using:

- One or more of the available menus;
- Buttons or icons;
- My favourite links;
- Hyperlinks embedded within reports or displays.

3.2. The user interface

The user interface map – *Figure 2 (below)* – introduces some of the basic user interface elements; naming them and identifying their purpose in *Table 3 (page 7)*.

Figure 2: User interface element map

A7's pages comprise one or more *panels* 01 and are accessed via the navigation tabs in the *Main menu*. 03

You will quickly learn how to navigate *A7*'s features using:

- One or more of the available menus, for example; 03 13

- Buttons or icons; 14 18 17
- My favourite links; 19
- Hyperlinks embedded within reports or displays. 19

Table 3: User interface element descriptions

UI Element name		UI element description
01	User menu [2]	The *User menu* allows users to manage their *A7* account.
02	User Sign-out hyperlink	The *User Sign-out* hyperlink allows users to exit *A7*.
03	Main menu bar	The *Main menu bar* enables the *User* to quickly access *A7* features.
04	My view	This is an example of an *A7* feature; *My view* in this instance. My view contains the *Current analysis context controls*, which select *Billing period*, *Organisational structure*, *Group* or *Subscriber*, and *Currency conversion list*.
05	User identifier	The *User identifier* is shown only when *A7* is used in *Impersonation mode*. It displays the *User* being impersonated and a hyperlink, which returns to the originating *User* and normal operating mode.
06	My favourites	Shortcuts to favourite reports.
07	Help Icon	The *Help Icon* provides easy access to further information; it opens a *Help* panel, which describes the features available on the page and may also contain links to further resources.
08	Breadcrumb trail	The *Breadcrumb trail* displays the currently selected position (*Group* or *Subscriber*) within the selected *Organisational structure*.
09	Horizontal scroll arrows	Some features such as this *Headline summary* expand beyond the page boundaries; use the pair of scroll arrows to see the previous/next item in the display.
10	Active tab	Active tabs move to the foreground of the page to display their content.
11	Inactive tab	Click to activate Inactive tabs.
12	Hover-over action:	Holding the cursor over components, such as chart bars, will reveal additional information (in this case the value represented by the bar).
13	Chart type menu	Charts and reports normally display a function menu, providing access to additional functionality (for example, Print or email).
14	Report icon	These icons are short cuts to reports; Click to open the report.
15	Download Icon	These icons are short cuts to dialog panels providing additional information and Download functionality; Click to open.
16	Delete Icon	Icons such as this provide basic housekeeping functions.
17	Expandable list	The *Expandable list* icon appears whenever a list item contains hidden detail. Use it – and the corresponding contract list icon – to view or hide the additional detail.
18	*Cost adjustment arrows*	*Cost adjustment arrows Icons* highlight variances between current and previous *Billing period* values. They display next t *Cost* and *Original Cost* figures on reports..
19	Embedded hyperlinks	Hyperlinks are used within the page to provide shortcuts to other application pages (for example, a relevant report).
20	Language selection menu	The *Language selection* menu provides an easy means of changing the UI language.
Others - not shown on the UI Map.		

[2] Also known as the *Welcome* menu.

UI Element name	UI element description
Drop-down list	A *drop-down list* enables quick and accurate selection from a predefined list of options.
Action button 	The UI contains *Action button* to enable the *User* to access additional functionality within a feature; for example, to **Edit** or **Delete** an object.

3.3. The user menu

Figure 3: User menu

You can use the *User menu* to maintain basic user details including:

- Setting password details;
- Changing *Email address*, *First name* or *Last name*
- Changing preferences (for example, stop notification emails), which is done using *My Account*;

In addition the menu also allows you to:

- Return to the *Home* page;
- Display the *Control panel*, which contains *My account* and *My preferences* features.

Part Two:

Quick start

This part of the document provides a quick overview to get you up and running with A7 quickly.

Chapters in Part Two:

This section will help you answer questions such as:	Reference
How do I access A7?	*Section 4.1 on page 10*
How do I sign-in to A7?	*Section 4.2 on page 10*
What if I forget the password?	*Section 4.3 on page 11*
How do I choose what to view?	*Section 5.1 on page 14*
How do I use the headline summary?	*Section 5.2 on page 14*
How do I see Usage Costs?	*Section 5.3 on page 14*
How do I check charges?	*Section 5.4 on page 15*
How do I view predefined reports?	*Section 7.2 on page 18*
How do I create a custom report?	*Section 7.3 on page 19*

4. Accessing A7

4.1. How do I access A7?

You will need *Sign-in credentials*, which typically comprise:

- A *username* and (temporary) *password* pair;
- A pointer to the *A7* service, which can be, for example:
  - A web address (such as, `http://mya7.serviceprovider.co.uk`)
  - A hyperlink from a service-provider's page or menu.

These credentials are emailed to your registered *email address*.

Your registered email address – viewable by using *User menu»My account* – is also used to notify you when a new bill is available for viewing and to respond to *Password reset/recovery* requests.

Set a new password

On first use of any new sign-in credentials it is good practice to change your password.

1. From the *User menu*, **My Account**
2. Within the *User Information* panel, select **Password**
3. **Input** a new password
4. **Input** the same password as confirmation
5. **Save** to continue

   A7 validates and saves your new password.

Your password must:

- Be a minimum of 8 characters,
- Not exceed a maximum of 32 characters,
- Contain at least one numeric character; (symbols are not allowed).

4.2. How do I sign-in to A7?

Each time you visit you will need to sign in using your *username* and *password*.

A maximum of five sign-in attempts are allowed.

Exceeding the maximum number of sign-in attempts locks the user account.

Figure 4: Sign-in panel sample

4.3. What if I forget the password?

Figure 5: Password reset request form

Forgotten passwords can be reset using the *Forgotten password* link on the *Sign-in* page.

Request a password reset

1. From the **Sign-in** page, select **Forgotten password.**

   The Forgot Password panel is displayed.
2. Input your *username* as **Screen name**.
3. Input the displayed **text verification** code as **Text verification**.
4. **Send new password**.
5. A temporary password is emailed to the address registered to the username entered.

4.4. How do I change account details?

It is not possible to change your user name.

Once signed in, the *User menu* is populated with your name (as entered when your user account was registered) and a *My Account* link.

From the *User menu, s*elect **My account**

The My Account panel is displayed.

Use *My account* to change your details (for example, your email address, first name or last name) and to reset your password.

4.5. What if I need help?

Select the Help icon, which is displayed in most panels and many pop-up panels.

A pop-up panel is displayed containing help text relevant to the panel or panel being viewed.

From within the *Main menu*, select **Help –** as described in *Ch. 10 Using Help features (on page 31).*

The Help/Support page is displayed.

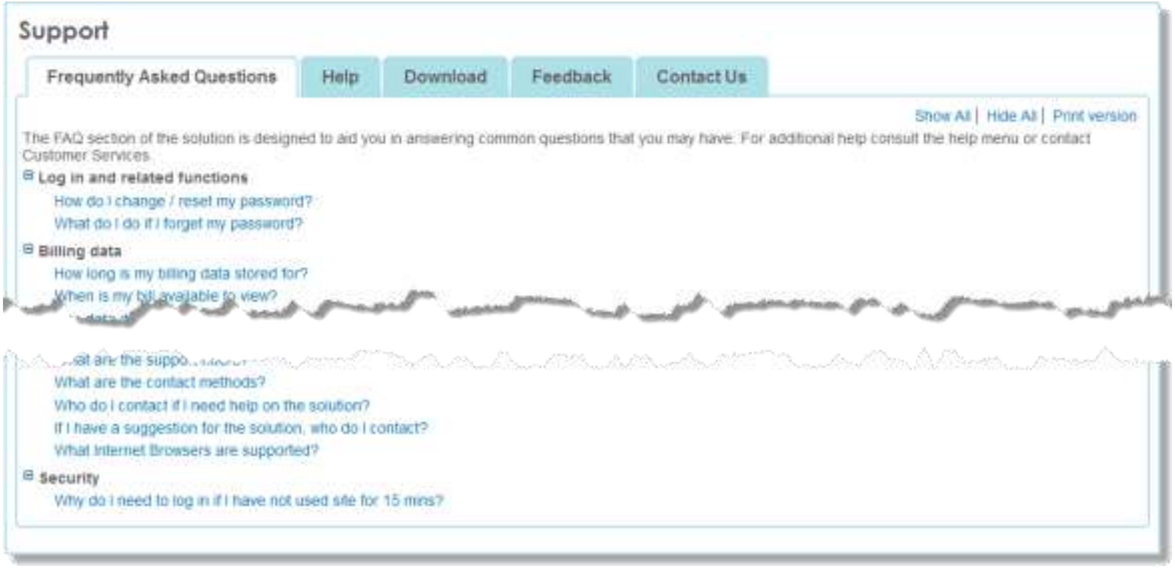


Figure 6: Help panel example

The tabs on the help page include:

- *Frequently Asked Questions*;
- *Downloads;*
- *Feedback;*
- *Contact Us*

5. Analysing at a glance

Home provides a useful hub from which to quickly assess your *subscriber* status; this can be viewed individually or as a group if you are assigned more than one.

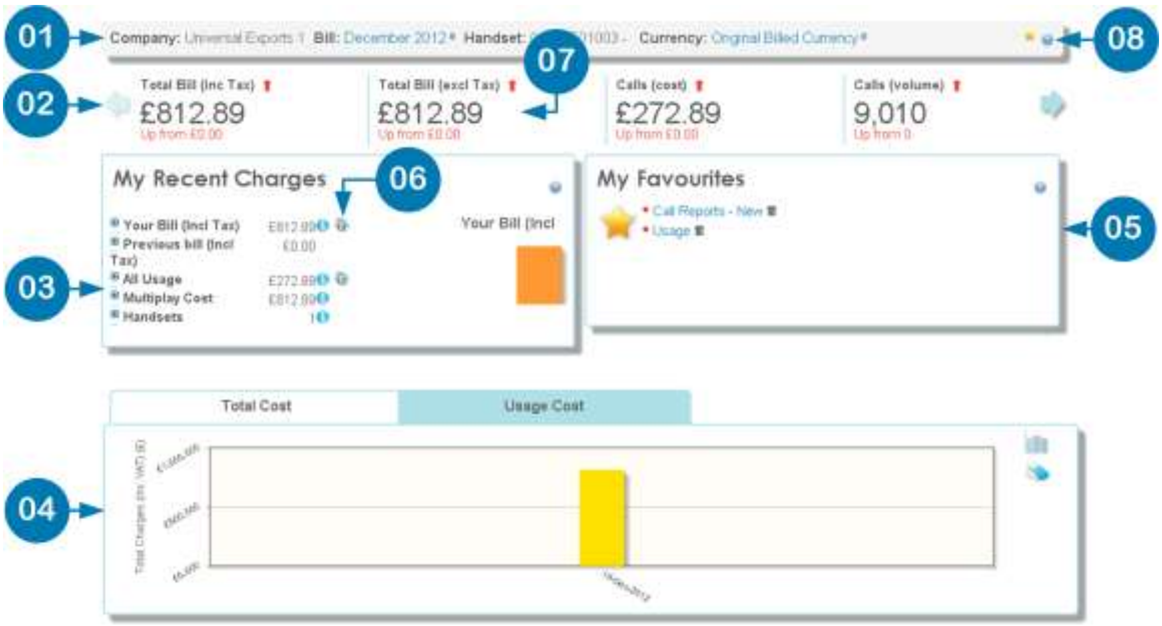


Figure 7: The Home page UI map

Home (Figure 2) is a valuable starting point for analysis. The page comprises five information packed panels giving a compact overview at a glance:

- *My view* 01 determines the data to be analysed (the *My view context*);
- *Headline summary* 02 displays a scrollable panel, which contains a selection of key indicators;
- *My recent charges* 03

  Displays charges and shows how they differ from the previous billing-period and provides quick links to associated reports and invoices 06
- *My favourites* 05

  Provides a quick navigation route to favourite reports;
- *Total Usage and Usage Cost charts* 04

  Display charts summarising costs over previous billing-periods.

How to get here:

From A7's *Main menu*, **Home**

Related information:

What you can do here …

- Select a new *Subscriber* to view (the *My view context*); 01
- Use embedded hyperlinks 07 in the headline summary 02 to drill-down for further detail in a report
- View *usage costs* and drill-down to the data behind the summary figures; 04
- View charges and drill-down to the data behind the summary figures 03
- Quickly access favourite reports 05 06;
- Access help 08

5.1. How do I choose what to view?

The selected *My view* context determines the data displayed in most A7 pages, panels and reports. If you have access to only one subscriber it is preselected for you.

Users with access to multiple subscribers can change their *My view context*; opting to view them as a group *All subscribers*, or individually.

Figure 8: My view showing expanded structure browser control

- From within *My view*, select the *expander* icon beside the Group, *All subscribers* .
  A7 displays the *Structure browser control*, which you can use to navigate to and select the required *subscriber* or the *All subscribers* group.

5.2. How do I use the headline summary?

The *Headline summary* panel displays key indicators for the selected *My view* context.

Figure 9: Headline summary showing scroll arrows

- From the Headline summary bar:
  - Scroll left or right using the scroll arrow icons
  - Hover over a value and select an embedded hyperlink
    A7 launches the *Usage* or *Charge categorisation* report depending upon the item.

5.3. How do I see Usage Costs?

The *Total Cost* and *Usage Cost* panel (*Figure 10*) on the Home page show the *total cost* or *usage cost* in each billing month loaded. It's a quick way to see periodic changes throughout the year.

Figure 10: Total cost and Total usage UI map

- Within the *Total cost and usage cost* panel, select the **Usage cost** tab 02

  A7 displays the *Usage cost chart* showing the total usage costs per loaded billing month. From here you can:

  - Hover over a bar 05 to see the total it represents. 03
  - Use the *Chart menu*. 04 to change the chart format, or to print the chart.

5.4. How do I check charges?

Figure 11: My recent charges UI map

The *My recent charges* panel on the *Home* page displays a summary of the recent charges 01 for your *My view context*.

The *Cost Adjustment Icons* 05 indicate how values have changed since the since the previous billing-period.

The panel also includes

- A mini chart 07 with hover-over action to display the amount. 04
- Embedded links to:
  - The *Charge categorisation report*; 02
  - Invoices; 03
  - *Usage report*. 06
- Expandable categories 08 help you focus on the information relevant to you.

6. Comparing trends

Trends are pointers from the past – use them to shape the future

The *Trends* page comprises side-by-side chart panels, which are ideal for quick comparisons of usage over multiple billing-periods.

For more on comparing trends …

From the *Main menu bar*, select **Reporting»Trends**

A7 display the Trends panel.

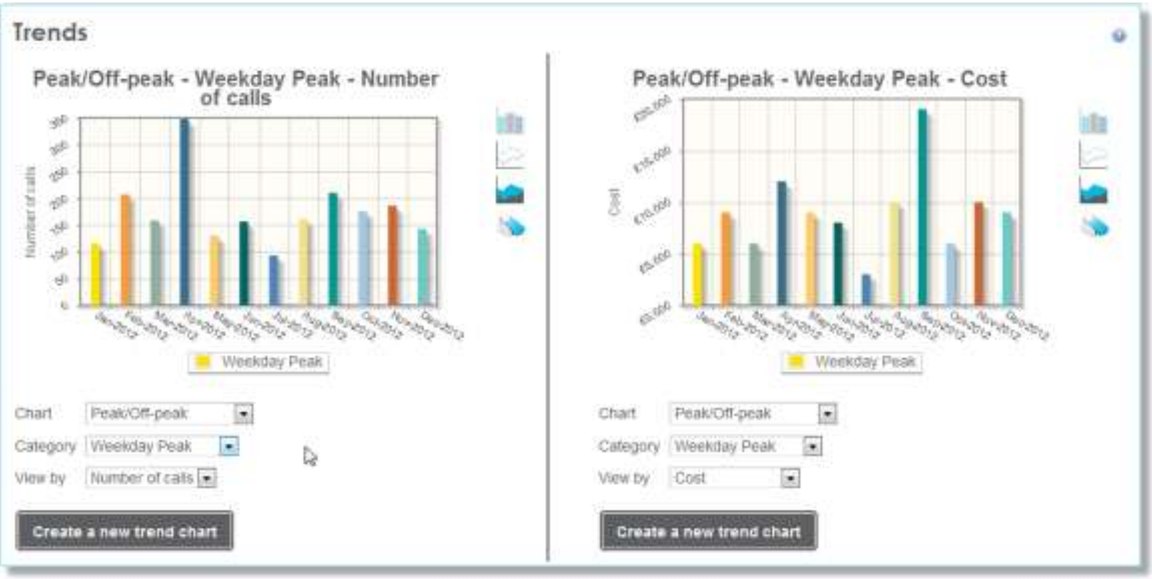


Figure 12: Trend charts sample

How to get here:

From *A7's Main menu*, **Trends**

For example

The *Trend charts* view *Figure 12 (above)* shows *Weekday peak usage* by number of calls and by cost.

It is easy to see that the two charts are broadly in sync but that, for example, there is an apparent high cost per call in September, which may be worth investigating further.

Control the charts using the drop-down lists *Chart*, *Category* and *View by*.

Related information:

What you can do here …

- Change current analysis context by selecting a different Billing-period, *Subscriber* or *Currency* to view;
- Print a chart view;
- Create a new chart;
- Access panel help

7. Finding your way with reports

A quick look at A7's reports.

A7 offers both predefined and custom reports, enabling you to easily turn data into information.

From the *Main menu bar*, **Reporting»Main**

A7 displays the *Report overview* panel, which provides a convenient way to access reports by grouping them in five categories:

- Costs reports
- When reports
- Where reports
- How reports
- My reports

How to get here:

From *A7's Main menu*, **Reports** 05
[Alternatively] From the report menu, **Overview**

Related information:

What you can do here …

- Select *All subscribers* or a *Subscriber* to analyse;
- Select a report to view;
- Drill-down from summary to detail levels
- Print, Save or Email reports.

Figure 13: Report overview sample

The *My reports* feature includes a reporting wizard which you can use to prepare custom reports.

7.1. What does a report look like?

A7's report interface can be considered to comprise four elements:

- Presentation;
- Selection;
- Navigation;
- Functionality.

For more on the report structure …

With each element having a number of components, as summarised in *Table 4 (on page 18)* and described in *Ch. 11 (on page 34)*

Figure 14: Sample report – a user interface map

Table 4: Report components summary

Report element	Report components with this element
Selection	▪ My view 01 ▪ Report category menu 02 ▪ *Report filters*; 04 For more on filters, see: *Report (on page 34).*
Presentation	▪ Column set; 05 ▪ *Report view* filter (not shown, displayed only when the selected report level has a custom report view); ▪ Report options icon; 03 ▪ *Data sorting* icons; 10 ▪ A Summary line Total/Average; 09 ▪ *Cost adjustment arrows* in some instances, showing the upward or downward trend since the previous billing period; 11 ▪ *Column scroll bars*. {Not shown, these scroll bars are used if the selected columns for the report do not all fit in a single screen width).
Navigation	▪ Page browse controls 08 ▪ Drill-down icons. 06 07
Functionality	▪ Edit dialled number description; ▪ *Report actions menu* (not shown, the Actions button reveals a drop down menu of options) ▪ *My favourites* icon

7.2. How do I view predefined reports?

View a report

1. From the *Main menu*, select **Reporting»Main**
2. A7 displays the *Report overview* page.
3. Use *My view* 01 (*Figure 14 above*) to choose the report context (*All subscribers*, or a specific *Subscriber*).

4. Within *Report overview*, select a `<report name>` from the *Costs, When, Where* or *How* panel.

   [Alternatively] From *the Report category menu* 02, *select the required report.*

   A7 displays your report as a *column-set* 05 showing data based on the selected *My view* context.

Figure 15: An example of a predefined report panel.

5. [Optionally] Refine the report:
   a. Use *Report filters* 04 to refine the data displayed.
   b. Use *Page browse controls* 08
   c. Use drill-down options 06 07 to explore the report detail. [3]
6. [Optionally] Use the *Report option icon* 03 to set the output media type (chart, print, save or email).

7.3. How do I create a custom report?

Use the *Reporting* tab to launch A7's report wizard.

Figure 16: My Report wizard panel sample.

[3] Drill-down options are not available on all reports.

Create a custom report

1. From the *My reports* panel on *Report overview*, select either of the report types: **Call reports – New** or **Charge reports – New**

   A7 launches the appropriate *Report wizard*.

2. Follow the report wizard's prompts to build a custom report – as described in *Section 12.5 Creating and using custom reports (on page 51).*

Run a custom report

3. From the *My reports* panel on *Report overview*, **Select** a saved report.

   The settings for the selected report are displayed for viewing or changing.

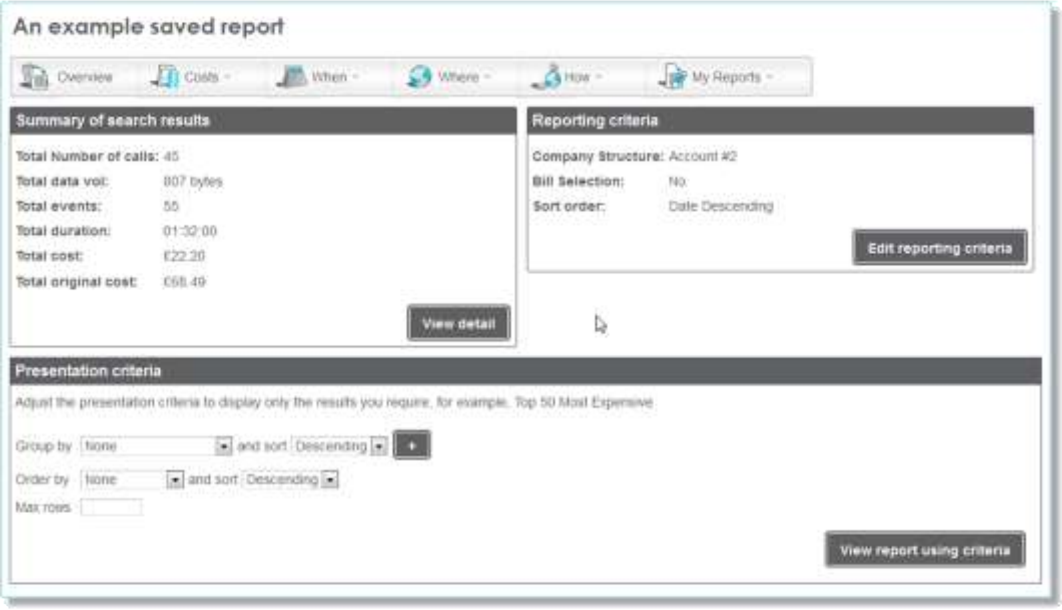


Figure 17: My saved report sample

4. **View detail** to see the report content.

