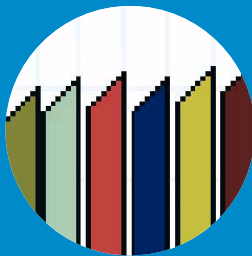
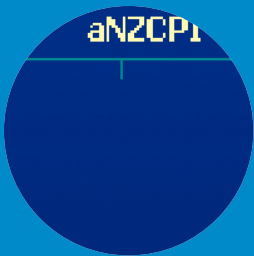
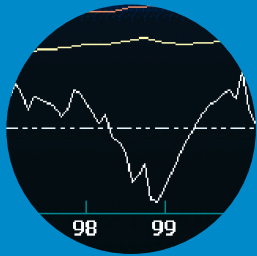
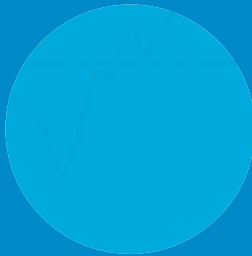
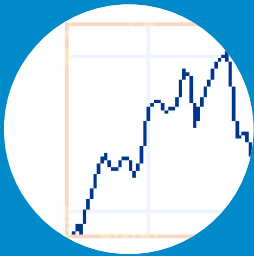
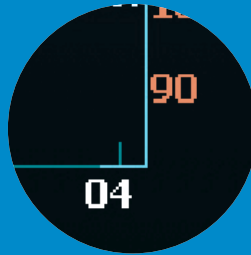
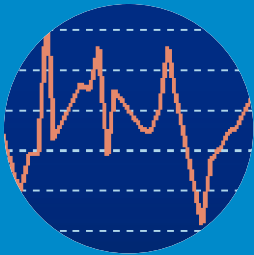
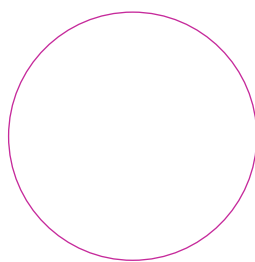


How to find data on Reuters quickly and easily

2nd edition ed. Marcus Rees





How to find data on Reuters quickly and easily

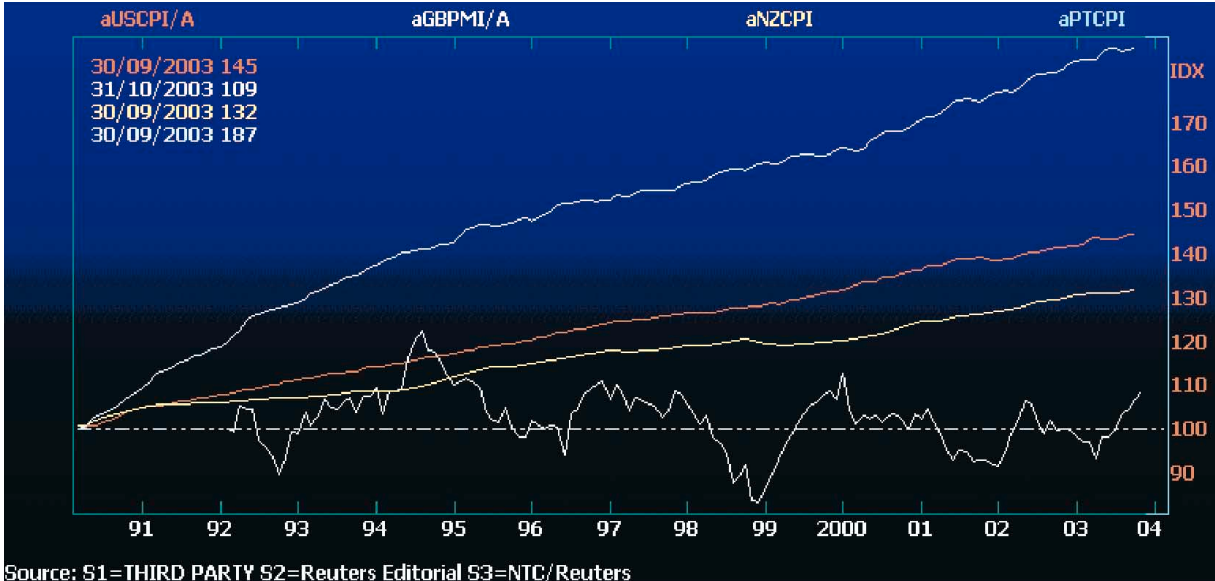
2nd edition ed. Marcus Rees

SECOND EDITION

The production of this Second Edition was made possible by the kind assistance and input provided by colleagues who are experts in their respective disciplines. A special thank you goes to the following people who have helped ensure that the information here is as accurate and comprehensive as possible.