   [alternatively]**Edit reporting criteria** to change the report.

Part Three:

Using A7 features

This part of the document introduces additional detail on using three of A7's basic but fundamental feature sets: the Home; Downloads; and Support pages.

Chapters in Part Three:

For more advanced features ...

Part Four – Using Reporting features on page 33

Part Five – Using Usage tagging features on page 79

Part Six – Using Administration features on page 87

8. Using Home features

The *Home* page is the first port of call for many *A7* users, since it gives a concise overview of the usage.

Home comprises five panels:

- *My view,*
- *Headline summary,*
- *Total usage and Usage Cost charts,*
- *My recent charges,*
- *My favourites.*

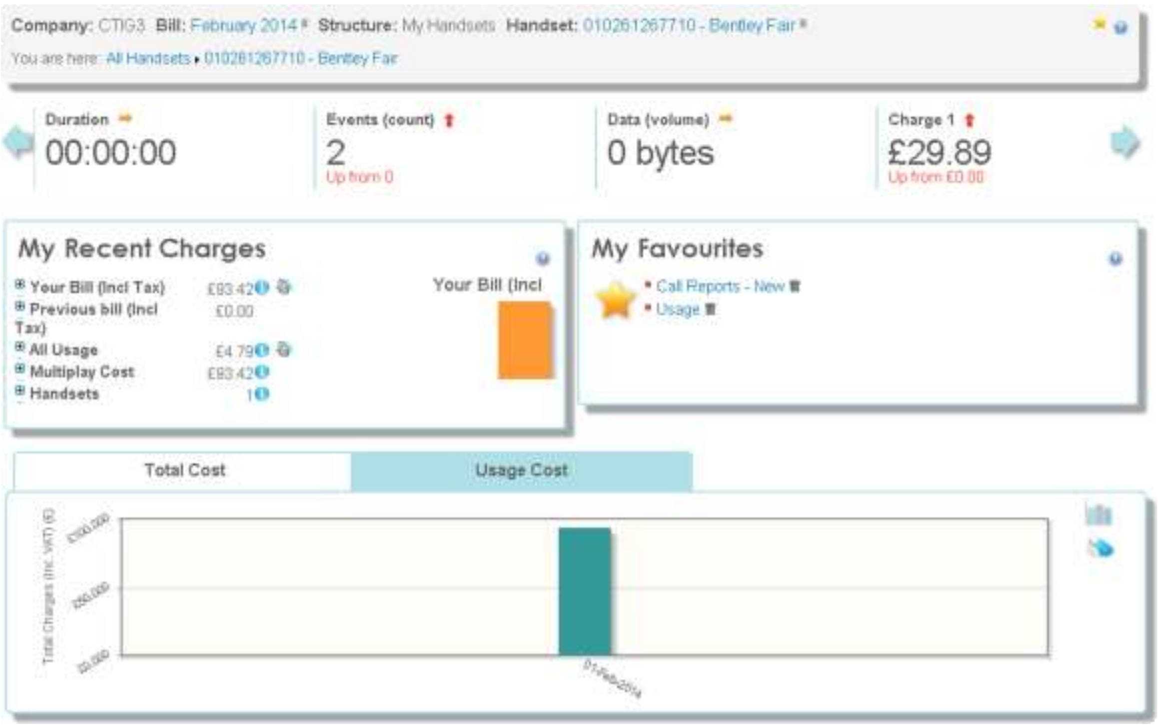


Figure 18: Home panel

8.1. My View

At the top of each page [4] is the *My View* panel, which both displays and controls the *My view context*. Users with access to a single subscriber will see a slightly different view to those with access to multiple subscribers – as shown in *Figure 19* and *Figure 20 (on page 23).*

Figure 19: My view panel – single subscriber

[4] Except the Help page.

Figure 20: My view panel – multiple subscribers

Table 5: My view components

Components	Description
My view context	The *My view* panel primarily displays and controls the component elements of the *My view* context, which include: ▪ The billing-period; ▪ The selected *subscriber* (or the group *All subscribers*); ▪ The *currency*.
Expander icon	Each *My view* control element has an expander icon, which expands the My View panel to show the appropriate *Context control panel*, within which you can select new values.
My favourites icon	This icon expands the *My view* panel to display a read-only list of your *My favourites* links.
You are here	Displayed only for users assigned multiple subscribers The breadcrumb trail displays the current selected position; that is the group, *All subscribers* group, or a selected subscriber within that group.

8.1.1. Bill context control

A7 uses *Billing-periods* in conjunction with *My subscribers* to allow you to view usage and/or charges for a selected billing-period.

The *Billing-period context control* panel displays each of the billing-periods loaded into *A7* (a maximum of 13).

From the *Billing-period context control* panel, select a billing-period from the hyperlinked options displayed.

Figure 21: Sample Billing-period Context control Panel

The *My view context* dynamically refreshes to display the usage and/or charges for the selected billing-period and structure.

8.1.2. Subscriber context control

Available only for subscriber-users assigned multiple subscribers

If you have access to more than one *subscriber* you can select the one you wish to view from the *group* called *All subscribers.*

Figure 22: Sample Group/Subscriber Context Control Panel

Navigate to a subscriber

Drill-down on a subscriber. Use the following icons to navigate the structure:

- Expand
- Collapse
- Search

Selecting a *subscriber* changes *My view* as shown below:

Figure 23: My view

Search for a subscriber

1. In the Structure browser control, select the Search icon

   A7 displays the *Search* filter text box.
2. In the Search filter text box enter a (partial) Subscriber number or Subscriber label.

   A7 returns a list of matching records once three or more characters are entered; refine the search by typing-in further characters.

   Numeric searches match from the beginning of the number.
   Alphanumeric searches match text anywhere in the name/label.
3. Select an entry from the displayed list.

   A7 refreshes the page, displaying information for your selected entry, including the *You are here* breadcrumb trail.

8.1.3. Currency context control

Available only for multi-currency users

Select a different currency

1. Within *My view,* select the Currency expander icon

   A7 expands My view to display a list of available currencies.

Figure 24: My view's Currency context control

2. Select the hyperlink for the required currency

   A7 applies the currency conversion list and redisplays the home page using that currency

8.1.4. My Favourites link

This icon expands the *My view* panel to display a read-only list of *Favourites* links.

Figure 25: Sample expanded My View showing Favourites

Select a link to go directly to the selected functionality – see also *section. 8.5 My favourites (on page 27).*

8.1.5. You are here

Available only for users with multiple subscribers and only on Home and *Trends* pages.

Figure 26: Breadcrumb trail sample

The *You are here* link changes dynamically to reflect the currently selected group (that is, *All subscribers*) or subscriber.

The elements of the breadcrumb trail are themselves hyperlinks, which when selected will update the context to that *group* or *subscriber.*

8.2. Headline summary

The *Headline summary* panel can be scrolled horizontally to display summary usage values, which also contain click-through links to relevant reports (*Table 6 below*).

Figure 27: Heading summary panel

Table 6: Reports linked-to from Headline summary

Report	Summary items linking to the report
Cost allocation report (*topic. 14.1.2 on page 61*)	Calls (Cost)

Report	Summary items linking to the report		
Usage report (*topic. 14.1.6 on page 65*)	Duration	Events (count)	Data (volume)

8.3. Total cost and Usage cost charts

Subscriber users see only the latest billing-period displayed in these charts

The *Total Cost* and *Usage Cost* panel provides a convenient way to view periodic changes throughout the year. It comprises two tabbed charts displaying:

- Total Cost – total of all charges (including usage charges) in each billing month loaded
- Usage Cost – total of usage in each billing month loaded

Figure 28: Sample Total cost and Total usage panel

Both charts display the currently selected billing period.

8.4. My recent charges

The *My recent charges* panel displays summaries of:

- *Recent charge totals* for the current and previous billing-periods.

  These can be expanded to display a breakdown of the figures excluding VAT and the VAT amount

- Usage;
- Costs by Multiplay type;
- The number of *Subscribers* in the currently selected structure and billing-period, expandable to display a breakdown by *Service Type*.

Figure 29: Sample My recent charges panel

The *Cost Adjustment arrow* icons ( ) indicate how each value has changed since the previous billing-period. Hover over an icon to see the previous value.

Related information

For the first billing period the icon is displayed, indicating that no comparison is possible.

Depending on permissions *My recent charges* also displays hyperlinks to the: *Charge categorisation (or Cost allocation)* and *Usage* reports.

8.5. My favourites

The *My favourites* panel displays a list of current *Favourites*.

Whilst you cannot add *Favourites* here, you can delete them using the *Delete* icon.

You may add a maximum of ten reports (including *My reports*) or custom trend charts to *My favourites*.

For more on adding favourites …

Add a report

Within the required report, select **Add as favourite**

A7 changes the icon to a *Remove favourite* icon

If you try to create an 11th report, you will be presented with a dialog stating that the new report (or Trend) will replace the least used Favourite. Confirm this action to continue.

Remove a report

1. Within the required report, select **Remove favourite** icon

   [Alternatively]Within My Favourites on the Home page, select **Delete** icon .

   A7 requests confirmation

2. **Ok** to continue

   A7 deletes the favourite

9. Using Download features

A7 provides a range of downloads including data export, invoices, unbilled calls files and accounts. All are accessible from the *Downloads* tab on the *Main menu.*

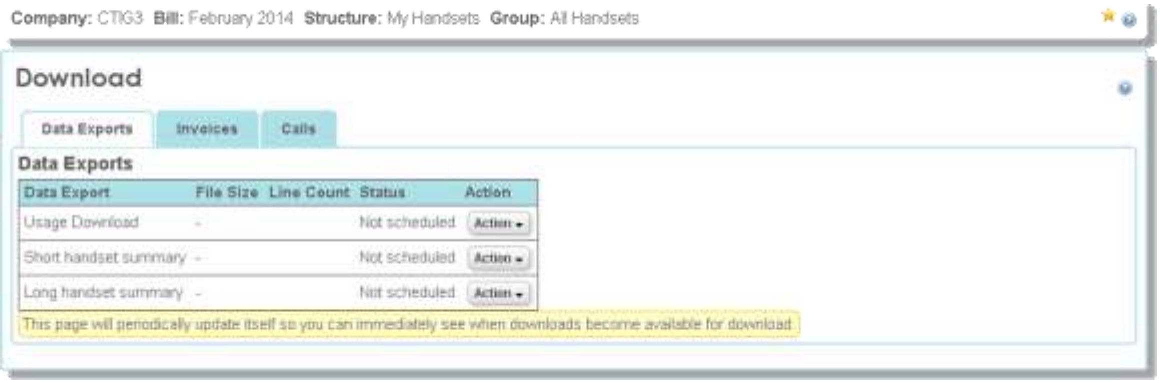


Figure 30: Download feature, Data exports tab sample

9.1. Data Exports

Three data exports are available to all users:

Export type	Description	Format
Usage Download	The Usage Download is available to all users and includes all usage records. Invoice/charge records are not included.	CSV
Short Subscriber Summary	The Short Subscriber Summary data export is available to all users and downloads a file of up to 20 fields associated with an individual subscriber.	CSV
Long Subscriber Summary	The Long Subscriber Summary data export is available to all users and downloads a file of up to 50 fields associated with an individual subscriber.	CSV

Schedule a download

Downloads must be scheduled in order for A7 to generate the file and make it available.

Spreadsheet compatibility

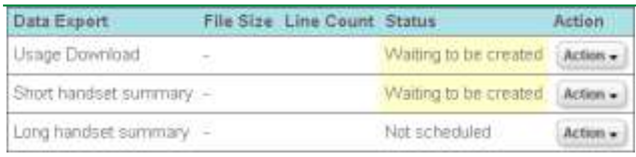
An A is displayed as the currency symbol in the cost column if the version of ***Excel*** used is ***Excel 2003 SP3*** or earlier.

If the download is opened in a text editor (such as ***Notepad***) the associated currency symbol is displayed instead of the A.

1. For the required *Export type*, **Action Menu»Schedule icon**

   A7 initiates a background job to create the file.

   You can view other panels while the data extract is being created



   Files ready for download display their size and number of lines they contain.

2. For the required *Export type*, **Action Menu»Download icon**

   A7 downloads the file to your default download location.

[Alternatively] To recreate the file, **Action Menu»Reschedule icon**

9.2. Invoices tab

Visible to Subscriber-users only if a service-provider issues individual invoices for a subscriber.

Use this tab to download a PDF copy of a Bill (if applicable).

Group Desc	Invoice no.	Date	Total inc tax	PDF
C129064T	0146019226	01-Dec-2012	£5,587.90	
084M104203T571	011327M1500-832-14202T00	03-Dec-2012	£18,467.55	
580318045 - 00001	000065837398	18-Dec-2012	£2,674.29	
670003799 - 00001	000065848978	18-Dec-2012	£1,969.71	
670065265 - 00001	000065849650	18-Dec-2012	£10,890.54	

Figure 31: Download Invoices tab sample

Search for the invoice to download using *Search by invoice number* search functionality, or download all PDF invoices.

To download a Bill, select **Action Menu»Download PDF icon**

Users with a large number of invoices may see a warning message displayed whilst *A7* prepares the list of downloadable invoices.

9.3. Usage (calls)

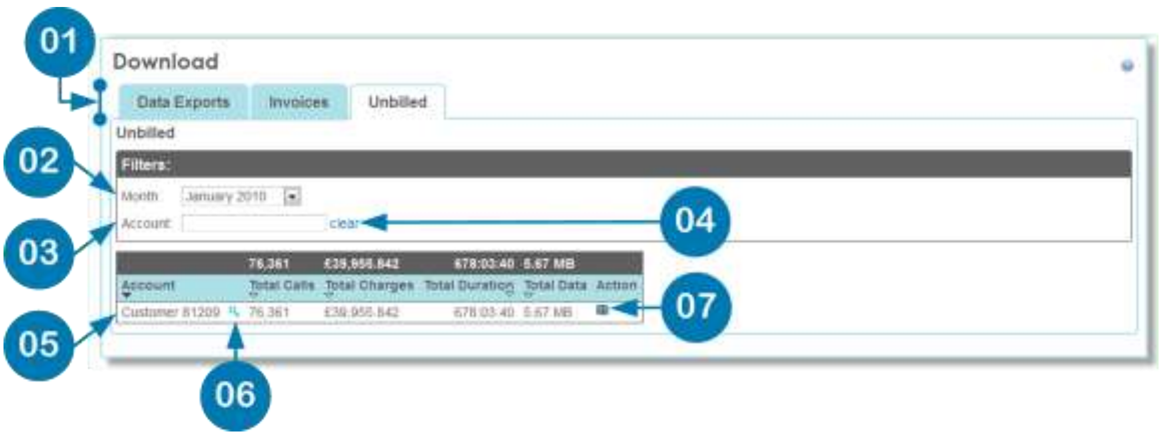


Figure 32: Download Unbilled UI map

Table 7: Download Unbilled UI components

Key	Item	Function
01	*Download* tab	Select **Unbilled** tab. Unbilled calls data is for download only; it is **not** available for analysis in *A7*.
02	*Month* drop-down list	Filter to select from last three months; (default is the latest month). This panel has its own month selector, which is independent of the *My view context's Billing-period*.
03	*Account* filter	Filter by account number or name.
04	*Clear filter* hyperlink	Clear any applied filter.
05	Returned list of Calls files	The list contains: ▪ A drill-down icon 06, which displays a list of individual *Unbilled Calls files* for the selected month/account combination; ▪ A download file icon 07 which downloads all *Unbilled Calls files* for the account. Unbilled data can take 24-48 hours to be loaded into *A7*.
06	*View (Account) Details* icon	Displays a new list containing one row per day [5] (of the selected month). Each row shows the calls, charges and duration summaries, for the individual days listed, plus the name of the file for that day. A single-day file may contain unbilled calls from more than one day. Select the associated icon to download the specific file for the day as a ZIP file containing a single CSV.
07	*Download file* icon	Download zipped *Calls files* containing each individual CSV file for the selected month.

[5] Not every day will appear in the list, because the availability of calls depends on their output from the source billing system.

10. Using Help features

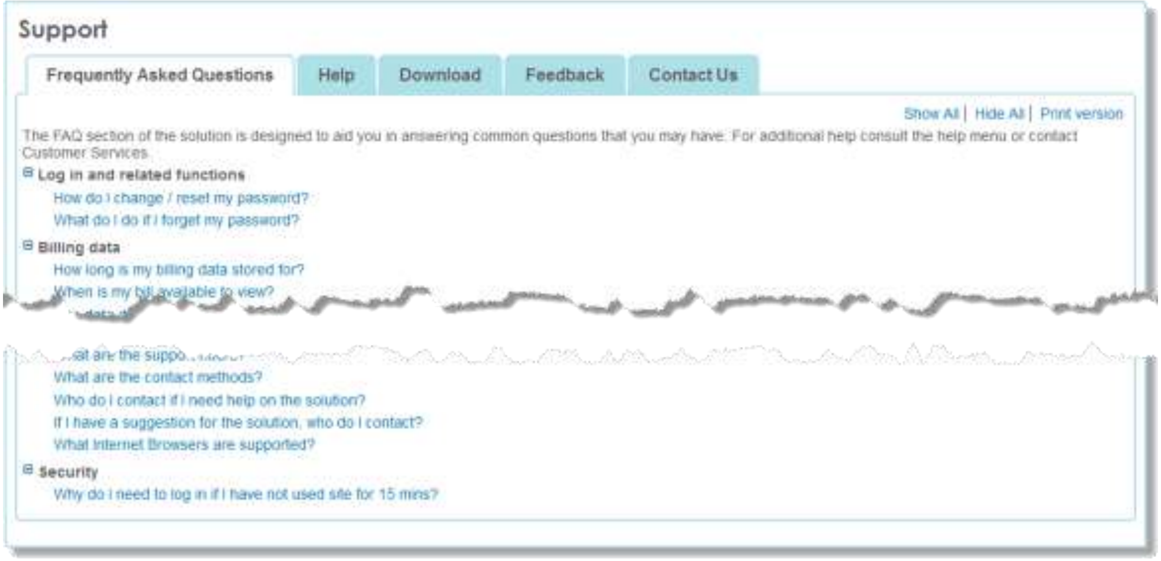


Figure 33: Support page example

10.1. Frequently Asked Questions

The FAQ tab provides a standard list of questions relating to A7. The questions include an ‘expand and contract’ option for each question and answer.

10.2. Download

The *Download* tab displays a list of links to downloadable resources, for example user guides or videos.

10.3. Help

The Help tab enables search and display of help topics.

10.4. Feedback

The *Feedback* tab allows you to record feedback (for example, suggestions or questions about the site). Questions can be associated to a specific query by using the drop-down box on the right of the page.

10.5. Contact Us

The *Contact us* tab displays the official contact details, that is, postal addresses, phone numbers and email addresses.

Part Four:

Using Reporting features

This section explains the elements of the A7 reporting interface and the structure of its reports.

Chapters in Part Four:

11. Understanding report components

All *A7* reports ultimately drill-down to *Usage-* or *Charge-detail records* [6] depending on whether they are usage- or charge-based reports.

The reports typically comprise:

- A common user interface;
- One or more *Report filter*(s);
- One or more Report summary level(s);
- A Report results *summary* page;
- One or more *Report detail level* page(s).

For more on report structure …

The report structure is discussed in more detail in *Section. 11.2 About the report structure (on page 40)*; in particular the contents of the *Report detail level column-sets* are shown in *Table 4 (on page 43)*

All reports share the common elements described in this chapter; except where a report's definition – see *Ch. 14 (on page 60)* – explicitly identifies a variance.

11.1. User interface elements

11.1.1. Selection

My view

The *My view* component sets the context for the report – as described in *Section 2.2 (on page 4)*.

Report category menu

The *Report category menu* provides easy access to the *Report overview* and the *Report categories*, enabling you to quickly switch between reports.

Figure 34: The Report category menu bar

Report filters

Table 8: Available report filters

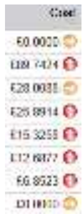
Data set filter name	Data set filter description
Multiplay Service 	This drop-down list filters the report by the selected *Multiplay Service*. All services available in the current selected month are listed plus an "All Services" option which is selected by default when the report is opened. Options: {**All services**, Content, Unknown, TV, VoIP, Broadband, Mobile, Fixed}
Billing period view 	This drop-down list is used by *Usage Tagging* to filter the report by the selected *Billing-period view*. Options: {**Unsubmitted usage records**, Submitted usage records}

[6] With the exception of the *Invoice Detail* report.

Data set filter name	Data set filter description
Tag status Tag Status: All Usage	This drop-down list is used by *Usage tagging* reports to filter by the *Tag status.* Options: {**All usage**, Business, Personal}
Show data for Showing data for: All Subscribers	This shows the breadcrumb trail and the level at which you are currently viewing the report. Each item in the trail can be clicked to view the report at that point in the structure.
Show/Hide Zero Entries Zero entries: show	When drilling down via the *subscriber* you have the option to decide if zero entries are to be shown or hidden, as the default zero entries are hidden. For example where the total cost against a *subscriber* is zero, the *subscriber* would be hidden and only displayed when *show zero entries* is selected.

11.1.2. Presentation

Cost Adjustment Arrows



The Cost adjustment icons are displayed alongside cost figures on the reports.

These arrows show whether the cost has decreased, increased or stayed the same since the last bill.

Column scrollbars

If the number of columns selected for display in a report exceeds the available display width then A7 displays a horizontal column scrollbar below each level of the report (that is, not the browser page).

The scrollbar scrolls only columns appearing after the drill-down icons (that is, selectable columns; mandatory columns remain fixed).

Report options menu

The report option menu is expanded using the Report options icon:

Name	Icon	Description
Chart		Click on this icon will open up a pop-up display of the report chart. The option to print the report and change the display to pie, line or bar chart is available. Please note not all reports display a graph. This option is displayed only when a numeric column (for example duration, costs, or averages) is selected (by sorting).
Configuration		A7enables the user to select and optionally save a custom report view comprising the: ▪ Columns to appear in the report (some columns are mandatory), ▪ Report sequence ▪ Number of rows per page. If the width of the selected columns exceeds the screen width then a horizontal scrollbar is displayed to enable viewing of off-screen column contents. By default all columns are displayed See: *Report views (on page 36)*.