Stephen Cassidy, Stephen Connor, Ciaran Doody, Marian Hall, Elliott Hann, Desmond Hannon, Elaine Herlihy, Marcus Herron, Jutta Werner-Hébert, Trudy Hunt, Ian Mattinson, Barbara Miller, Vincent Nunan, Richard Pembleton, Tony Warren

A further thank you to Elke Behrend and John Hendry who provided the structure and format of this guide through their work on the first edition.



INTRODUCTION TO THE SECOND EDITION

The first edition of this guide clearly hit the mark. We knew that a lot of people wanted a general explanation of code structures and specific guides for each asset class. That's what you got, and the response was extremely positive.

This second edition simply brings the guide up to date. The underlying code structures for data remain very much as they were, but the markets, of course, constantly change. We have added details that point you to this information and we have removed some things that are no longer valid.

Since the first edition, Reuters displays have developed quite remarkably. As a rule, you can now find market data in context much more easily. Equity Views and Bond Views, for example, make it much simpler to get at fundamental data, reports, independent estimates and even electronic trading directly from a web browser. Top News also uses web technology to present news and pictures in a visually clear format. At the same time, more speed-guides, intuitive chain displays and better search tools mean that you can get to what you want quicker than before.

During this time, Reuters 3000 Xtra has taken major steps forward. The Get Going screen now presents an intuitive area where you can select the display that suits you best. New objects, such as the different NASDAQ viewers, the Intraday Viewer with VWAP, and the Index Movers, give real market insight straightaway.

Marcus Rees, John Hendry

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There's a lot of information waiting for you...

But how do you know that you are making the most of everything you have subscribed to? If you find it difficult to get hold of the information you need, read on.

The information that Reuters provides is constantly growing and constantly changing. It's not always easy to keep up with the latest developments. This guide changes that.

Whether you're a new user or you've been working with data from Reuters for years, it's a reference point for all the codes that are used to find information. It will also direct you to useful pages that help you to find your way around, and tools that can find information for you.

The guide explains the structures behind codes in simple steps, and it has separate sections on those codes for each of the major asset classes. So it's not a directory – it's better than that. Once you're familiar with the data structures for different asset classes, many of the codes for data will become instinctively familiar to you.

Real-time and historical data can be viewed on a number of different Reuters platforms and applications, such as Reuters 3000 Xtra, Reuters Kobra and Reuters Trader, as well as through Reuters datafeeds, the Reuters Terminal and a number of third-party applications. In this guide, we will show you the best way to get at that information.

01

HOW THIS GUIDE IS ORGANISED

Taken as a whole, the world of Reuters data and news is vast, complex and potentially overwhelming – like the world it covers. But it's all built logically, and if you break it down into smaller pieces, there's nothing difficult to understand.

In **Getting started**, we look at the different types of data available. From there, we look at the **structure of Reuters data**. There's also a section on different tools for finding the data you need. Once you're familiar with the high-level information, you can use the individual sections that look in detail at each asset class, such as equities, bonds, foreign exchange and commodities and energy.

Finally, there are sections at the back that cover contributed data (pages and records of information provided by active market players), news codes, delayed data (usually available free of charge), error messages and phone numbers for help desks.

For convenience, there's an **In brief** section at the end of most sections, which summarises the key points.

INTRODUCTION

Symbols

We've used icons throughout the book to highlight different types of information.



TIPS

This indicates useful or important information that makes finding data even less complicated.



IN BRIEF

There is an **In brief** section that summarises the key concepts at the end of each section.

02



REUTERS 3000 XTRA

This indicates an item that is only relevant to Reuters 3000 Xtra users.

Markets and financial instruments change constantly, companies merge, for instance, and countries change their currencies. So; Reuters codes change, too.

The codes given in this book are correct at the time of going to press, but are liable to change at any time.

The point of this book is to give you intelligent ways of finding data without memorising codes – this is the best way to handle the constant change that is natural to the financial markets.

Getting started with Reuters data

To begin understanding data from Reuters, it's helpful to break it up into different groups. The easiest way is to start with these four:

1. Country-level: data that belongs to different countries.
2. Asset classes: equities, fixed income, etc.
3. Market-level: data that belongs to different exchanges or other recognised markets.
4. Real-time and historical data.