Name	Icon	Description
Download		Save the report you are viewing to a selectable location in one of a number of formats, including: Each format includes a number of selectable options. Reports containing a large number of records display the message `Please wait while we prepare your report".` Do not leave this page before the report is generated. Doing so will end the process and necessitate a rerun If you try to export more than 5,000 records a message will request you to refine your search, or to set the query up as a Scheduled report.
Email		This allows you to e-mail the report you are viewing to the address you registered with *A7* in any of the exportable formats. Reports containing a large number of records display the message `Please wait while we prepare your report".` Do not leave this page before the report is generated. Doing so will end the process and necessitate a rerun If you try to export more than 5,000 records a message will request you to refine your search, or to set the query up as a scheduled report.
Print Preview		If you select the print icon, the page will display in flat format, with a further option to print the information displayed on the page or return to the report.
Schedule Report		Creates the report as a *Scheduled report*. These reports are run using a background service and are not subject to the export limits described below. These reports can be: ▪ Generated / run immediately or once every bill load ▪ Downloaded through the Scheduled Reports Management screen and / or emailed.

Report total lines

Most tables display a *Header summary* row, which summarises the data in the table as column totals.

Totals	1,384	0 bytes	56:48:56	£178.5084

Figure 35: Example total line

Report views

You may define *Report views,* which display only the columns you are interested in; although some reports contain columns that are mandatory – see: *Month* in *Figure 36 (on page 37)*.

> **Report view scope …**
>
> Report views apply only to the selected report and report level. So columns removed at the *All subscribers* level are not automatically removed at subscriber or Report detail level (nor in any other report).

Using this feature you may define the:

- Name of the saved *Report view*;
- Relative positions of the selected columns; using drag-and-drop to arrange them as required;
- Sort column and sequence direction;
- Number of rows displayed per page.

Figure 36: Report view configuration panel

The *Default report view* comprises all the service-provider defined columns for that report, but does not include *Export only* columns.

The selected, Report view is:

- Remembered and displayed whenever the report is used;
- Saved with Scheduled report details and used as the scheduled report view even if the *Report view* itself is changed or deleted;
- Use when a report is printed; A7 neither truncates, trims nor rearranges columns to fit the page width. Use the browser's *Shrink to fit* option;
- Ignored if the *Report view* is invalid (that is, it contains columns not available in the selected organisational structure) – the *Default report view* is displayed in its place. This caters for columns such as *Subscriber version,* which are available in the *Billing-defined structure*, but not in the *Default structure*.

Report columns to the left of (and including) the drill-down icons are mandatory columns.; they can neither be moved nor removed.

Sorting

Most reports allow for sorting on selected columns.

The solid arrow icons ▲▼ indicate the currently selected sort column and the direction of the sort (▲ ascending or ▼ descending).

- Clicking a selected sort icon reverses the sort sequence;
- Clicking on a different sort icon (empty arrow) sorts the report by that field.

11.1.3. Navigation

Drill-down icons

The two drill-down icons, Select group and Select detail enable you to move through the various report summary levels.

Ultimately though, most reports drill-down to display the *Report detail level*, which is preceded by the *Report results summary* page and – in some reports – by one or more intermediary *Report summary levels*.

Drilling-down into a report auto-applies an appropriate filter; remove the filter to go back to the previous level

Name	Icon	Description
Select group		Visible only for users with multiple subscribers. The *Select group* icon drills down to show subscribers in the group *All subscribers*.
Select detail		The *Select detail* icon drills down into the data to show the actual usage or charges.

From the *Report results summary* page, **View detail** to see the Report detail level (usage/Charge-data) – as described in *Section 11.2 About the report structure (on page 40)*.

The *View detail* button is unavailable if the report would return too many results. Refine the search to reduce the volume of results returned.

Page browsing

Page browse controls display at the top and bottom of every page whenever the report contains more rows than the number of lines per page {default=15 lines}.

Figure 37: Page browse controls

Page browse controls comprise, from left to right, as shown in *Figure 37 (above)*:

Table 9: Page browse control icons

Name	Icon	Description
Position text message	Showing 1-5 of 11 rows	The *Report position* message showing the number of rows in the report and the row number range currently being displayed
Previous page icon	‹	A (Go to the) *Previous page* icon
Page number icon	2	Two or more *Page number* icons: ▪ The page number for the first page and the final page are always displayed, ▪ Up to three consecutive intermediate page numbers are also displayed – for example, `2, 3` and `4` in *Figure 37 (above).*
Next page icon	›	A (Go to the) *Next page* icon;
Page number text box	Page ... Go	A *Page number* search filter text box and *Go* hyperlink Input a number and **[Go]** to go to that page.

Report overview observations

In addition to displaying Report titles as navigational hyperlinks the *Report overview* also displays *Observations* for selected reports. The example in *Figure 38* shows an observation for the *Transmission type report.*

Selecting the *Observation*, which is also a hyperlink, will launch the relevant report.

Figure 38: Report overview panel showing Observations

11.1.4. Functionality

Edit dialled number description

Sorting always uses the original *Dialled number description* not the amended one.

The *Edit dialled number description* icons are available in a number of reports, selecting either icon launches the *Edit dialled number* pop-up panel.

Figure 39: Inline editor for dialled number description

The features provided on the pop-up panel enable users to:

- Edit the *Dialled number description*;
- Delete this entry

  A7 reverts to using the description from the data and the default icon;
- Edit the *Dialled number icon*;
- Set the *Tag all future usage as personal* indicator.

  The next time usage data is loaded for this *Dialled number* it is automatically tagged *Personal*.

The Administrator's influence

If an administrator user [7] has set a description and icon all other users see them (including all other admin users)

How to revert to the default entry …

Selecting **Delete this entry**, reverts to the icon and description from the *Organisational contact book entry*;

My favourites icons

Use the *My favourites* icons to mark a report as a favourite, or to remove a previously marked report.

Name	Icon	Description
Add to My favourites Icon		You may define a maximum of ten reports (and/or custom *Trend charts*). Select the icon to add this report or chart to *My favourites*.
Remove from My favourites Icon		Select the icon to remove this report or chart from *My favourites*.

Report actions menu

The *Report actions menu* presents a context-sensitive list of actions to be applied to the selected row – as shown in *Table 10 (on page 40)*.

[7] That is, a user assigned to the top level of the Organisational structure.

Table 10: Actions within the Report action menu

Name	Icon	Description
Delete		Select to delete the selected object.
Download data export		Select to download the selected data export object.
Edit		Select to edit the selected object.
Run		Select to run the *Scheduled report*.
Schedule report/export		Select to schedule or reschedule the selected report or data export.
Stop		Select to stop running a *Scheduled report*.
View		Select to view the selected object.

11.2. About the report structure

Reports display information in column-sets (tables), with some providing an optional chart view.

All reports ultimately drill-down to usage or charge detail levels depending on the whether it is a usage- or charge-based report.

The A7 report structure typically comprises:

- A common user interface;
- One or more *Report filters* – *on page 34*;
- One or more *Report summary level*(s) – *topic 11.2.1 (below)*;
- A *Report results summary* page – *topic 11.2.2 (on page 41)*;
- One or more *Report detail level* page(s) – *topic 11.2.3 (on page 43)*.

Reports display all columns left aligned except for costs and numbers columns, which are right aligned.

11.2.1. Report summary level

The *Report summary level* displays a summary of the report results aggregated at a data level, for example by *Charge-category* as shown in *Figure 40 (below)*.

Figure 40: Report feature showing Report summary level details

A *Report summary level* page comprises:

- A *My favourites* icon (that is, either an *Add to* or a *Delete from* icon)
- The *Help* icon;
- The *Report category menu;*
- The *Report options menu* icon*;*
- An expandable *Filters* panel containing one or more filters, depending upon the report The *Showing data for* filter is always present;
- The *Report totals line*;
- The *Report summary row*(*s*) with *Select detail* and/or *Select group* drill-down icons.
  - *Select detail* drills down the data hierarchy, for example to a charge sub-category, and ultimately to the *Report results summary* – *topic 11.2.2 (below)*;
  - *Select group* drills down from the *All subscribers* group level to display a list of all subscribers assigned to the user.

  If you have only one subscriber, or have selected a single subscriber in *My view* the Select group option is not displayed.

  Ultimately this drill-down displays the *Report results summary.*

11.2.2. Report results summary

The report results summary comprises three panels, which display the:

- Summary of search results;
- Reporting criteria;
- Presentation criteria.

Summary of search results

This shows a summary of the results. Different fields are shown for usage and charge based reports.

Figure 41: Report results summary–Summary of search results (usage)

Figure 42: Report results summary–Summary of search results (charge)

- View the report, using the **View detail** button

> This option is not available if the search returns too many results; you must first refine the search to return fewer results.

- Use the **Back to report** button to return to the summarised level of the report.

Reporting Criteria

The *Reporting criteria* panel displays a list of filters currently applied to the selected report.

> These may be filters you manually selected or filters that were auto-applied as you drilled through the summarised levels of the report.

- Select **Edit reporting criteria** to launch the *My reports wizard* – as described in *section 12.5 Creating and using custom reports (on page 51)*.

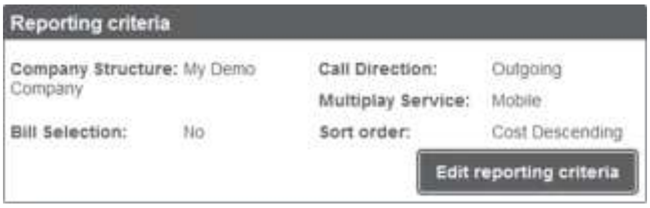


Figure 43: Report results summary–Reporting criteria (usage data)

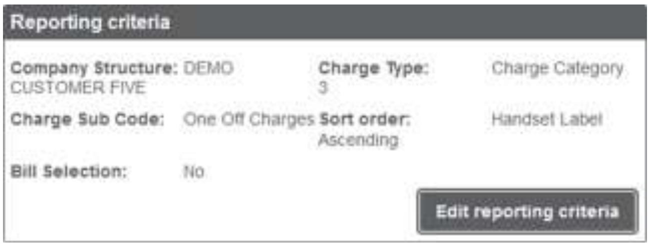


Figure 44: Report results summary–Reporting criteria (Charge-data)

- Select **Edit reporting criteria** to launch the *Usage* or *Charge Wizard*.

Presentation Criteria

The *Presentation Criteria* panel allows further refining of the report by grouping and ordering the results.

> **Focus in on what is important ...**
>
> Too many results returned? Try setting the presentation criteria to show only the top 50 records.
>
> - Group by = `Area code`
> - Order by = `Usage Descending`
> - Max rows = `50`

Some reports also provide a chart view.

Figure 45: Report results summary–Presentation criteria panel

11.2.3. Report detail level

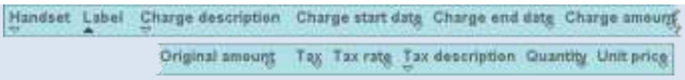
At the *Report detail level* each report presents its data using one of the column-sets defined in *Table 11 (below),* depending upon whether it is a *usage-* or *charge-based* report.

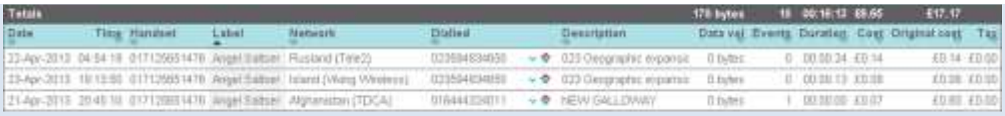
Numeric columns (costs and numbers) are right aligned; all other columns are left aligned.

The report detail level displays usage or charge transaction details, depending on the report basis

Figure 46: Report detail level page

Table 11: Report detail level column-sets

Report basis	Report column set		Reports using this basis and column set
Charge detail	▪ Subscriber ▪ Label ▪ Charge description ▪ Charge start date ▪ Charge end date ▪ Charge amount	▪ Original amount ▪ Tax ▪ Tax rate ▪ Tax description ▪ Quantity ▪ Unit price	▪ Charge categorisation ▪ Cost allocation
			

Report basis	Report column set	Reports using this basis and column set
		
Usage detail	▪ Date ▪ Time ▪ Subscriber ▪ Version ▪ Label ▪ Network ▪ Dialled ▪ Description ▪ Data vol ▪ Events ▪ Duration ▪ Cost ▪ Original cost ▪ Tax	▪ Cost range ▪ Billing Period ▪ Bundle Usage ▪ Daily Distribution ▪ Destinations ▪ Duration Range ▪ Internal ▪ Multiplay Service ▪ Peak/Off-Peak ▪ Roamed ▪ Tax Exempt ▪ Transmission Type ▪ Usage ▪ Usage By Direction ▪ VPN
		
		

11.3. Report download formats and constraints

You may download Reports in various formats:

CSV [8], PDF, XML, Word, Excel [8], PowerPoint.

The following constraints apply to reports downloads from *A7*:

Table 12: Constraints on report downloads.

Element	Constraints
Column-wrapping	▪ On breaking words if present; ▪ Mid text if there are no breaking words.
Displayed columns	All available columns are included in displayed reports and exports.
Formatting	▪ Exported columns are formatted as `Text`. ✔ Change the column format to `Number` in Excel to view data in raw number format. ▪ Images are not supported with Excel exports.
Limits	▪ There is an imposed limit of 5,000 records per report. Reports larger than this may be run as *Scheduled reports*. ▪ Downloads including full tagging usage have no limit enforced.
Orientation	Landscape by default
Prerequisites	Excel 2003 service pack 3 and above is supported within *A7*.
Warnings	Reports containing a large number of records generate the following message: `Please wait while we prepare your report` ✖ If you leave the page before the report is generated the task ends and will need to be rerun.

[8] The text delimiter can be defined.

11.4. About scheduled reports

Most reports can be set-up as *Scheduled reports*, which you can configure to run once or to run whenever new data is loaded.

11.4.1. Scheduled reports features

Scheduled reports features include:

Report can then be run, downloaded and emailed to individual users or groups of users;

- The *Scheduled reports management* panel allows you to view Scheduled reports; including the history of previous reports.
- Reports can be scheduled in all standard *A7* formats;
- Reports can be stopped, started and restarted.

11.4.2. Scheduled Reports constraints

Scheduled Reports constraints include:

- You cannot amend the actual content of a scheduled report, but you can amend:
  - The export format,
  - When it is run
  - Who it is sent to,
- You cannot overwrite an existing schedule report with a new scheduled report, instead you must create a new one and delete the old one.
- Some reports are not suitable for Scheduled Reporting, if a report is not suitable you will not have the option to **Schedule report**.
- If a custom report which has been selected as a scheduled report is changed and updated, the schedule report will use the updated report.

12. Main reports

12.1. Using the Report Overview

The *Report overview* panel displays the titles of all available reports grouped by type; that is: *Costs*, *When*, *Where*, *How* and *My Reports*.

View the report overview

From the *Main menu bar*, select **Reports**

The *Report overview* is displayed.

Figure 47: Sample report overview panel

The name of the last report viewed in a group is highlighted (in bold font).

12.2. Using predefined reports

View a report

Related information

11 Understanding report components *34*

1. Within the Report overview page, select the required report name

   [Alternatively] From the *Report category menu*, select required **report name**.

   The *selected report* is displayed (most display a summary level initially).

Figure 48: Sample report

2. [Optionally] Apply any *Report filters*, as required, to focus the results returned by the report. For more on filters, see *topic on page 34*.
3. Use the Select detail and *Select group* icons (where available) to drill-down to the *Report detail level* – see *topic 11.2.3. (on page 43)*.
4. From the *Report category menu,* select **Overview** to return to the *Report overview* page.

   [Alternatively] Select another report for viewing using the *Report category menu*.
5. Use the drill-down icons (where available) to view Report summary levels down to Report detail level.
6. [Optionally] Use the *Report option* icon to:
   - View the report as a chart; [9]
   - Print the report;
   - Save the report;
   - Email the report.
7. To return to the *Report overview*; from the *Report category menu,* select **Overview**.

   [Alternatively] From the *Report category menu,* select *Report category*»**Report name**.

12.3. Configuring report views

Each report displays a *Default report view*, which you can customise by creating one or more alternative *Report views*

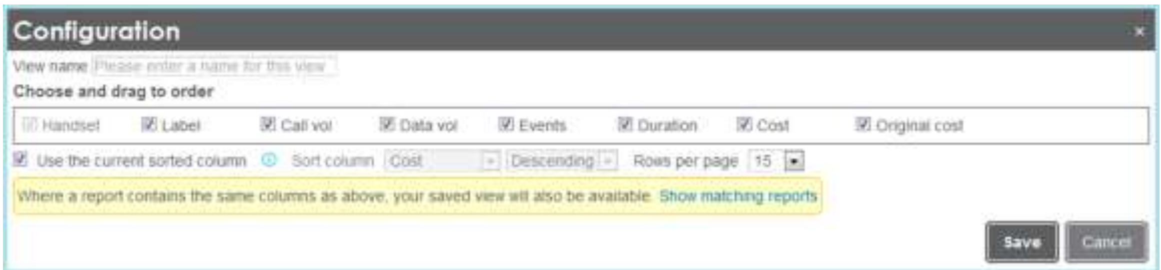
For more on report views ...

Initially reports display the *Default report view*, but once an alternative *Report view* is defined and used, that view is remembered and displayed whenever the report is used.

Configure a report view

1. From the *Report category menu*, select a <report name>
2. From the Report options menu, select **Configure** icon

   A7 displays the Configuration panel.



3. Input a name as *View name*
4. [Optionally] Use the check boxes to select each column to be displayed.

9 Available only if a numeric column is selected.

5. [Optionally] Drag-and-drop the columns into the required order.
6. [Optionally] Specify a different sequence for the report:
    i. Deselect the Use the current sorted column checkbox
    A7 activates the Sort column drop-down lists
    ii. Select a sort column from the drop-down list, Sort column.

    Sort columns do not need to be displayed.

    iii. Select a sort sequence from the drop-down list.
7. [Optionally] Select the number of lines per page from the drop-down list, *Rows per page* Configurable:{default=**15**}.
8. **Save** to continue

    A7 validates and saves the view.

    A7 displays the report using the saved view details.

    [Alternatively] **Cancel** to exit the panel without saving the view details.

Report view selection

1. From the *Report category menu*, select a `<report name>`

    If more than one *Report view* exists, A7 displays a *Report view filter*

Figure 49: Report filters panel showing Report view filter

2. From the *Report view* drop-down list, select the required `<view name>`

    A7 displays the report level in the selected view format.

12.4. Managing scheduled reports

Most reports can be set-up as scheduled reports, which can be run, downloaded and emailed to individual users or groups of users.

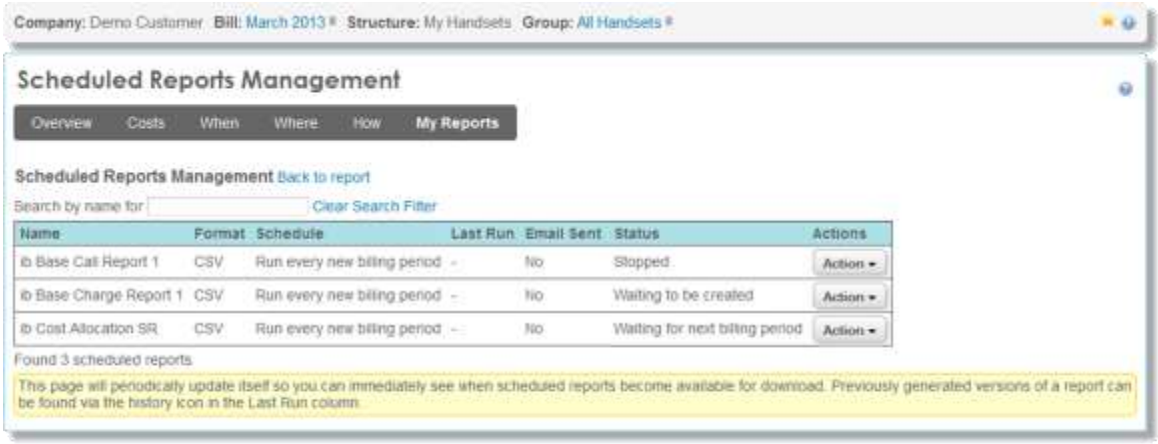


Figure 50: Scheduled report management feature

If you want to email your reports you must first enter the contact details – as described in *Managing Email contacts (on page 50)*

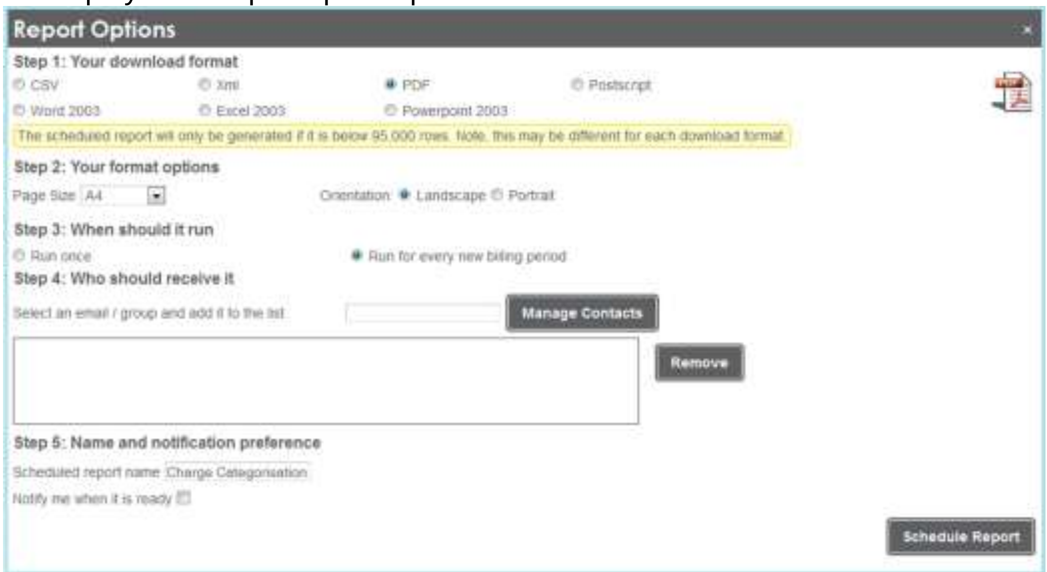
12.4.1. Scheduling reports

Create a Scheduled Report

1. From the *Report options menu* within the report you wish to schedule, select **Schedule** icon

   A7 displays the Report options panel.

2. Choose your export format

   These are the same formats used for emailing and saving reports.

3. Choose your format options

   As above these are the same format options used for emailing and saving reports.

4. Specify when it should it run

   Schedule reports can be run as a one off, or each time new billing data is loaded, by default the report will run each time new data is loaded.

5. Select the report recipients

   Input a contact address in the ***Who should receive it?*** text box.

   Type-ahead functionality displays a list of matching items for you to select from.

   [Alternatively] Select **Manage Contacts** to define new contacts.

   You must create the individual email addresses and groups –as described in *Managing Email contacts (below)*.

6. [Optionally] Input ***Scheduled report name***

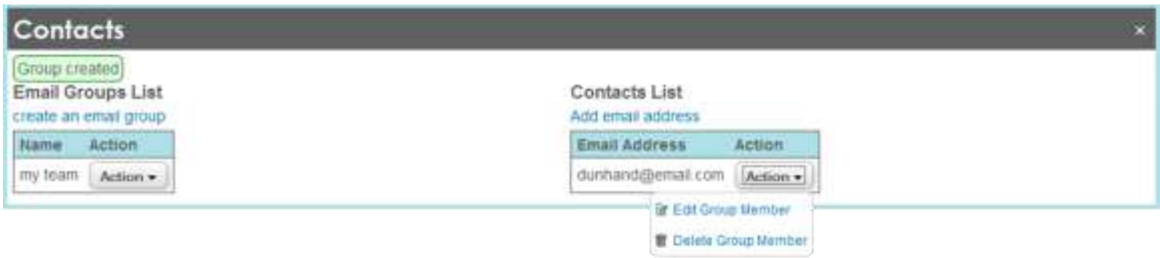
   By default the Scheduled report name is pre-populated but you may change this if required.

7. [Optionally] Select ***Notify me when its ready*** option

   This option sends you email notification when the report is ready is available; Off by default;

12.4.2. Managing Email contacts

You add and manage your contact email addresses using the *Manage Contacts* button in the *Schedule report* panel.



Email addresses cannot be entered without agreeing to a disclaimer (for each email added) that you take responsibility for any emailed scheduled reports which are sent out by the system.

Add an Email address

1. Within the Schedule report panel, select **Manage Contacts**

   A7 displays the *Contacts* panel.

2. **Add email address**

   A7 displays the *Contacts* panel.

3. Input a valid email address (twice to avoid mistyping errors)
4. Input a name and description for your email contact.
5. Select the **disclaimer** checkbox
6. **Save** to continue.

Create an Email group

1. Within the *Schedule report* panel, select **Manage Contacts**

   A7 displays the *Contacts* panel.

2. Select **Create an email group**

3. Add the required email addresses using the type ahead functionality to search for them (obviously they must already have been entered with the Add email address functionality described above).
4. Input a group name and description
5. Select the disclaimer box
6. Save to continue

Deleting an email address removes it from all *Scheduled Reports*.

Changes to email addresses are reflected in all *Scheduled Reports* the user is assigned to.

12.5. Creating and using custom reports

A7's custom report feature – *My Reports* – allows you to create and run custom reports on your billing data.

You may base the reports on either:

- *Usage* data using **Call Reports – New**
- *Charge-data* using **Charge Reports – New**.

12.5.1. Call reports wizard

The *Call Report Wizard* presents a number of tabs which will allow you to define the selection criteria for your usage-based report.

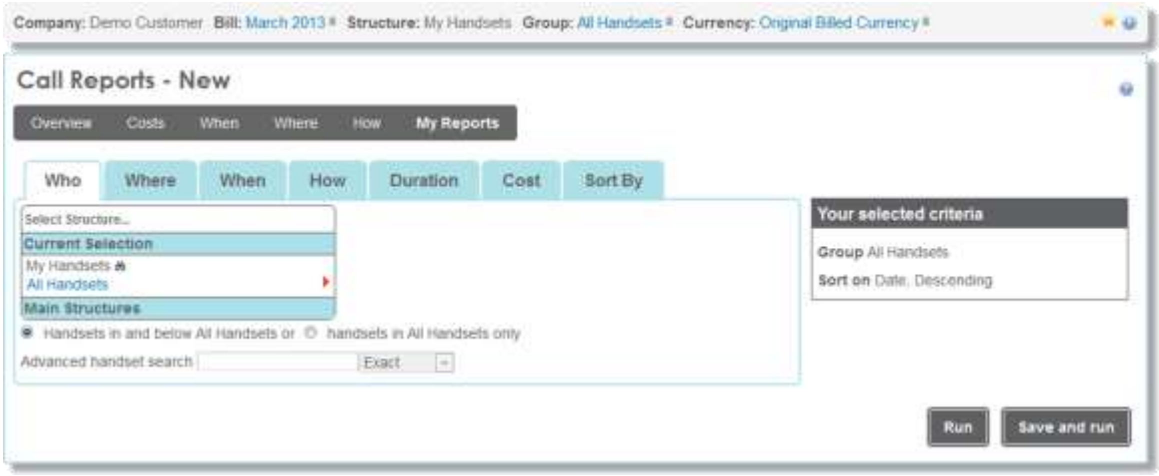


Figure 51: Call reports wizard sample

Each tab presents one or more filters. Just select and set the ones you need, then **Run** or **Save and run** your report (to be re-used later as required).

As you build up your report the *Your selected criteria* box on the right hand side of the screen display the selected criteria.

The available tabs are:

- **Who**

  Select *All subscribers* or a specific subscriber to report on;

- **Where**

  Select filters based on the usage destination, for example a Dialled Number or Dialled Description; these filters work in a similar way to the *Advanced subscriber search;*

Advanced subscriber search …

The advanced search is only available to users assigned multiple subscribers who select *All subscribers* in the *Who* tab.

To use the search:

- Input a text string to be matched against a subscriber.
- Indicate whether the string must be present or absent in the subscriber.
- Specify the match type as *Starts with*; *Contains* or *Exact*.

- **When**

  Limit the report search to a defined time-frame;

- **How**

  Focus the report on a specific type of usage (for example, *data* or *VoIP* usage)

- **Duration**

  Select by usage duration (longer or shorter than);

- **Cost**

  Select by usage cost (in or greater than a defined value or range);

- **Sort By**

  Select filters to further narrow your usage report and define the report sequence.

Create a usage-based report

1. From the Reports menu, select **My Reports»Call reports – New**

   The Call Report Wizard tabs are displayed.

2. Select the subscriber(s) to report on using the *Who* tab.

   The selections in the Who tab govern the *My view context* for custom reports, *not* the My view context controls.

3. Set the remaining report criteria using the appropriate tab (or tabs)
4. Select **Save and run**

   A7 saves the report and adds it to the list of available reports displayed on the *Report overview* and within the *Report menu's My reports* option.

   A7 runs the report and displays the *Report detail summary*.

   [Alternatively] Select **Run**

   A7 runs the report and displays the *Report detail summary*

12.5.2. Charge reports wizard

The *Charge reports wizard* presents you with a number of tabs which will allow you to specify selection criteria for your charge-based report.

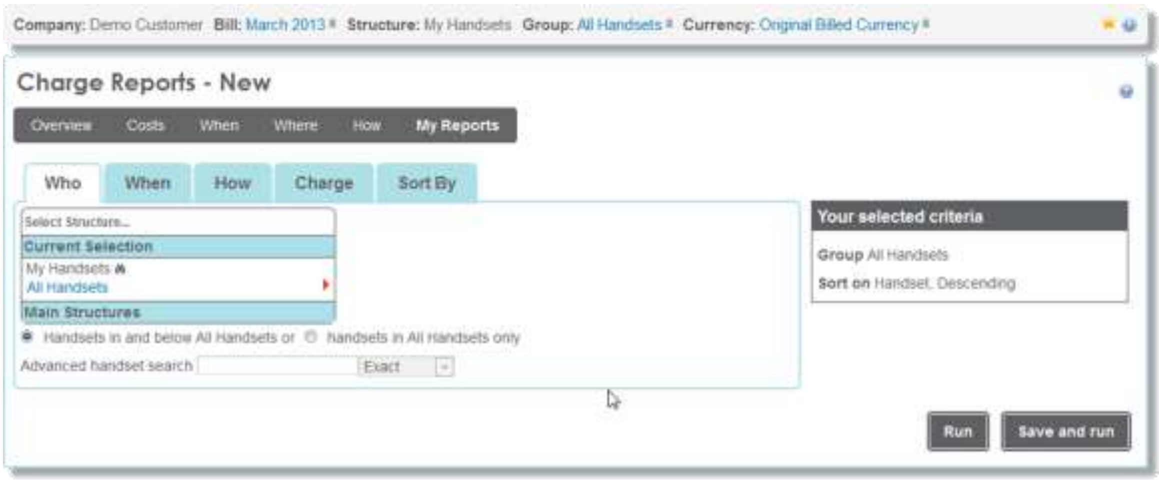


Figure 52: Charge reports wizard sample

Each tab presents one or more filters. Just select and set the ones you need, then **Run** or **Save and run** your report (to be re-used later as required).

As you build up your report the *Your selected criteria* box on the right hand side of the screen display the selected criteria.

The available tabs include:

- **Who**

  Select *All subscribers* or a specific subscriber to report on;
- **When**

  Limit the report search to bills within a defined time-frame;
- **How**

  Focus the report on a specific type of usage (for example, *data* or *VoIP* usage)
- **Charge**

  Select by charge value (in, or greater than, a defined value or range);

- **Sort By**
  Define the report sequence.

Create a charge-based report

1. From the Reports menu, select **My Reports»Charge reports – New**
   The Charge Report Wizard tabs are displayed.
2. Proceed as described in *Create a usage-based report (on page 52)* step-2 onwards.

View an existing report

From the *My reports* panel on *Report overview*, select `<Saved report name>`

[Alternatively] From the *Report category menu*, *My Reports*»`<Saved report name>`

A7 saves the report `<Saved report name>` and runs it, displaying the results.

13. Trend charts

The *Trends* page displays charts based on usage data covering more than one billing-period. You may select from a range of pre-defined charts or create your own custom charts.

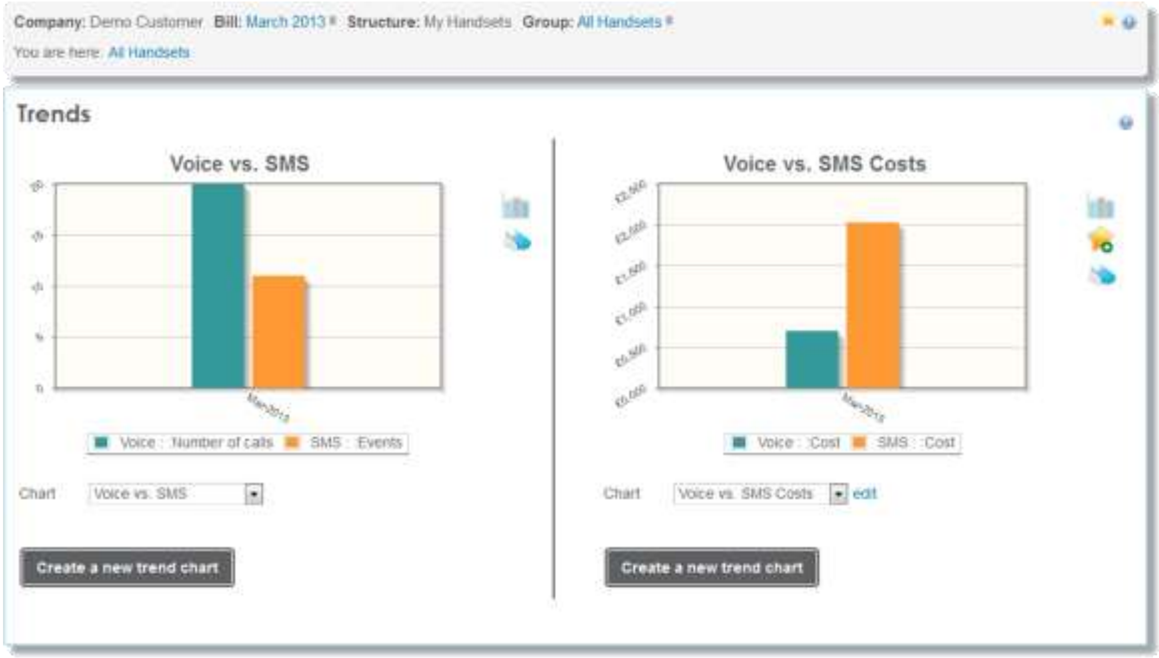


Figure 53: Sample Trends Chart page

13.1. Pre-defined trend charts

A7 provides eight pre-defined charts:

- *Destinations,*
- *Peak/Off-peak,*
- *Roamed,*
- *VPN,*
- *Bundle usage,*
- *Transmission type,*
- *Service summary*
- *Voice vs. SMS*.

Figure 54: Trend chart components

Table 13: Trend chart functional components

Key	Component	Description	
01	*Chart title* bar	Comprises the *Chart* name, *Category* and *View by* selections.	
02	*Chart type menu*	Defines the type of chart to be displayed (that is, a Bar, Line or Area chart). *Line* and *Area* chart options are not presented when only one bill exists for the selected *My view context.*	
03	Y-Axis	The Y-axis represents the measure, for example *Call volume*, or *Data volume*.	
04	*Print* icon	Prints the displayed chart.	
05	*Trend chart* parameters	*Chart* drop-down list	Displays a list of predefined *Trend charts* followed by any *Custom trend charts*.
		Category filter	Selects a sub-category of the data (for example, *Destination category* for the *Destination trend chart*. [10]
		View-by filter	Selects the y-axis (for example, *Call* or *Data volume*).
06	*Edit* hyperlink	Launches the *Edit my trend chart* panel[11] to edit or clone existing charts.	
07	*Create a new Trend chart* button	Launches the *Edit my trend chart* panel to enable creation of a new chart.	

Predefined charts display *Category* and *View by* drop-down list, which enable you to select options such as:

- The category you want to filter by;
- The view you want to see.

The *Chart* selection dictates the content of the *Category* drop-down list, which in turn dictates the content of the *View by* drop-down list – as described in *Table 14 (below)*.

Select the chart type using the *Chart type menu* icons to the right of the chart.

For example

To view the cost of international calls over the months loaded:

- Select *Destinations* from the *Chart* drop-down box
- Select *International* from the *Category* drop-down box
- Select *Total Cost* from the *View By* drop-down box.

Don't forget the context …

Remember *My view*. Any selected chart will reflect the *My view context*, so:

- Select the required *Billing-period*,
- Select either *All subscribers* or a specific *Subscriber;*
- Select the required *currency conversion list*.

Table 14: Trend chart properties

Chart	Category		View by	
Bundle usage	▪ Entirely in bundle ▪ Partially in bundle ▪ Qualified but expired	▪ Not in bundle ▪ All categories	▪ Number of calls ▪ Duration ▪ Events	▪ Data volume ▪ Original cost ▪ Cost
Destinations	▪ International ▪ International Mobile ▪ National ▪ Non-geo ▪ Local	▪ Mobile ▪ Other ▪ Premium rate services ▪ All Categories	▪ Number of calls ▪ Duration ▪ Events	▪ Data volume ▪ Original cost ▪ Cost
Peak/Off-peak	▪ Not applicable ▪ Weekday peak ▪ Weekday off peak	▪ Weekend peak ▪ All categories	▪ Number of calls ▪ Duration ▪ Events	▪ Data volume ▪ Original cost ▪ Cost

10 The contents of the *Category* filter drop-down list is determined by the selected *Chart*.
11 Available for Custom Trends charts only.

Chart	Category		View by	
Roamed	▪ Not roamed ▪ Roamed ▪ Roamed received	▪ Roamed mobile ▪ Roamed SMS ▪ All categories	▪ Number of calls ▪ Duration ▪ Events	▪ Data volume ▪ Original cost ▪ Cost
Service summary	▪ Fixed	▪ All categories	▪ Number of calls ▪ Duration ▪ Events	▪ Data volume ▪ Original cost ▪ Cost
Transmission type	▪ Voice ▪ Data ▪ SMS ▪ GPRS	▪ Fax ▪ Email ▪ MMS ▪ All categories	▪ Number of calls ▪ Duration ▪ Events	▪ Data volume ▪ Original cost ▪ Cost
Voice vs. SMS	–	–	▪ Number of calls	▪ Events
VPN	▪ Unknown ▪ Off net ▪ On net	▪ Non-VPN ▪ All categories	▪ Number of calls ▪ Duration ▪ Events	▪ Data volume ▪ Original cost ▪ Cost

13.2. Custom Trend Charts

13.2.1. Creating trend charts

If none of the predefined charts meets your needs, can create your own using the *My trend chart* wizard.

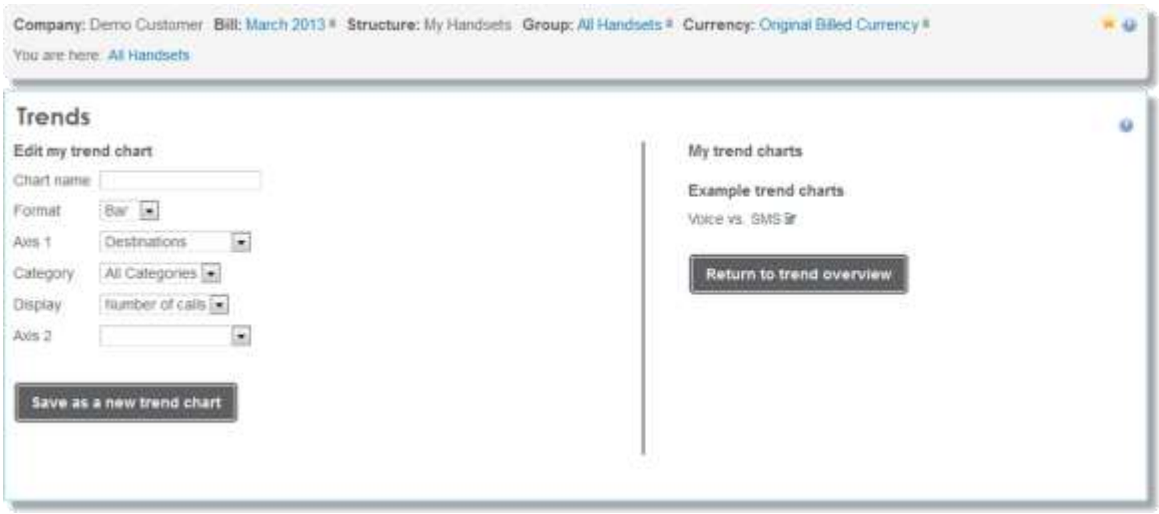


Figure 55: Sample Trend Chart Wizard panel

Create a new chart

1. From the *Trends overview* page, **Create new chart**
   A7 displays the *Edit my trend chart* panel – *Figure 53 (above)*.
2. Within *My* view, use the context controls to check and/or set the required context.
3. Complete the *My chart* form:

Parameter	Type	Usage
Chart name	Text box	Provides a descriptive identifying name for the chart.
Format	Drop-down	Determines how the data is presented. Select from drop-down list.{options: **Line**, Bar or Area}.
Axis 1	Drop-down	Use Axis 1 and Axis 2 to compare one category against another. Select a chart type for Axis 1
Category	Drop-down	Select a category for the Axis 1 chart type
Display	Drop-down	Select a view for the Axis 1 chart type
Axis 2	Drop-down	Use Axis 1 and Axis 2 to compare one category against another.

4. **Save as a new trend chart** to save the custom chart.

   A7 displays a confirmation message and adds the saved chart to the Charts drop-down list; in the My trend charts sub-section of the *Trends overview* page.

5. **Return to trend overview** to return to the *Trends overview* page.

   A7 displays the *Trend overview* page showing the newly created chart.

At this point you can adjust the *My view context* to analyse the specific data you want.

13.2.2. Maintaining trend charts

Delete a chart

1. From the *My trends chart* panel of the *Edit my trend chart* page – *Figure 53 (above)*, find the chart name in the list on the right hand side.
2. **Delete** icon
3. **Return to trend overview** to return to the main *Trends* page.

Edit a chart

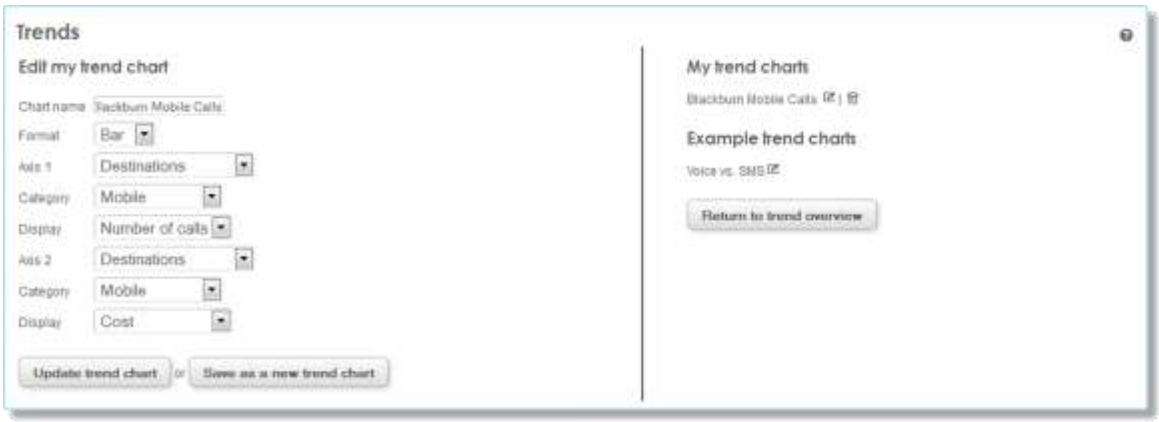


Figure 56: Figure 23 Trend chart, edit saved chart example

1. Within the *Trends overview* page, select the chart from the **Charts** drop-down list.
2. **Edit** to continue

   A7 displays the *Edit my trend chart* panel – *Figure 53 (above)*.

3. Make the required changes.
4. **Update existing chart** to save the changes

   Alternatively: **Save as new chart**

   This action retains the old *Trend chart*, whilst also creating a new one using the values supplied – you just need to supply the name.
5. **Return to trend overview** to return to the main Trends page.

13.2.3. Adding Trend charts to favourites

The *My favourites* icons are visible only when viewing a custom *Trend chart*.

Use the *Add to Favourites / Remove from Favourites* icon(s) –displayed on the *Trend overview* – to update the *My favourites* panel.

Add to Favourites

Remove from Favourites

14. Report-definitions

14.1. Cost report-definitions

14.1.1. Charge categorisation report definition

The *Charge categorisation* report summarises Charge-data by Charge-category.