The first three types are self-explanatory, but it's worth looking at the fourth to understand the difference between real-time and historical data. Why? Because before you start using Reuters data, you need to tell Reuters which real-time exchange data you need.

WHAT DO WE MEAN BY REAL-TIME DATA?

Real time means almost immediately. When a trade is made at an exchange or a new rate is set, then you see it almost as soon as it happens – sometimes within a fraction of a second, regardless of your location. This real-time data can come from exchanges, from registered contributors on the Reuters network or from third-party data providers.

03

EXCHANGE-TRADED REAL-TIME DATA

All Reuters services supply the general financial information and news you have subscribed to. However, exchanges reserve the right to charge a small additional fee for the delivery of real-time data to your terminal. If you want to know more about charges for particular exchanges, your local Reuters representative will be able to tell you the exact fees for the data you require.

If you only usually need indicative prices, most exchanges also provide delayed data, which is free of charge. For more information on this, please refer to the **Delayed data** chapter in this guide.

CHAPTER 1

GETTING STARTED WITH REUTERS DATA



WHERE CAN YOU FIND HISTORICAL DATA?

Historical data is an integral part of Reuters 3000 Xtra; it covers company reports, bond terms and conditions, ratings histories and historical price charts, to name just a few.

In addition, Reuters offers a range of enterprise-wide financial information products, such as Reuters Datascope, offering open access to substantial amounts of historical data for department or enterprise-wide use.

SPECIALIST DATA

Reuters also gives users access to specialist data services that provide extra depth of information, market commentary and analysis by acknowledged experts.

The services cover all asset classes and all segments of the market, from treasury, asset management, investment banking and brokerage, through to corporate and media.

Types of coverage include:

- economic indicators and macroeconomic commentary
- specialist analysis and commentary
- specialist forecasting and technical analysis
- specialist news services
- specialist prices (including broker data)

For a full list of specialist services, go to page **SPECIAL**. Each service is chargeable, but you can find offers and free trials on page **FREETRIALS**.

You can also check for new services and enhancements on page **WHATSNOW**.

Simple ways of finding data



REUTERS 3000 XTRA – SEARCH FACILITIES FOR VERSION 4.5

Version 4.5 of Reuters 3000 Xtra provides a single Search mechanism that you can use to make anything from the simplest search for a company name through to precise searches for data such as a P/E ratios in a certain range or bonds by an issuer in a particular coupon range.

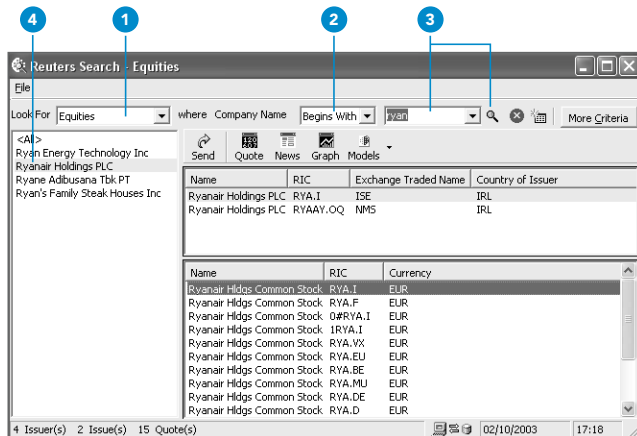
This means you can search in a number of different ways and then click directly to a display on one of the instruments returned.



Click on the Search button to the left of the command line to display the Reuters Search dialogue box.

CHAPTER 2

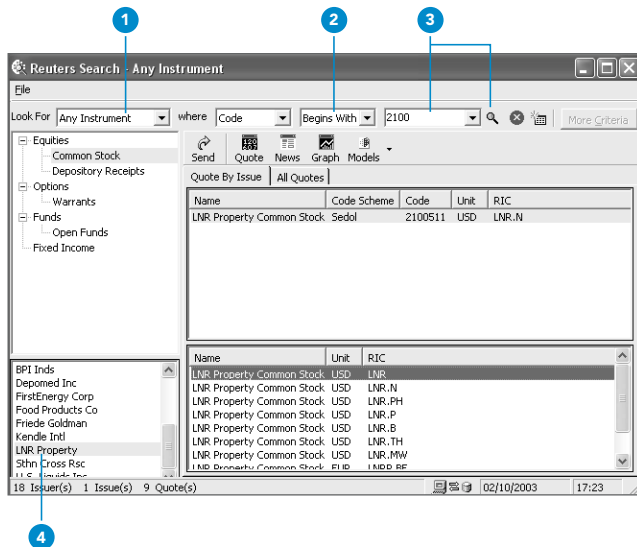
SIMPLE WAYS OF FINDING DATA



FINDING EQUITIES

For the simplest search for a company:

1. Set the **Look For** field to **Equities**.
2. Set the **Company Name** field to **Begins With** or **Contains**.
3. Enter the name or part name and click on the **Search** button.
4. Where more than one company is found that matches your search, these are listed on the left; click on one to display its instruments.