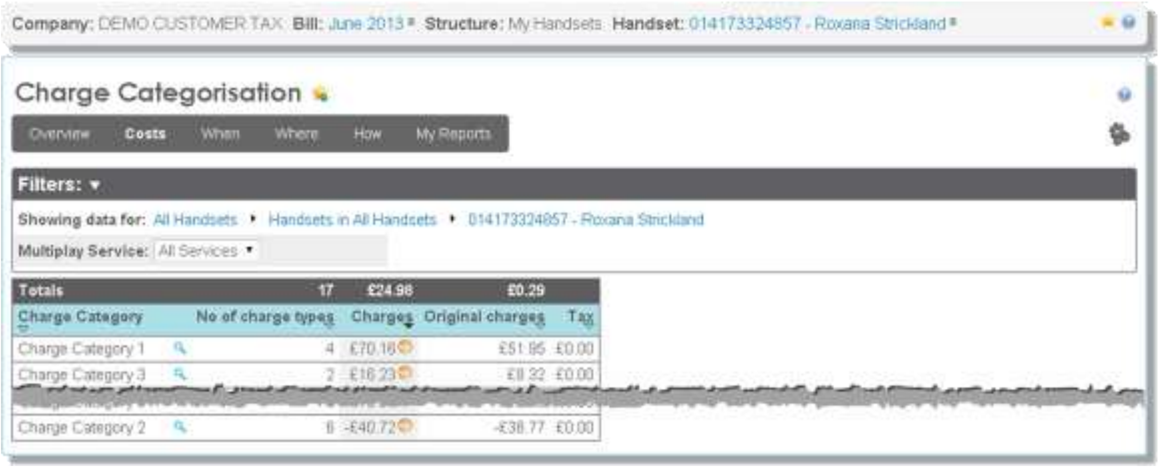
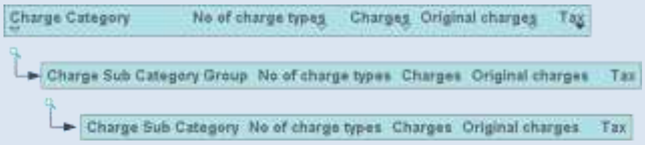


Figure 57: Charge categorisation report

Table 15: Charge categorisation report-definition

Report attributes		
Name	Charge categorisation report	
Description:	The *Cost categorisation* report summarises invoices charges by Charge-category, showing Recurring, one-off and usage charges, and credits.	
Access path:	From the *Report category menu*, **Costs»Charge categorisation**	
	From the *Reports overview* panel, select **Charge categorisation**.	
Constraints:	Available only in single currency deployments where the Service-provider is using twelve Charge-categories ▪ There must be at least one sub category per Charge-category; ▪ Sub categories are dynamic; ▪ A maximum of 15 Charge-categories can be defined.	
Variations:	Unavailable report functionality: ▪ *Report overview observations*.	
Report basis:	*Charge detail records*	
Sequence:	Charges – descending.	
Filters:	**Fixed:**	**Selectable:**
	Showing data for [`selected level`*]*	▪ Multiplay service; ▪ *Zero entries*, ▪ One-line-per.

Report attributes		
Functionality:		Drill-down the *Sub-Charge-category* summary-level(s) within the selected *top-level Charge-categories;* and then into the *Charge details*. 
		Available only for users with multiple subscribers when the *My view context* is *All subscribers.* Drills-down to show an entry for each subscriber in *All subscribers* group, offering *Select detail* drill down (as above) per subscriber.

f

14.1.2. Cost allocation report-definition

The *Cost allocation* report displays a breakdown of charges by charge type for each assigned subscriber.

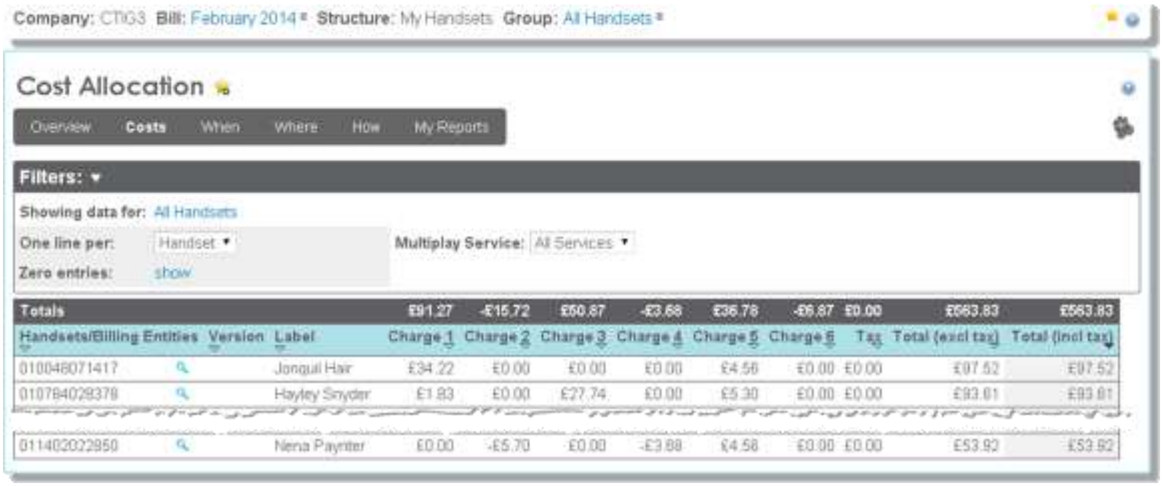


Figure 58: Cost allocation report sample

Table 16: Cost allocation report-definition

Report attributes		
Name	Cost allocation report	
Description:	The *Cost allocation* report displays a breakdown of charges by charge type for each assigned subscriber.	
Access path:	From the *Report category menu*, **Costs»Cost allocation**	
	From the *Reports overview* panel, select **Cost allocation**	
Constraints:	The report lines will wrap-around when exporting All columns in MS Word, PDF or PowerPoint format, so we recommend users either limit the number of columns being reported or exporting All columns in CSV format.	
Variations:	**Unavailable report functionality:** ▪ *Cost adjustment arrows* not displayed.	
Report basis:	*Charge detail records*	
Sequence:	*Cost - descending.*	
Filters:	**Fixed:**	**Selectable:**

Report attributes		
	Showing data for [`selected level`*]*	▪ Multiplay service; ▪ *Zero entries*, ▪ One-line-per.
Functionality:	🔍	Drill-down directly to the *Report results summary* page – as described in *Topic 11.2.2(on page 41)*.
	👤	Available only for users with multiple subscribers when the *My view context* is *All subscribers.* Drills-down to show an entry for each subscriber in *All subscribers* group, offering *Select detail* drill down (as above) per subscriber.

14.1.3. Cost range report

The *Cost range report* summarises volume, duration and cost by {Configurable} cost-range bands, highlighting areas of high or low spend.

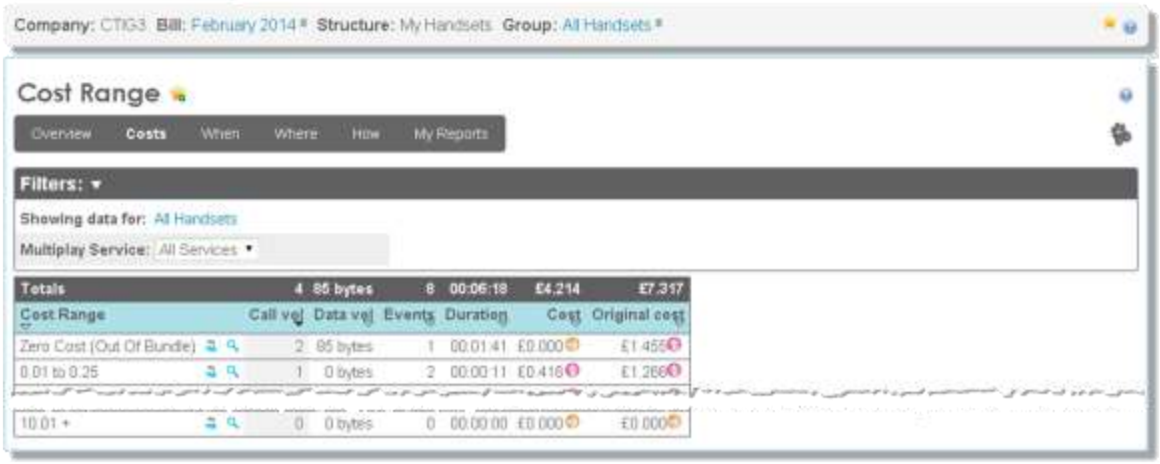


Figure 59: Cost range report example

The default Cost range categories are:

- 0.00,0.00;
- 0.00,0.259;
- 0.26,0.509;
- 0.51,1.009;
- 1.01,2.009;
- 2.01,5.009;
- 5.01,10.009;
- 10.01.

Table 17: Cost range report-definition

Report attributes	
Name	*Cost range report*
Description:	The *Cost range report* summarises usage by cost-range bands
Access path:	From the *Report category menu*, **Costs»Cost range** From the *Reports overview* panel, select **Cost range**.

Constraints:	▪ Not available if multiple currencies are used.
	▪ A maximum of 12 ranges can be defined.
	▪ {Configurable} Two ranges can be designated to show:
	  ▪ All bundled usage records (that is, zero cost).
	  ▪ All unbundled zero cost usage.

Variations:	None specified

Report attributes		
Report basis:	*Usage detail records*	
Sequence:	*Cost range – ascending.*	
Filters:	Fixed:	**Selectable:**
	Showing data for [`selected level`*]*	▪ Multiplay service; ▪ *Zero entries*, ▪ One-line-per.
Functionality:	🔍	Drill-down directly to the *Report results summary* page – as described in *Topic 11.2.2(on page 41)*.
		❌ Available only for users with multiple subscribers when the *My view context* is *All subscribers.*
		Drills-down to show an entry for each subscriber in *All subscribers* group, offering *Select detail* drill down (as above) per subscriber.

14.1.4. Most expensive report-definition

The *Most Expensive* report displays a list of the top-50 most expensive calls.

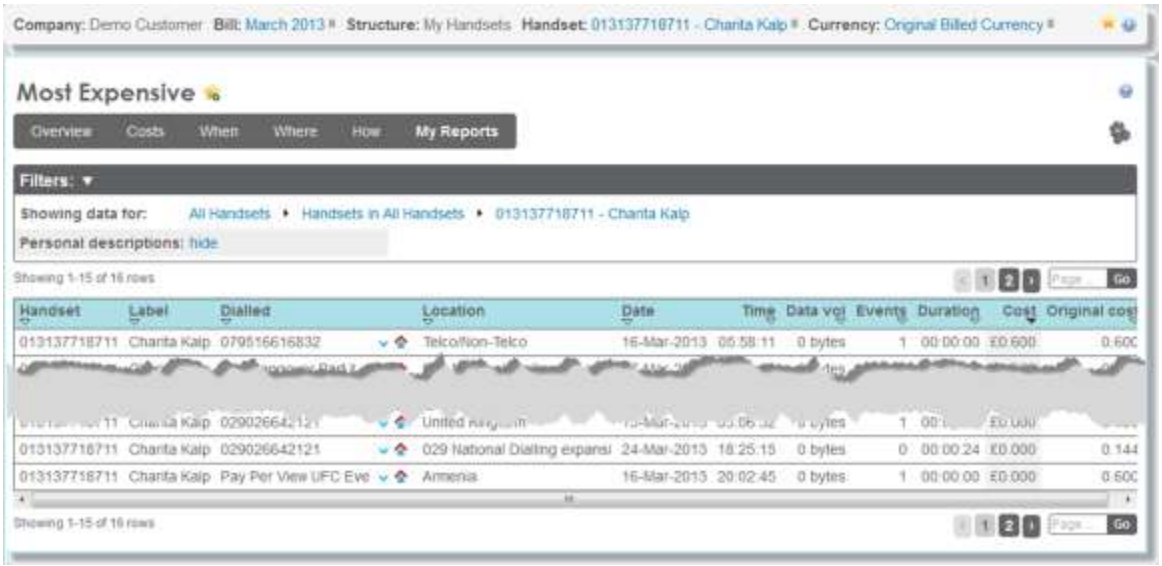


Figure 60: Most expensive report sample

Table 18: Most expensive report-definition

Report attributes	
Name	Most expensive report
Description:	Highlights high cost usage records within the selected *My view context.*
Access path:	From the *Report category menu*, **Costs»Most expensive**
	From the *Reports overview* panel, select **Most expensive**
Constraints:	❌ Not available to the group *All subscribers.*
	▪ Excludes zero-charge usage; ▪ {Configurable} Includes the previous three *Billing-periods*; ▪ {Configurable} Shows the Top 50 records;.
Variations:	ℹ **Unavailable report functionality:**

Report attributes		
	▪ *Report filters* (all); ▪ *Select group* drill-down; ▪ *Select detail* drill-down;	▪ *Cost adjustment arrows Icons*; ▪ Report totals.
Report basis:	*Usage detail records*	
Sequence:	*Cost* – descending.	
Filters:	Fixed:	**Selectable:**
	Showing data for [selected level]	*Personal description filter*
Functionality:		Not available
		Not available
		Edit dialled number description– as described in: *topic. 11.1.4 (on page 39)*.

14.1.5. Tax exempt report-definition

The *Tax exempt report* displays usage with no associated tax charge (no VAT, for example).

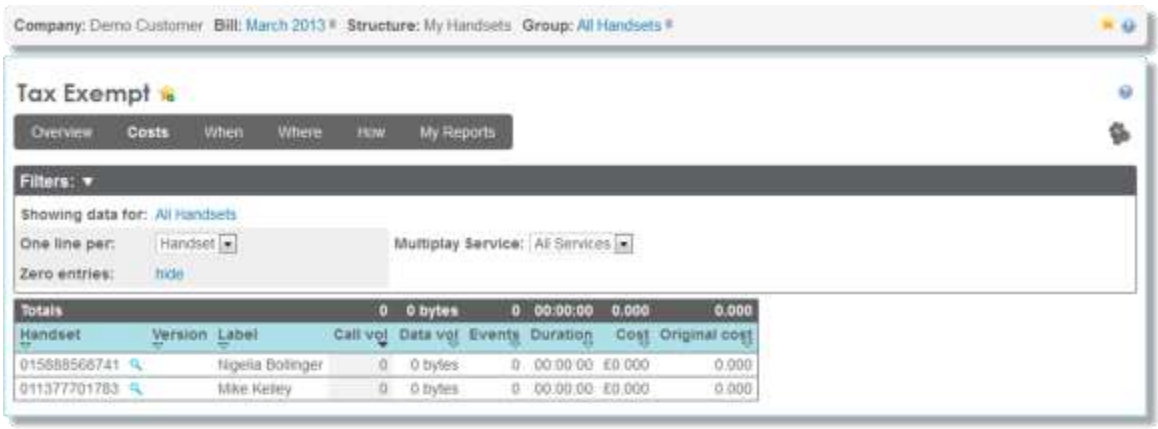


Figure 61: Tax-exempt report sample

Table 19: Tax exempt report-definition

Report attributes		
Name	Tax exempt report	
Description:	The *Tax exempt report* displays usage with no associated tax charge. So, for example, it Includes VAT exempt or zero rated us*age* records; including roaming calls outside of the European Union.	
Access path:	From the *Report category menu*, **Costs» Tax exempt**	
	From the *Reports overview* panel, select **Tax exempt**	
Constraints:	Available only if the *service-provider* can provide a Tax flag in the usage data feed (that is, at *CDR* level).	
Variations:	**Unavailable report functionality:**	
	▪ Cost adjustment arrows; ▪ Charts;	▪ Report overview Observations.
Report basis:	*Usage detail records*	
Sequence:	*Cost* – descending.	

Report attributes			
Filters:	Fixed:		**Selectable:**
	Showing data for [`selected level`*]*		▪ Multiplay service; ▪ Show zero entries, ▪ One-line-per.
Functionality:		Drill-down directly to the *Report results summary* page – as described in *Topic 11.2.2(on page 41)*.	
		Not available	

14.1.6. Usage report definition

The *Usage* report breaks down the total usage (calls) costs for each element of the selected My subscriber structure.

Figure 62: Usage report example

Table 20: Usage report-definition

Report attributes			
Name	Usage report		
Description:	Shows usage for the selected My view *context.*		
Access paths	From the *Report category menu*, **Costs»Usage**		
	From the *Reports overview* panel, select **Usage**.		
Constraints:	None specified – viewable using any *Organisational structure* assigned to the user.		
Variations:	**Unavailable report functionality:** ▪ Multiplay service filter; ▪ *Charts*; ▪ *Report overview observations*.		
Report basis:	*Usage detail records*		
Sequence:	*Cost* – descending.		
Filters:	Fixed:		Selectable:
	Showing data for [selected level]		▪ One line per ▪ Zero entries
Functionality:		Drill-down directly to the *Report results summary* page – as described in *Topic 11.2.2(on page 41)*.	
		Not available	

14.2. When report-definitions

14.2.1. Billing-period report-definition

The *Billing-period* report summarises usage by loaded bill.

Figure 63: Billing-period report sample

Table 21: Billing-period report attributes

Report attributes		
Description:	*The Billing-period report summarises usage by loaded Bill. It shows usage totals for each day,* revealing usage patterns and the subscribers involved.	
Constraints:	▪ Shows all us*age* irrespective of the *bill* selected – even where multiple bills contain us*age* for the same day; ▪ Billing-period may include more than one month's data.	
Variations:	Unavailable report functionality: ▪ *One line per* filter (at top level); ▪ *Zero entries* filter (at top level); ▪ *Cost adjustment arrows* ▪ *Charts* (at any level).	
Report basis:	*Usage detail records*	
Sequence:	*Call vol* – descending	
Filters:	**Fixed:** *Showing data for* [`selected level`]	**Selectable:** ▪ Multiplay service; ▪ One-line-per; ▪ Show zero entries.
Functionality:	(magnifier icon)	Drill-down directly to the *Report results summary* page – as described in *Topic 11.2.2(on page 41)*.
	(subscriber icon)	✪ Available only for users with multiple subscribers when the *My view context* is *All subscribers.* Drills-down to show an entry for each subscriber in *All subscribers* group, offering *Select detail* drill down (as above) per subscriber.

14.2.2. Daily distribution report

The *Daily Distribution* report shows the distribution of all usage transactions in one-hour slots over a 24-hour period.

Figure 64: Daily distribution report example

This report is ideal for identifying usage hotspots and allows you to drill-down into an individual hour to see the usage records.

Table 22: Daily distribution report-definition

Report attributes		
Name:	Daily distribution report	
Description:	Shows usage per hour over a 24 hour cycle. This report is ideal for identifying busy and quiet spots within a day, with individual hours viewable using the *Select detail* drill-down.	
Access path:	From the *Report category menu*, **When»Daily distribution**	
	From the *Reports overview* panel, select **Daily distribution**.	
Constraints:	None identified	
Variations:	**Unavailable report functionality:** ▪ *One line per* filter (at top level); ▪ *Zero entries* filter (at top level); ▪ *Cost adjustment arrows*; ▪ *Report overview Observations* ▪ *Charts* (at drill-down level)..	
Report basis:	*Usage detail records*	
Sequence:	*Daily distribution* – ascending	
Filters:	**Fixed:**	**Selectable:**
	Showing data for [`selected level`].	▪ *Multiplay service*; ▪ *One-line-per*; ▪ Zero entries.
Functionality:	🔍	Drill-down directly to the *Report results summary* page – as described in *Topic 11.2.2(on page 41)*.

Report attributes		
		Available only for users with multiple subscribers when the *My view context* is *All subscribers.* Drills-down to show an entry for each subscriber in *All subscribers* group, offering *Select detail* drill down (as above) per subscriber.

14.2.3. Duration range report

The *Duration Range Summary* report shows information grouped by the duration of the usage.

Figure 65: Duration range report

The Duration range bands are:

- Not Duration Based
- 00:00:00,00:00:00;
- 00:00:00,00:00:30;
- 00:00:31,00:01:00;
- 00:01:01,00:05:00;
- 00:05:01,00:10:00;00:
- 10:01,00:30:00;
- 00:30:01,

In addition to the duration range categories you may also see categories for:

- Usage not charged by duration;
- Usage allocated an automatic zero duration.

Table 23: Duration range report-definition

Report attributes		
Description:	The *Duration range* report shows information grouped by the duration of the usage.	
Report basis:	*Usage detail records*	
Constraints:	*None identified*	
Variations:	**Unavailable report functionality:** ▪ *One line per* filter (at top level); ▪ *Zero entries* filter (at top level); ▪ *Charts* (at any level).	
Sequence:	*Call vol* – descending	
Filters:	**Fixed:**	**Selectable:**

Report attributes		
	Showing data for [`selected level`].	▪ Multiplay service; ▪ One-line-per; ▪ Show zero entries.
Functionality:	🔍	Drill-down directly to the *Report results summary* page – as described in *Topic 11.2.2(on page 41).*
		Available only for users with multiple subscribers when the *My view context* is *All subscribers.* Drills-down to show an entry for each subscriber in *All subscribers* group, offering *Select detail* drill down (as above) per subscriber.

14.2.4. Peak/Off-peak report

The *Peak / Off Peak* report shows usage summarised by the *Call period banding* within which the usage was charged.

Figure 66: Peak/Off-peak report example

By default the available categories are:

- Not applicable
- Peak Weekday
- Peak Weekend
- Off-peak Weekday
- Off-peak Weekend

Table 24: Peak/Off-peak report-definition

Report attributes		
Description	The *Peak/Of-peak* report summarises usage by *charge band* (for example, peak, weekend peak, or off-peak)	
Constraints:	Users can view this report using any *Organisational structure* they are assigned to.	
Variations:	**Unavailable report functionality:** ▪ *One line per* filter (at top level); ▪ *Zero entries* filter (at top level) ▪ *Charts* (at drill-down level).	
Report basis:	*Usage detail records*	
Sequence:	*Call vol* – descending	
Filters:	**Fixed:**	**Selectable:**

Report attributes		
	Showing data for `[selected level]`	▪ One line per; ▪ Multiplay service; ▪ Zero entries.
Functionality:	🔍	Drill-down directly to the *Report results summary* page – as described in *Topic 11.2.2(on page 41)*.
	👤	❂ Available only for users with multiple subscribers when the *My view context* is *All subscribers.* Drills-down to show an entry for each subscriber in *All subscribers* group, offering *Select detail* drill down (as above) per subscriber.

14.3. Where report-definitions

14.3.1. Destinations report-definition

The *Destination* report shows usage grouped by *Destination category*.

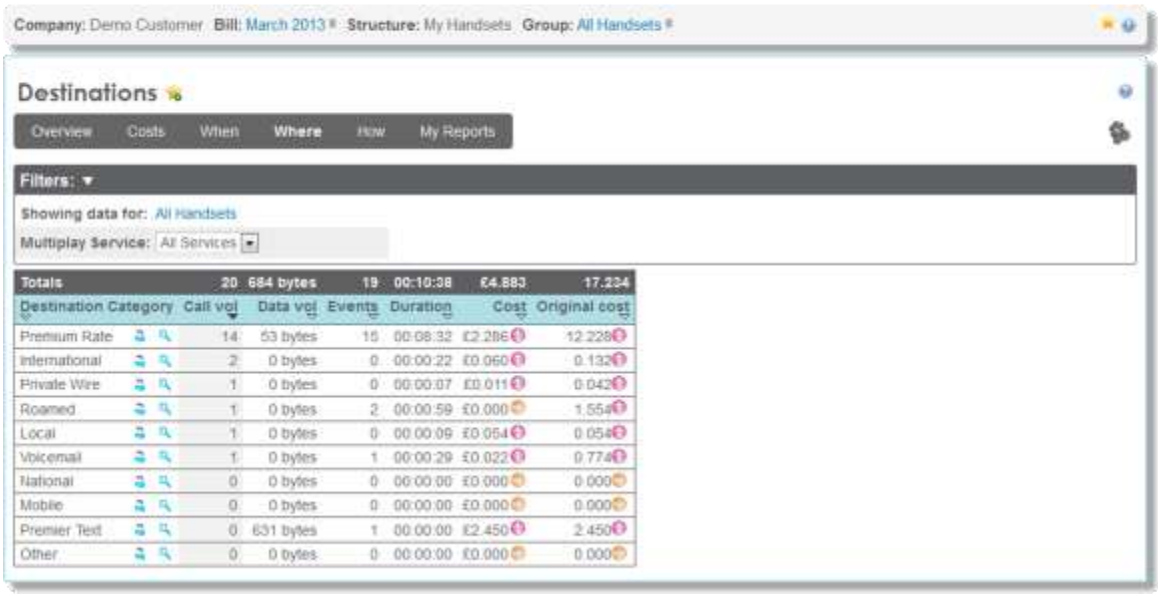


Figure 67: Destinations report

Table 25: Destinations report-definition

Report attributes	
Name	Destinations report
Description	The *Destination* report summarises usage grouped by *Destination category*. Destination categories include: ▪ *Local* ▪ *Mobile* ▪ *National* ▪ *Non-geo International* ▪ *International Mobile* ▪ *International Other* ▪ *Other* ▪ *Premium Rate Services*
Access path	From the *Report category menu*, **Where»Destination** From the *Reports overview* panel, select **Destinations**.
Constraints:	▪ Up to a maximum of 15 *Destination categories* may be defined. ▪ The *Select detail* drill down to sub-category is available only to users with multiple subscribers who select *All subscribers* in the *My view context.*

Variations:	**Unavailable report functionality:** ▪ *One line per* filter at top-level; ▪ *Zero entries* filter at top-level; ▪ *Charts* (at drill-down level)..
Report basis:	*Usage detail records*
Sequence:	*Call vol*– descending.
Filters:	**Fixed:** *Showing data for* `[selected level]` **Selectable:** ▪ *One line per*; ▪ *Multiplay service*; ▪ *Show zero entries*.
Functionality:	Users with multiple subscribers when the *My view context* is *All subscribers.* Drill-down from: ▪ *Destination category* to *Sub-category ;* ▪ *Sub-category* to *Report results summary page.* All other users. Drill-down directly to the *Report results summary* page. Available only for users with multiple subscribers when the *My view context* is *All subscribers.* Drills-down to show an entry for each subscriber in *All subscribers* group, offering *Select detail* drill down (as above) per subscriber.

14.3.2. Internal report-definition

The *Internal calls report* shows usage on internal calls.

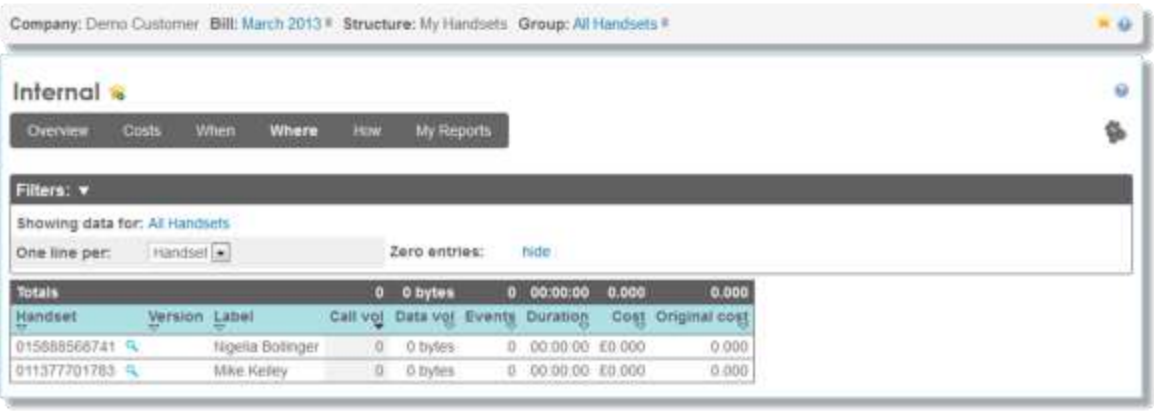


Figure 68: Internal report sample

Table 26: Internal report attributes

Report attributes	
Name:	Internal usage report
Description:	The *Internal* report itemises internal usage.
Access path	From the *Report category menu*, **Where»Internal** From the *Reports overview* panel, select **Internal**
Constraints:	Users can view this report using any *Organisational structure* they are assigned to.

Report attributes		
Variations:	**Unavailable report elements** ▪ Cost adjustment arrows, ▪ *Select group* drill-down, ▪ Charts.	
Report basis:	*Usage detail records*	
Sequence:	*Billing-period* – descending	
Filters:	**Fixed:**	**Selectable:**
	Showing data for [`selected level`]	▪ *One line per*; ▪ *Show zero entries*.
Functionality:	Drill-down directly to the *Report results summary* page – as described in *Topic 11.2.2(on page 41)*.	
	Available only for users with multiple subscribers when the *My view context* is *All subscribers.* Drills-down to show an entry for each subscriber in *All subscribers* group, offering *Select detail* drill down (as above) per subscriber.	

14.3.3. Usage by direction report-definition

The *Usage by direction* report summarises usage as either incoming or outgoing.

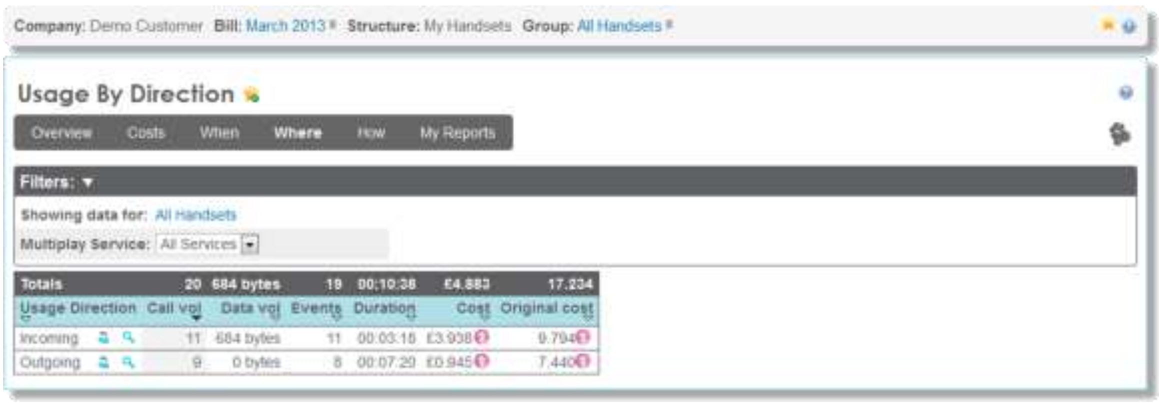


Figure 69: Usage by direction report sample

Table 27: Usage by direction report attributes

Report attributes	
Name	Usage by direction report
Description:	The *Usage by direction* report summarises usage as either incoming or outgoing.
Access path:	From the *Report category menu*, **Where»Usage by direction**
	From the *Reports overview* panel, select **Usage by direction**.
Constraints:	None identified
Variations:	**Unavailable report features:** ▪ *Report overview observations;* ▪ *Report actions* ▪ *Charts (at drill-down level)..*
Report basis:	*Usage detail records*

Report attributes			
Sequence:	*Call vol* – descending		
Filters:	**Fixed:**		**Selectable**
	Showing data for `<breadcrumb trail>`		▪ *Multiplay service (top-level);* ▪ *One line per;* ▪ *Zero entries.*
Functionality:	🔍	Drill-down directly to the *Report results summary* page – as described in *Topic 11.2.2(on page 41)*.	
	👤	❂ Available only for users with multiple subscribers when the *My view context* is *All subscribers.* Drills-down to show an entry for each subscriber in *All subscribers* group, offering *Select detail* drill down (as above) per subscriber.	

14.4. How report-definitions

14.4.1. Bundle usage report-definition

The *Bundle usage report* displays usage summarised by its relationship to the bundle (that is, whether in or out of the bundle). Use this report to determine whether your bundle package is of an appropriate type and level.

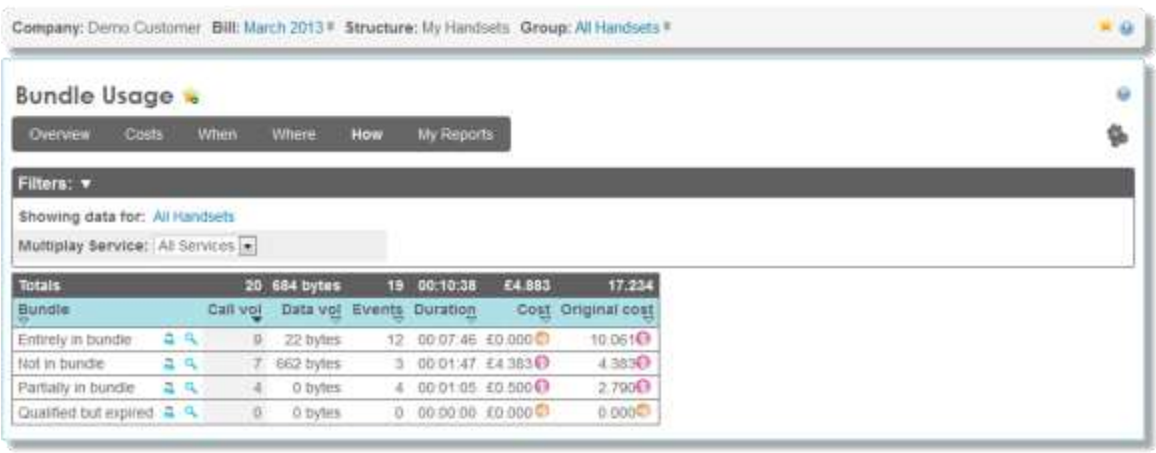


Figure 70: Bundle usage report sample

Table 28: Bundle usage report attributes

Report attributes	
Name:	Bundle usage report
Description:	The *Bundle usage* report summarises usage by *Bundle usage; that is whether the usage is classed as*: ▪ Entirely in bundle; ▪ Not in bundle; ▪ Partially in bundle; ▪ Qualified but expired/ ℹ The *bundle category Partially in bundle* is used when only part of the *usage* is included in the *bundle*. The remaining *usage* is costed once the *bundle* allowance has expired.
Access path:	From the *Report category menu*, **How»Bundle usage**

Report attributes		
	From the *Reports overview* panel, select **Bundle usage**.	
Constraints:	None identified	
Variations:	▪ Displays a total line; ▪ Displays *cost-adjustment arrows*.	
Report basis:	*Usage detail records*	
Sequence:	*Call vol* – descending	
Filters:	**Fixed:**	**Fixed:**
	Showing data for `<breadcrumb trail>`	*Multiplay service (top-level);* *One line per;* *Zero entries.*
Functionality:	Drill-down directly to the *Report results summary* page – as described in *Topic 11.2.2(on page 41)*.	
	Available only for users with multiple subscribers when the *My view context* is *All subscribers.* Drills-down to show an entry for each subscriber in *All subscribers* group, offering *Select detail* drill down (as above) per subscriber.	

14.4.2. Multiplay Service report-definition

The *Multiplay Service* report shows a summary of usage grouped by its multiplay category.

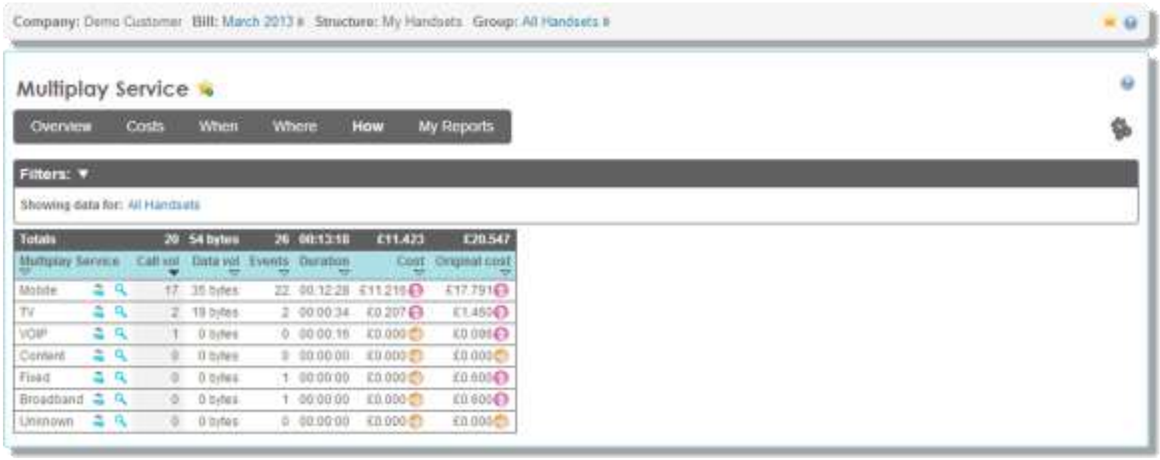


Figure 71: Multiplay service report sample

Table 29: Multiplay service report attributes

Report attributes	
Name:	*Multiplay Service report*
Description:	The *Multiplay Service report* summarises usage by its *Multiplay category* (for example, categories my include usage by: Mobile, Data, VoIP and Fixed line).
Access path:	From the *Report category menu*, **How»Multiplay service**
	From the *Reports overview* panel, select **Multiplay service**.
Constraints:	▪ None identified
Variations:	**Unavailable report functionality:** ▪ No select group drill-down.

Report attributes		
Report basis:	*Usage detail records*	
Sequence:	*Call vol* – descending	
Filters:	**Fixed:**	**Selectable:**
	Showing data for [`selected level`]	▪ *One line per*; ▪ *Multiplay service*; ▪ *Show zero entries*.
Functionality:	🔍	Drill-down directly to the *Report results summary* page – as described in *Topic 11.2.2(on page 41)*.
		Available only for users with multiple subscribers when the *My view context* is *All subscribers.* Drills-down to show an entry for each subscriber in *All subscribers* group, offering *Select detail* drill down (as above) per subscriber.

14.4.3. Roamed report-definition

The Roamed report shows usage by *Roamed status*, making it easy to identify usage that is (or is not) classed as roamed.

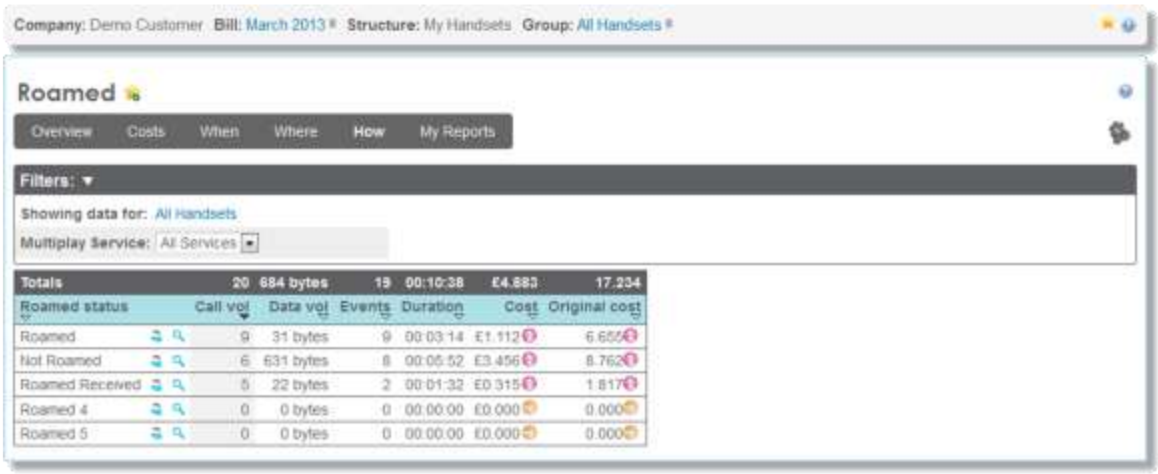


Figure 72: Roamed report sample

This is a useful report, for users with high international usage, or those looking for anomalous usage, for example, usage whilst the user was on holiday.

The *Roamed status* may be, for example: Roamed, Not Roamed, Roamed Received, or Roamed SMS.

Table 30: Roamed report-definition

Report attributes	
Name:	*Roamed report*
Description:	The *Roamed report* displays usage by *Roamed status;* use this report to identify roaming costs and anomalies.
Access path:	From the *Report category menu*, **How»Roamed**
	From the *Reports overview* panel, select **Roamed**.
Constraints:	Up to five *Roamed status* categories can be defined.

Report attributes	
Variations:	**Unavailable report functionality:** ▪ *One line per* filter (at top level); ▪ *Zero entries* filter (at top level); ▪ *Charts* (at drill-down level) ▪ *Report overview observations*.
Report basis:	*Usage detail records*
Sequence:	*Call vol* – descending
Filters:	**Fixed:** *Showing data for* [`selected level`] **Selectable:** ▪ *Multiplay service*; ▪ *One line per*; ▪ *Zero entries*..
Functionality:	Drill-down directly to the *Report results summary* page – as described in *Topic 11.2.2(on page 41)*. Available only for users with multiple subscribers when the *My view context* is *All subscribers.* Drills-down to show an entry for each subscriber in *All subscribers* group, offering *Select detail* drill down (as above) per subscriber.

14.4.4. Transmission Type report-definition

The *Transmission Type* report summarises usage by its *Transmission Type* (for example, SMS, GPRS, Voice or Data).

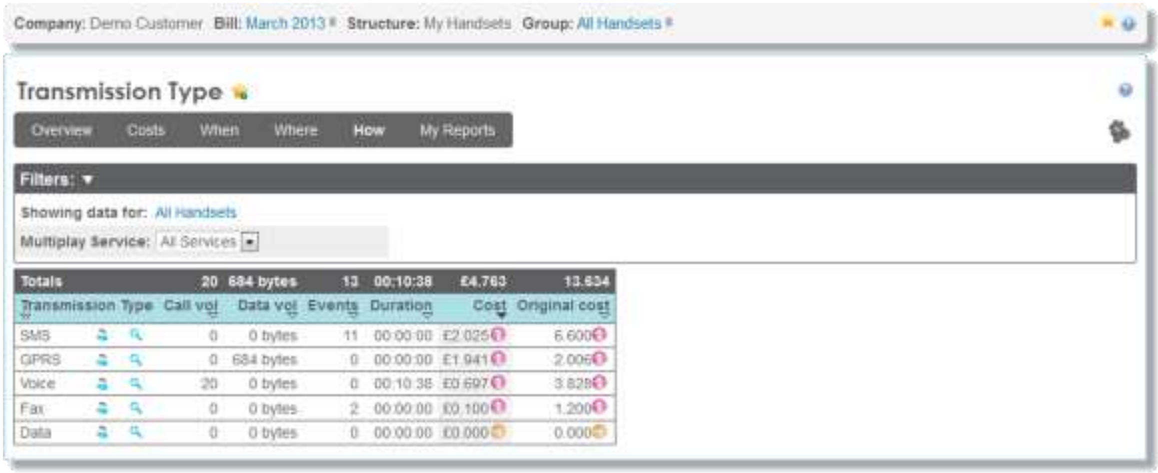


Figure 73: Transmission type report

Table 31: Transmission type report-definition

Report attributes	
Name:	Transmission types report
Description:	The *Transmission types* report summarises usage by its transmission type; use this report to reveals how *subscribers* are being used.
Access path:	From the *Report category menu*, **How»Transmission type** From the *Reports overview* panel, select **Transmission type**.
Constraints:	Up to ten *Transmission type categories* can be defined (for example: SMS, Voice, Fax, GPRS and Data).

Report attributes		
Variations:	**Unavailable report functionality:** ▪ *One line per* filter (at top level); ▪ *Zero entries* filter (at top level); ▪ Charts (at drill-down level)..	
Report basis:	*Usage detail records*	
Sequence:	*Cost* – descending	
Filters:	**Fixed:**	**Selectable**
	Showing data for [`selected level`]	▪ *One line per*; ▪ *Multiplay service*; ▪ *Show zero entries*
Functionality:		Drill-down directly to the *Report results summary* page – as described in *Topic 11.2.2(on page 41)*.
		Available only for users with multiple subscribers when the *My view context* is *All subscribers.* Drills-down to show an entry for each subscriber in *All subscribers* group, offering *Select detail* drill down (as above) per subscriber.

14.4.5. VPN report-definition

The *VPN* report shows a summary of usage grouped by its multiplay category.

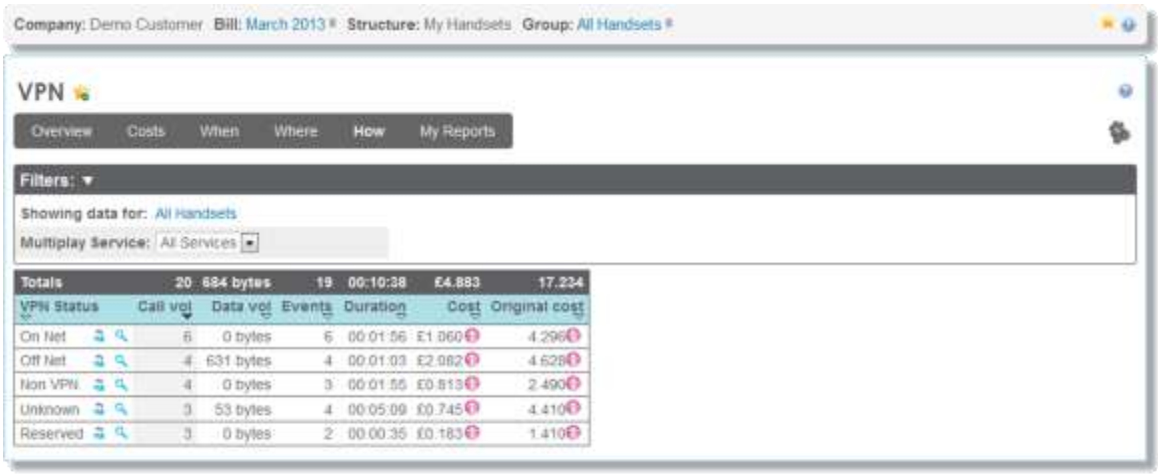


Figure 74: VPN report sample

Table 32: VPN report attributes

Report attributes	
Name:	VPN report
Description:	The VPN report summarises usage by its *VPN status* category
Access path:	From the *Report category menu*, **How»VPN**
	From the *Reports overview* panel, select **VPN**.
Constraints:	Up to five *VPN Status* categories may be defined, including for example: ▪ On-Net – zero cost VPN us*age* (within the company); ▪ Off-Net – external VPN us*age* (with a cost); ▪ NON-VPN – non-VPN us*age* (with or without cost).

Report attributes		
Variations:	**Unavailable report functionality:** ▪ *One line per* filter (at top level); ▪ *Zero entries* filter (at top level); ▪ *Charts (at drill-down levels);* ▪ *Report overview Observations*.	
Report basis:	Usage detail records	
Sequence:	*Call vol* – descending	
Filters:	**Fixed:**	**Selectable:**
	Showing data for `[selected level]`	▪ *One line per*; ▪ *Multiplay service*; ▪ *Zero entries*.
Functionality:	Drill-down directly to the *Report results summary* page – as described in *Topic 11.2.2 (on page 41)*.	
	Available only for users with multiple subscribers when the *My view context* is *All subscribers.* Drills-down to show an entry for each subscriber in *All subscribers* group, offering *Select detail* drill down (as above) per subscriber.	

Part Five:

Using Usage tagging features

Chapters in Part Five:

15. Usage tagging overview page

It is often a business requirement to separate out personal and business usage. A7's *Usage Tagging* feature-set enables you to manage the process efficiently.

In addition to *Tagging your usage Ch. 16 (on page 81)* You can view usage reports – as described in *Ch. 17 Usage tagging report-definitions (on page 83)*.

The *Usage tagging overview* tab provides a convenient gateway to *Tagging* features.

Navigating usage tagging

Usage tagging provides navigation functionality such as

- Sorting,
- Filtering,
- Drilling-down,
- Saving,
- Printing and
- Downloading

All work in the same was as they do for standard *Reports* – as described in *Ch. 11 Understanding report components (on page 34)*.

Figure 75: Usage tagging overview - subscriber view

16. Tagging your usage

Users assigned to multiple subscribers must select a single subscriber in order to tag usage.

The *Usage tagging* report summarises all usage for the previous month by *Dialled number*; use it to examine usage and to tag any that was for personal use.

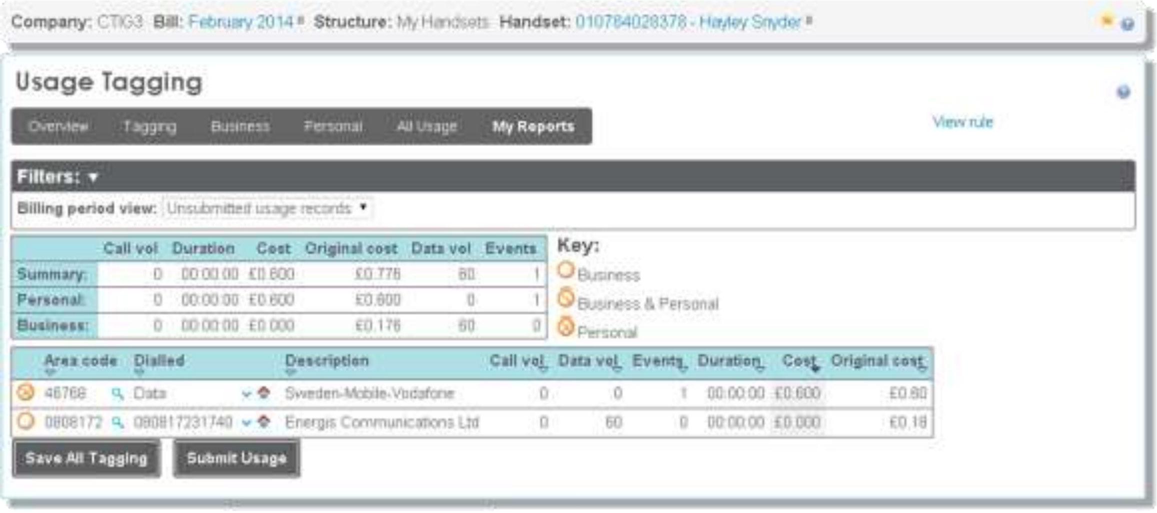


Figure 76: Usage tagging report sample

You may choose to either:

- Tag all usage involving selected *Dialled numbers* – as described in *Tag all usage to a Dialled number (below)*;
- Tag individual incidences of such usage as described in *Tag individual calls (on page 82)*

Once you have tagged all personal usage, submit the *Tagged usage statement* using the *Submit usage* feature described in *Submit tagging (on page 82)*.

Submit usage locks the usage tagging feature for the current month to prevent further tagging, although you may still:

- View usage detail using *Select detail* ;
- Edit *Dialled number* details and/or mark them as personal (for future usage) using the or icons.

Tag all usage to a Dialled number

Fully-tag a dialled number if all usage to it is personal.

These tags are carried-forward to subsequent months.

1. From the main menu, **Usage tagging**
2. Within Usage tagging overview, **Usage tagging**
3. Within the returned list, select the *Dialled number* to tag/untag:

Applying multiple tags

Complete the tagging on each page and select the **Save all tagging** button which saves all your changes.

In either case, the selected item is fully-tagged and will continue to be so tagged in future months.

If you selected a Business or Personal/Business item

A7 tags all usage involving the *Dialled number* as *Personal* ;

If you selected a Personal item

A7 tags all usage involving the *Dialled number* as *Business* ;

Tag individual calls

Partially-tag a dialled number if only certain usage is personal.

These tags are NOT carried-forward to subsequent months.

1. From the main menu, **Usage tagging**
2. Within Usage tagging overview, Usage tagging
3. Within the returned list, **Select detail** to drill-down into the *Dialled number*

   A7 returns a list of usage involving the selected *Dialled number.*
4. To tag usage, select a Business usage transaction

   A7 tags the usage as Personal

   A7 tags the dialled number as Business/Personal
5. To un-tag usage, Select a tagged Personal usage transaction

   A7 tags the usage as Business

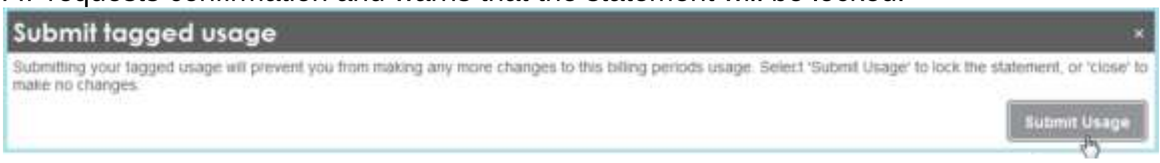
   If all usage transactions on the *Dialled number* are now business, it reverts to its default tag of *Business.*

Submit tagging

From the main menu, **Usage tagging**

1. Within Usage tagging overview, Usage tagging
2. Within the returned-list, **Submit usage**

   A7 requests confirmation and warns that the statement will be locked.

3. **Submit usage** to continue.

   A7 submits and locks the *Tagged usage statement*

   No further tagging is allowed for the month.

   Attempting to tag further usage, or change tagged usage, triggers a warning message:

   These tagged usage records were submitted by an administrator on 15-Oct-2013 09:20:45 and can no longer be changed.

17. Usage tagging report-definitions

17.1. Usage tagging report

Use the *Usage tagging* report – which summarises all usage for the previous month by *Dialled number* – to examine usage and tag any that was for personal use.

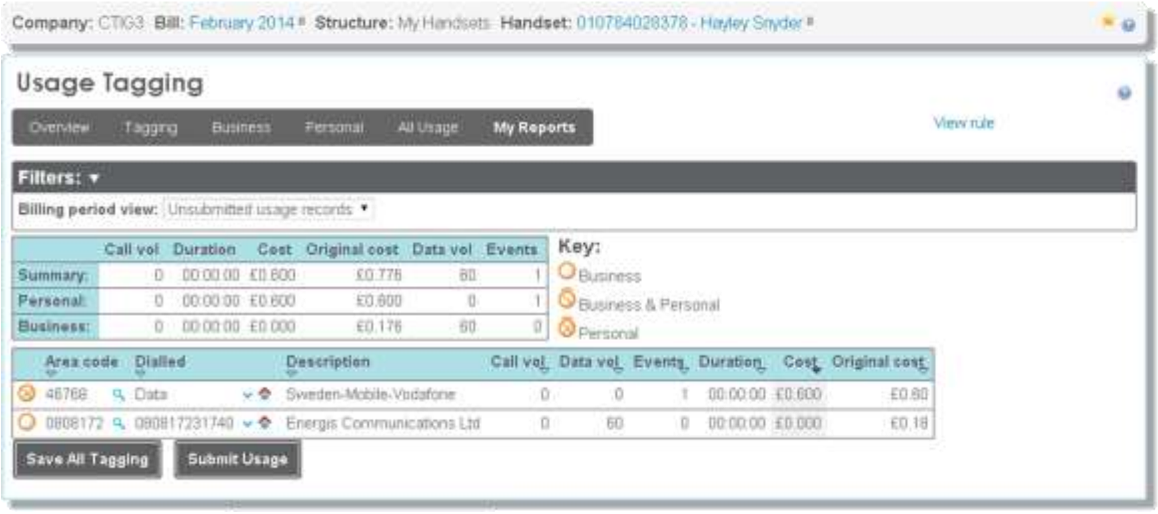


Figure 77: Usage tagging report sample

Table 33: Usage tagging report attributes

Report attributes				
Description	The *Usage tagging* report summarises all usage for the previous month by *Dialled number*, providing tools to tag the usage as being for personal use.			
Report basis:	*Usage detail records*			
Summary column- sets:	*Summary table*			
	▪ *Call vol(ume),*	▪ *Cost*;	▪ *Data vol* (ume);	
	▪ *Duration* (hh:mm:ss);	▪ *Original cost;*	▪ *Events* (count);	
	Returned list			
	▪ *Area code,*	▪ *Call vol(ume),*	▪ *Duration* (hh:mm:ss);	
	▪ Dialled number;	▪ *Data vol* (data volume);	▪ *Cost*;	
	▪ *Description;*	▪ *Events* (count);	▪ *Original cost.*	
Sequence:	*Cost* – descending			
Filter:	*Billing-period view*	{**Unsubmitted usage records**; Submitted usage records}		
Functionality:		Select this *untagged* icon to Tag usage – as described in *Tag all usage to a Dialled number (page 81)*		
		Select this *fully-tagged* icon to Un-tag usage. All individually tagged usage is also untagged.		
		Select this *partially-tagged* icon to Un-tag usage. All individually tagged usage is also untagged.		
		Display usage details records. as described in *Tag individual calls (page 82)*		

		Select either icon to launch the *Edit dialled number* pop-up panel, which allows you to: ▪ Edit the *Dialled-number description*; ▪ Edit the *Dialled-number icon*; ▪ Set the *Tag all future usage as personal* indicator. The next time usage data is loaded for this number it is automatically tagged *Personal*.
	Go Back	Return to summary level.
	Save All Tagging	Select this to save the tag changes made on this page before moving to the next page.
	Submit Usage	Select this to submit your Tagged usage statement – as described in *Submit tagging (page 82)*. No further tagging is possible unless an administrator removes the lock.
Constraints:	Submitting a *Tagged usage statement* locks down the tagging feature for the month; the edit dialled number panel remains usable.	
Variations:	This is a two column-set report, which displays both a summary table and a returned list of summarised usage.	

17.2. Tagging report

This *Tagging report* shows All usage, Business usage or Personal usage, depending upon the filter applied.

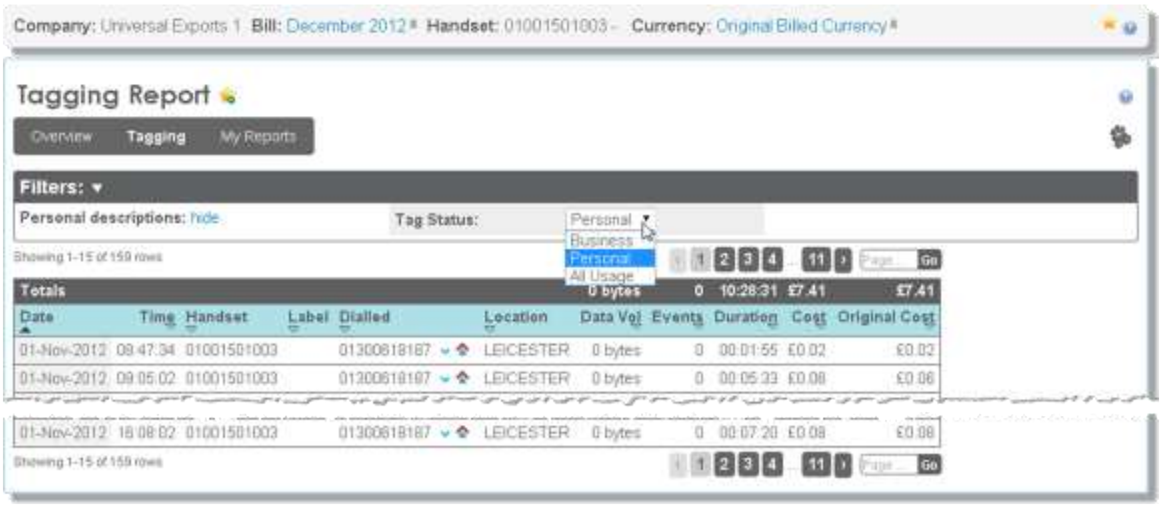


Figure 78: Business usage report sample

Table 34: Business usage report attributes

Report attributes	
Description	The *Tagging report* lists usage for the selected subscriber, filtered by the tag status (All, Business, Personal).
Report basis:	*Usage detail records*
Constraints:	The tagged status cannot be changed.
Variations:	None documented.

Summary column- set:	▪ *Date;* ▪ *Time;* ▪ *Handset/Billing entity;*	▪ *Label;* ▪ *Dialled;* ▪ *Location;*	▪ *Data vol* (data volume); ▪ *Events* (count); ▪ *Duration* (hh:mm:ss); ▪ *Cost*.
Sequence:	*Call vol* – descending		
Filter:	Personal description	Drop-down list `{`**`Show;`** `Hide}`	
	Tag status	Drop-down list: {**All**; Business; Personal}	
Functionality:	Common report components only – as described in *Ch. 11 Understanding report components (page 34)*.		
	Edit dialled number icon	Select to launch the *Edit Dialled number* pop-up panel – as described in *Edit dialled number description (page 39).* ▪ Edit the *Dialled-number description*; ▪ Edit the *Dialled-number icon*; ▪ Set the *Tag all future usage as personal* indicator. The next time usage data is loaded for this number it is automatically tagged *Personal*.	

Part Six:

Using Administration features

Chapters in Part Six:

18. Managing the Phone book

18.1. Maintaining phone books

Requires the optional *Usage tagging management* module; use the inline phone book editor if this is not available.

Entries in the phone book override any *Learnt Tagging* rules.

Inline phone book editor …

Private phone book entries can be edited directly from report detail lines,

▶ Select the icon to open the inline *Phone book editor.*

Use the *Administration* sub-menu to manage your *Phone book.*

All users have access to a *Private phone book* ; a list of dialled numbers to which they have added a description. Descriptions can be added using the inline *Phone book editor* , which can be accessed through reports such as the *Most Expensive report* or directly through this administration route.

Private phone book entries comprise:

- A number,
- A description
- An associated icon, which is displayed in reports.

You may sort the phone book by dialled number or descriptions; both are text fields so sorting is done A-Z, not 1-9.

The phone book maintenance feature allows you to:

- Add and edit phone book entries

  You may add entries at any time; however tagging occurs only at data load.

  A7 does not treat similar numbers as the *same* number.

  If you add a number to the *phone book* and also set a tagging status, you must add all possible variations on this number (this includes, for example, numbers that may be dialled with or without international dialling codes.
- Delete phone book entries

The delete feature removes the *Phone book* entry, its description, icon and tagging status from A7. The subscriber's icon and description revert to those set in the data load, whilst the configuration settings determine any default future tagging actions.

If required, the phone book can be printed using the print icon.

Figure 79: Phone book management page

Create a phone book entry

1. From the *Main menu*, select **Administration»Phone book**.
   A7 displays the *Phone book management* page – *Figure 79 (above)*.
2. Select the **Create new entries within the phone book** icon
3. For each row to be added, Input the entry details:
   i. Input the number as Dialled number
   ii. Input descriptive text as Description

      This cannot be blank.

   iii. Select an Icon to indicate the use for this entry

> **The No Change option …**
>
> A7 uses the *By default usage tagging will be* setting; as set in the *Usage tagging configuration* feature.

4. [Optionally] If there are more rows to add, select **Add new row icon**
   A7 displays a further blank row
5. **Save** to continue
   A7 saves the details
   Close icon to return to the *Phone book*
   [Alternatively] **Cancel** to abandon the input details.

Delete a phone book entry

1. Within the *Main menu,* select **Administration»Phone book**.
   A7 displays the *Phone book management* page – *Figure 79 (above)*.
2. Locate the entry to be deleted

   Use the filter to search long lists

3. Within the required report line, select **Actions»Delete Entry**
   A7 displays a confirmation request message.

4. **Yes** to continue

   A7 deletes the entry**.**

   [Alternatively] **No** to cancel the deletion

18.2. Handling bulk entries

You can import and export a CSV file of Phone book entries using the Upload and Download icons

A7 uploads the file on demand but any changes to future tagging take effect only at the next data load.

18.2.1. File format

There is no icon column; instead the upload settings specify an icon to be applied to all entries. Existing icon selections for overwritten entries are lost.

The file contains columns for the:

- *Dialled number,*
- *Description,*
- *Default tagging type.*
  - 0 = Tag as Business
  - 1= Tag as Personal
  - Blank = no change {Default value}.

18.2.2. Uploading phone book entries

The upload panel allows you to select to:

- Overwrite existing details {default},

  This mode overrides the values of any existing entries in the phone book with those in the uploaded file;

For example – Overwrite =Yes

If an entry is set to *Business* in the phone book and the upload contains the same entry set to *Personal*, the uploaded entry overrides the existing (business) entry

- Not *overwrite existing details*

  Any existing entries are retained untouched.

For example – Overwrite =No

If you upload ten entries and eight of them already exist, only two entries are processed,

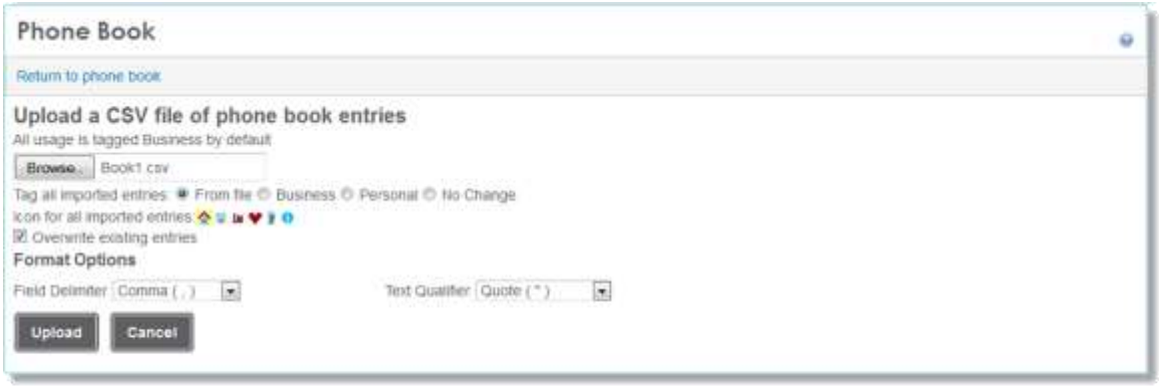


Figure 80: Upload phone book entries panel

Upload Phone book entries

1. A7 displays the *Phone book management* page – *Figure 79 (on page 89)*.
2. Within the *Phone book management* page, **Upload**
   A7 displays the *Phone book upload a CSV file* panel – *Figure 80 (above)*.
3. Select **Browse**
   A7 opens a file browser panel.
4. Navigate to the required file**,** select **Open** to continue
5. [Optionally] Select an **Icon** to apply to all uploaded entries.
6. [Optionally] Deselect **Overwrite existing entries** to ignore any existing entries.
7. [Optionally] Select a delimiter from the drop-down list **Field delimiter**
8. [Optionally] Select a qualifier from the drop-down list **Text qualifier**
9. Select **Upload** to continue
   A7 uploads the selected data, saves the details and displays a confirmation panel.
   [Alternatively] **Cancel** to abandon the input details.
10. **Close** the panel to return to the *Phone book*

If errors are found then an error panel is displayed – see *16* Tagging your usage *(on page 81)* for further information.

18.2.3. Downloading phone book entries

Figure 81: Download phonebook entries

Save phone book

1. From the *Main menu,* select **Administration»Phone book**

   [Alternatively] Within the *Usage tagging management* pane, select **Phone book**.

2. Select the **Save** icon

   A7 displays the *Download phone book entries* panel – *Figure 81 (on page 91)*.

3. [Optionally] Select **Improve excel compatibility**.

4. [Optionally] Select a delimiter from the drop-down list **Field delimiter**

5. [Optionally] Select a qualifier from the drop-down list **Text qualifier**

> **Excel compatibility options ...**
>
> Selecting Excel compatibility prevent numbers from losing preceding zeroes by treating them as formulas.
>
> A byte order mark is also added to the file so that Excel 2003 (Service Pack 3) and later will display Unicode characters correctly.

6. Select **Download** to continue

   A7 downloads the selected data and saves the details in accordance with your browser settings. The file name is `phonebook.csv`

   Select **Return to phone book**

   [Alternatively] **Cancel** to abandon the download.

19. Managing Currencies

A7 caters for multiple currencies by providing *Currency Conversion Lists*. These manually maintained lists enable you to configure exchange rates for multiple currencies, enabling reports to display multi-currency usage in a *single converted currency*.

Viewing multi-currency accounts ...

A7 prompts *CBV users* viewing multiple currency accounts to define currency conversion rates the first time they use A7.

- Within the displayed prompt panel, select **Define currency conversion rates** to open the Currency conversion panel

You must create *Currency conversion lists* defining target currency details for each of the currency that may appear in your data – see *Create a currency conversion list (on page 94).*

Figure 82: Currency conversion panel

The *Currency conversion* panel comprises two parts:

- On the left is a pane displaying:
  - Currency
    The currency into which A7 converts all other currencies in the data load;
  - Conversion rate
    The rate A7 must multiply this currency by in order to get the equivalent value in the target currency selected on the right hand side of the panel.

    To get the latest rates select **Click here** to link to an Exchange rate website.
- On the right hand side is a pane displaying the selected target currency's details (if any).

If the data comprises a mix of Euros, USD (US Dollars) and GBP (GB Pounds), to be displayed as a unified GBP value:

- Create a target currency for GBP specifying a 1:1 conversion rate.
- Create a target currency for Euros, specifying a conversion rate of, for example, 1.2000 (that is, £1 buys €1.2);
- Create a target currency for USD, specifying a conversion rate of, for example, 1.6000 (that is, £1 buys $1.6).

You can also edit and delete existing *Currency conversion lists* from within the Currency conversion panel – see *Update or delete a currency conversion list (on page 94).*

Currency fields allow up to four decimal places but trailing zeroes are not required; so 0.8 and 0.8000 represent the same value

Create a currency conversion list

1. Within the *Main menu,* select **Administration»Currency**
2. Select the **Create a new list**

   A7 displays the *Currency conversion panel – Figure 82 (on page 93).*
3. Within the Target currency pane, input
   - Descriptive text as the **Target name**
   - The symbol representing this currency as **Target symbol**
   - A name for the currency as **Save conversion rate as**
4. **Create** to continue

   A7 saves the currency details.

   The rate is immediately available for selection (for example within *My view)*

Update or delete a currency conversion list

1. Within the *Main menu,* select **Administration»Currency**

   A7 displays the Currency conversion panel

   The Update option is displayed only if lists have been created.
2. Select **Update existing list**

   A7 displays a drop-down list containing the available *Currency conversion lists*
3. Select the required currency conversion list from the drop-down list
4. Edit the displayed currency details.
5. **Update** to continue

   A7 saves the currency details.

   [Alternative 1] **Cancel** to exit without changing the details.

   [Alternative 2] **Delete** to remove the list.

   A7 displays a confirmation prompt panel; **Delete** to confirm.
   The list is no longer available for selection.

Appendices

List of appendices …

Appendix A Browser compatibility

✗ *A7* relies on web standards that older browsers may not fully support.

A7 supports a browser page resolution of 1280 by 1024 px.

This version of *A7* explicitly supports the browsers:

Microsoft Windows 8 ™

Support for IE 10 is applicable only when running in Desktop-style for Windows 8.

- *Microsoft Internet Explorer (IE)* ™ (versions 8, 9, 10 and 11);

✗ Earlier browser versions are not supported

- *Mozilla Firefox* ® and *Google Chrome* ® major releases on *Microsoft Windows* ™;
- Apple Safari ® and *Google Chrome* on iOS7.

Browser	Windows 7	Windows 8	Windows 8.1	Android	iOS7 [12]
IE8	✓	✓	✓	✗	✗
IE9	✓	✓	✓	✗	✗
IE10	✓	✓	✗	✗	✗
IE11	✓	✗	✓	✗	✗
Metro IE 10	✗	✗	✗	✗	✗
Metro IE 11	✗	✗	✗	✗	✗
Chrome 32 [13]	✓	✓	✓	✗	✓
Firefox 25 [13]	✓	✓	✓	✗	
Safari	✗	✗	✗	✗	✓

Key	
✓	Supported
✗	Not supported

12 This is only for PDFs on iPads/iPhones

13 Only the latest *major* number releases are tested. Also there is no need to specify OS for Chrome and Firefox,; it is only newer versions of IE that are OS sensitive.

Appendix B Excel and CSV Compatibility

A7 CSV exports will open in all versions of Excel, however the Excel exports will only work on versions of Excel from 2003 and onwards. CSV by default outputs everything as UTF-8 as this supports the majority of character sets for different countries and languages.

When saving and emailing reports, if you opt to export your report in .CSV format using a version of Excel before Excel 2003 SP3, the cost column will display the currency symbol as Â, this is because Unicode UTF-8 is being used, all versions off Excel from Excel 2003 SP3 will display all currency symbols correctly.

Images within Excel spreadsheets are not supported. Reports emailed/exported using Excel 2003 will not contain the Virgin Media Business logo.

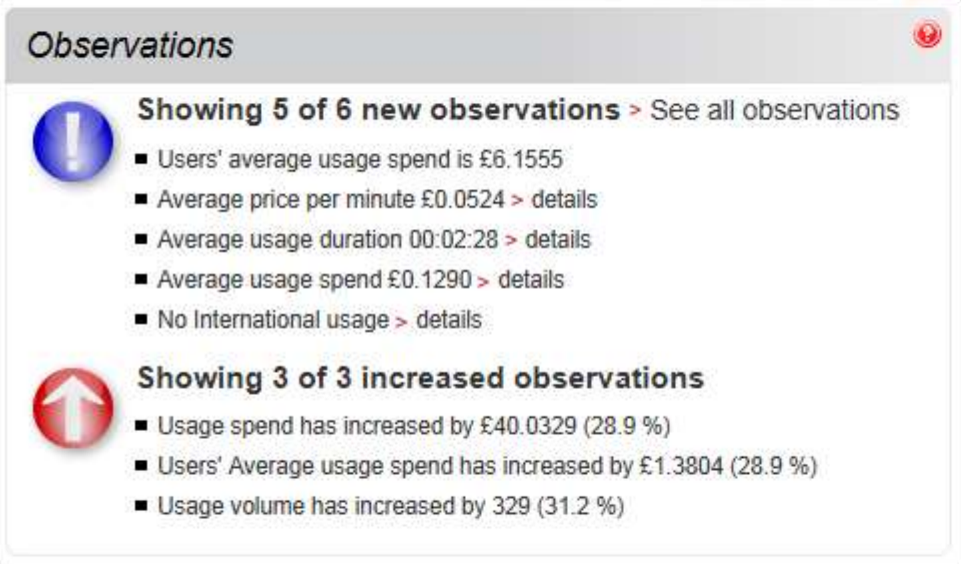
It is recommended that if you use earlier versions of Excel, you open your .CSV file in Notepad and save as a Unicode file.

Appendix C Deprecated panels

C.1 Dashboard panels

C.1.1 Observations

These are static observations highlighting averages and changes in your bill from last month; a hyperlink is displayed this will take you to the appropriate report where you can view more details.



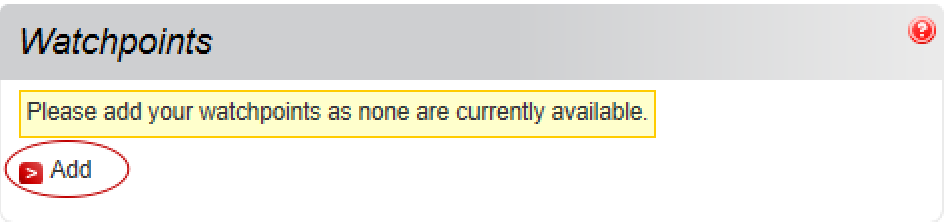
C.1.2 Watchpoints

This functionality allows you to enter up to:

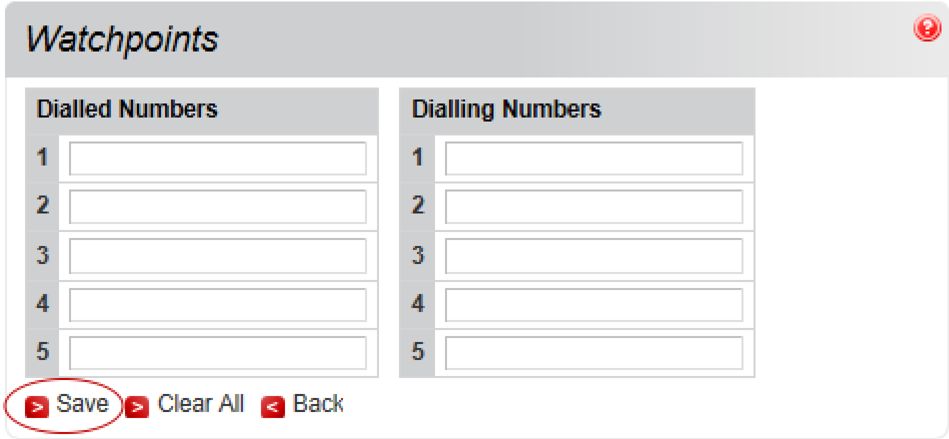
- 5 Dialling Numbers and /or
- 5 Dialled Numbers

Then analyse the spend between the latest billing period and the previous billing period. If the dialling number is not present in the previous bill the watch point for this bill is shown as zero.

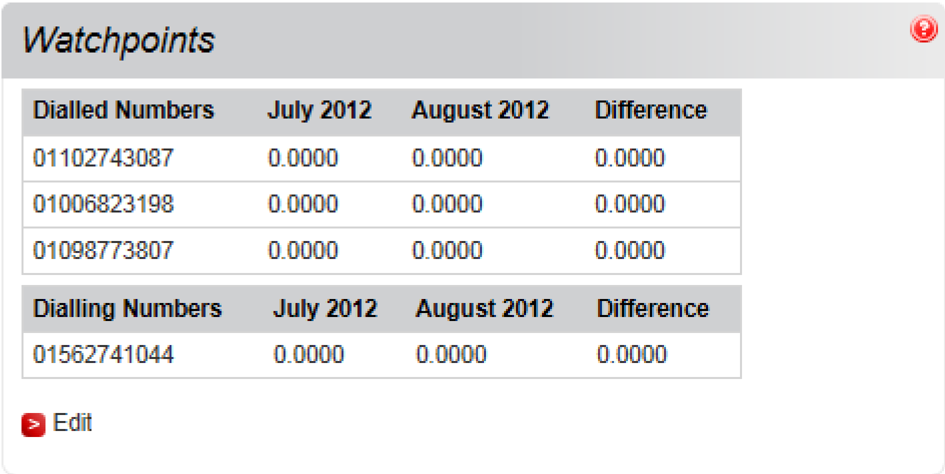
1. To start adding numbers simply click **Add**:



2. Input your chosen numbers



3. Just click **Save** and your screen will dynamically change to display these Watchpoints.



Appendix D Deprecated features

D.1 Home page features

D.1.1 Headline summary – six Charge-category deployments

Use the scrollable *Headline summary* pane to gain a quick overview of the state of the selected context.

Figure 83: Headline summary feature

The pane contains embedded hyperlinks to reports containing further details on the values displayed.

D.1.2 Recent charges – six Charge-category deployments

My Recent Charges shows summaries of:

- *Totals of recent charges* for the currently selected and previous billing-periods.

  These can be expanded to display a breakdown of the figures excluding VAT and the VAT amount
- *Subscribers* [14] in the currently selected structure and billing-period, which is expandable to display a breakdown by *Service Type*.

> Subscribers loaded prior to June 2013 show a service type of Unknown.

The *Cost Adjustment Icons* indicate how each of the figures has changed since the last billing-period (hovering over an icon will display the previous bill's figure).

Depending on assigned permissions and features available *My recent charges* may also display quick links to the:

- *Charge categorisation* report – see *Topic 14.1.1 (on page 60)*;
- *My Recent Charges – Invoices* feature*;*
- *Usage report – see* *Topic D.2.3 (on page X).*

[14] Sample image shows this labelled as Lines.

D.1.3 My recent invoices

Available to Account level users (or above).

The *My recent invoices* feature displays a list of loaded invoices (five per page) for the currently selected billing-period, with the option to download a PDF version.

Individual invoices can be searched for by *Invoice number*.

Figure 84: Sample My recent charges - Invoices feature

You do not need to be viewing the *Billing-defined structure* to see the list and download PDF invoice copies.

D.2 Deprecated Reports

D.2.1 Cost allocation report (6 Charge-category model only)

The *Cost allocation* report summarises usage by *Cost allocation* and can be used to highlight areas of high or low spending.

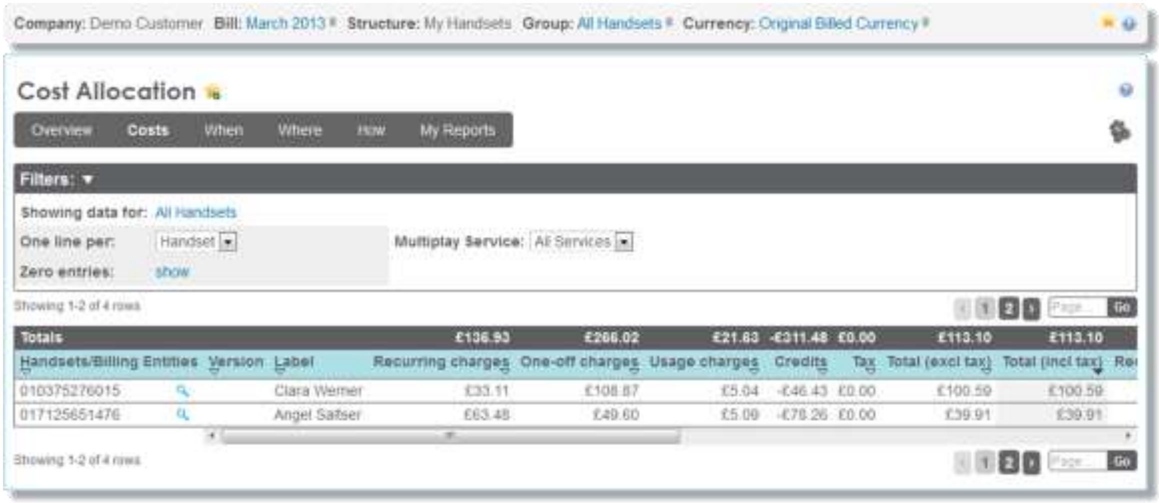
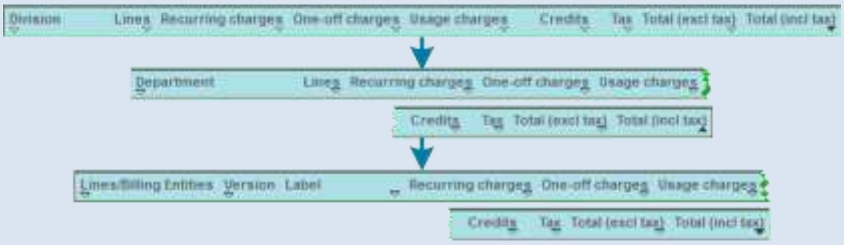


Figure 85: Cost allocation report sample

Table 35: Cost allocation report attributes

Report attributes	
Description:	The *Cost allocation* report displays up to three *Charge-categories* and three corresponding credit categories.
Constraints:	None identified.
Variations:	Unavailable report functionality: Cost adjustment arrows not displayed.
Report basis:	Charge detail records
Sequence:	Cost - descending.

<table>
<tr><th colspan="6">Report attributes</th></tr>
<tr><td rowspan="2" colspan="2">Filters:</td><td colspan="2">Fixed:</td><td colspan="2">Selectable:</td></tr>
<tr><td colspan="2">Showing data for [<code>selected level</code>]</td><td colspan="2">▪ Multiplay service;
▪ Show zero entries,
▪ One-line-per.</td></tr>
<tr><td rowspan="2" colspan="2">Functionality:</td><td colspan="4">Drill-down directly to Report results summary level.

</td></tr>
<tr><td colspan="4">Drill-down the Organisational structure from your starting level to Subscriber-level and then to Report results summary level.

</td></tr>
<tr><td rowspan="2" colspan="2">Default view</td><td colspan="2">Mandatory columns</td><td colspan="2">Selectable columns</td></tr>
<tr><td colspan="2">▪ Group level name
Or
▪ Subscribers/Billing Entity, Version and Label</td><td>▪ Recurring charges
▪ One-off charges
▪ Usage charges</td><td>▪ Credits
▪ Tax
▪ Total (excl. tax)
▪ Total (incl. tax)</td></tr>
<tr><td colspan="6">Viewable columns – mandatory columns in bold, deselected columns in (brackets).</td></tr>
<tr><td rowspan="2">Report summary level</td><td>Group level</td><td colspan="4">Not available</td></tr>
<tr><td>Subscr. Level</td><td>▪ Subscriber/Billing entity
▪ (Version)
▪ Label</td><td colspan="2">▪ Recurring charges
▪ One-off charges
▪ Usage charges
▪ Credits</td><td>▪ Tax
▪ Total (excl. tax)
▪ Total (incl. tax</td></tr>
<tr><td colspan="2">Report detail level</td><td>▪ Subscriber
▪ (Version)
▪ Label
▪ Charge description</td><td colspan="2">▪ Charge start date
▪ Charge end date
▪ Charge amount
▪ Original amount</td><td>▪ Tax rate
▪ Tax description
▪ Quantity
▪ Unit price</td></tr>
</table>

D.2.2 Fixed cost report-definition

This report is discontinued at release 1.10

The report's output can be replicated using the *Cost allocation* report and switching off columns using the *selectable columns* feature.

The *Fixed cost report* summarises recurring and one-off charges.

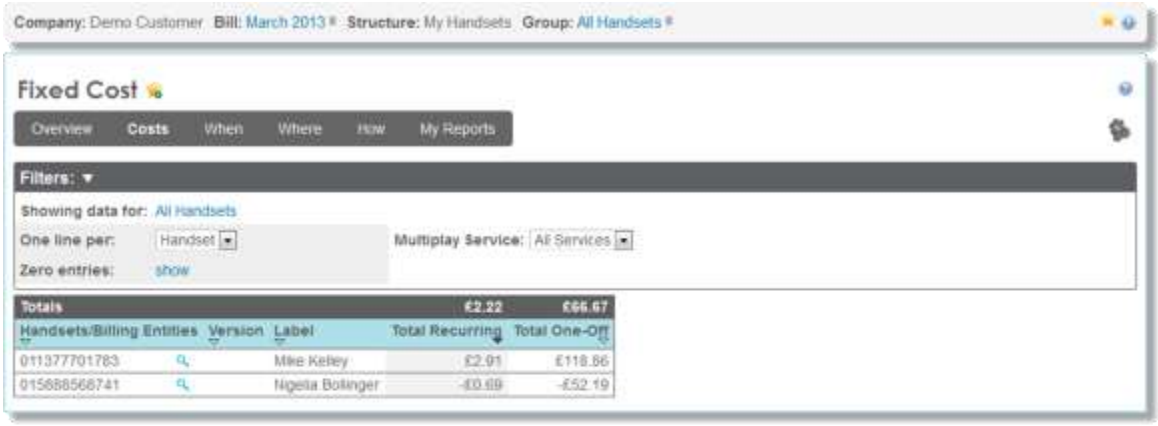


Figure 86: Fixed cost report sample

Table 36: Fixed cost report-definition

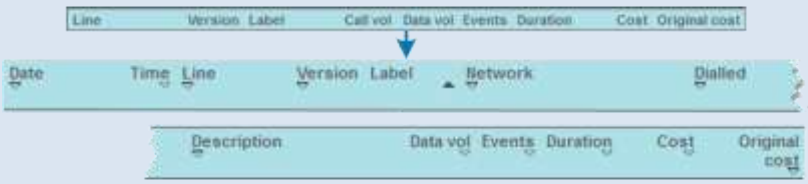
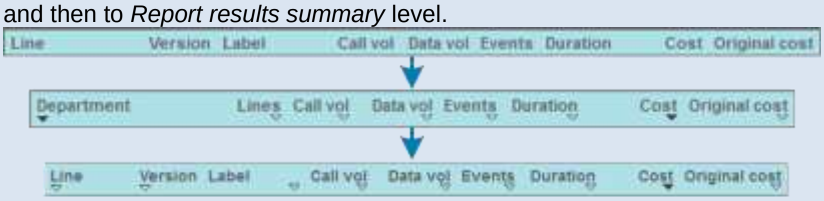
Report attributes			
Name	*Fixed cost report*		
Description:	*Summary of Recurring and Non-Recurring charges for a customer*		
Access path:	From the *Report category menu*, **Costs»Fixed cost**		
	From the *Reports overview* page, select **Fixed cost**.		
Constraints:	Available only to *Service-providers* using six Charge-*categories*.		
Variations:	**Unavailable report functionality:** ▪ *Cost adjustment arrows*; ▪ Charts; ▪ *Report overview Observations.*		
Report basis:	*Charge detail records*		
Sequence:	*Cost – descending.*		
Filters:	**Fixed:**	**Selectable:**	
	Showing data for [`selected level`*]*	▪ Multiplay service; ▪ *Zero entries*, ▪ One-line-per.	
Functionality:	🔍	Drill-down directly to the *Report results summary* page.	
		Not available	
Viewable columns – mandatory columns in **bold**, deselected columns in (brackets).			
Report summary level	Top level	▪ **Subscriber/Billing entity** ▪ (Version)	▪ Label ▪ Total Recurring ▪ Total One-Off
	Select Group	No group summary levels	
	Select Detail	No detail summary levels	
Report detail level	▪ Subscriber ▪ (Version) ▪ Label ▪ Charge description	▪ Charge start date ▪ Charge end date ▪ Charge amount ▪ Original amount	▪ Tax rate ▪ Tax description ▪ Quantity ▪ Unit price

D.2.3 Usage report-definition (six-charge-category model)

The *Usage* report summarises usage volumes and costs at each level of the selected *Organisational structure*.

Figure 87: Usage report sample

Table 37: Usage report-definition

Report attributes		
Description:	Shows usage against Organisational structure for the *Current analysis context.*	
Constraints:	None specified – viewable using any *Organisational structure* assigned to the user.	
Variations:	**Unavailable report functionality:** ▪ Multiplay service filter; ▪ *Charts*; ▪ *Report overview observations*.	
Report basis:	*Usage detail records*	
Sequence:	*Cost* – descending.	
Filters:	Fixed:	Selectable:
	Showing data for [selected level]	▪ One line per ▪ Zero entries
Functionality:	Drill-down directly to *Report results summary* level. 	
	Drill-down the *Organisational structure* from your starting level to Subscriber-level and then to *Report results summary* level. 	

Report attributes				
Viewable columns – mandatory columns in **bold**, deselected columns in (brackets).				
Report summary level	Group level	▪ **Tier name** ▪ Subscribers ▪ Call vol	▪ Data vol ▪ Events ▪ Duration	▪ Cost ▪ Original cost
	Subscr. Level	▪ **Subscriber** ▪ (Version) ▪ Label	▪ Call vol ▪ Data vol ▪ Events	▪ Duration ▪ Cost ▪ Original cost
Report detail level		▪ Date ▪ Time ▪ Subscriber ▪ (Version) ▪ Label	▪ Network ▪ Dialled ▪ Description ▪ Data vol	▪ Events ▪ Duration ▪ Cost ▪ Original cost

[Inside back cover page]

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