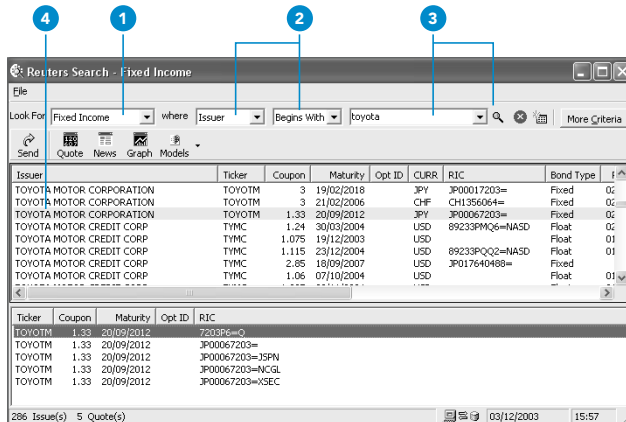
To find an instrument when you know its clearing code (for example, ISIN):

1. Set the **Look For** field to **Any Instrument**.
2. Set the **Where** field to **Code** or select the specific code type.
3. Enter the code or part code and click on the **Search** button.
4. Where more than one company is found that matches your search, these are listed on the left; click on one to display its instruments.

You can also set the **Look For** field so that you can easily find either **Warrants** or **Indices**.

CHAPTER 2

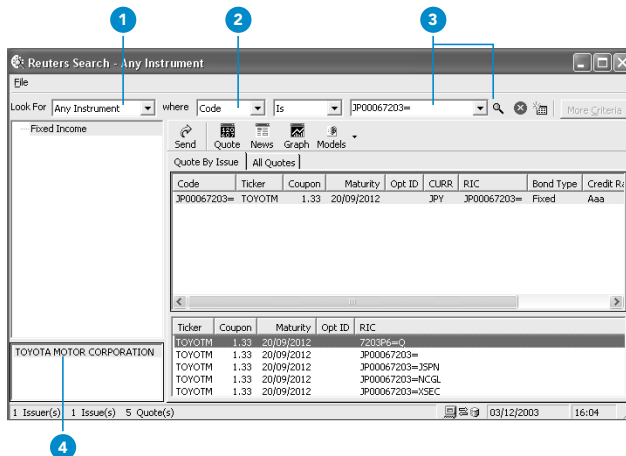
SIMPLE WAYS OF FINDING DATA



FINDING BONDS

To find a bond where you know the issuer:

1. Set the **Look For** field to **Fixed Income**.
2. Set the two **Where** fields to **Issuer** and **Begins With**.
3. Enter the name or part name of the issuer and click on the **Search** button.
4. The issuers that match your search are listed at the top. Scroll through and click on one to display its instruments.



To find a bond where you know its exact code (such as CUSIP or SEDOL):

1. Set the **Look For** field to **Any Instrument**.
2. Set the first **Where** field to **Code** (if necessary) or to a specific code type. Note that the second **Where** field now changes to **Is**.
3. Enter the code and click on the **Search** button.
4. Where more than one company is found that matches your search, these are listed on the left; click on one to display its instruments.



TIP

For a highly specific search, set the **Look For** field to anything other than **Any Instrument**, then click on the **More Criteria** button.

This enables you to add extra criteria to your search. For example, if you click on the **Liquidity** tab, you could specify certain yields, duration or amounts outstanding, either as single values or as a range.

CHAPTER 2

SIMPLE WAYS OF FINDING DATA



REUTERS 3000 XTRA – SEARCH FACILITIES FOR VERSION 4.0


These tools are available if you have Reuters 3000 Xtra version 4.0.

They include a cross-asset, name and code look-up facility, as well as a criteria search that provides sophisticated criteria selection screens for each asset class covering fixed income, equities, indices and economic indicators.

REUTERS LOOKUP

The Reuters Lookup facility is a quick search function for finding companies, stocks, indices, bonds or economic data via a single name or code lookup. Given the full or partial name or any clearing code such as Sedol, ISIN or CUSIP, you can browse through all information and quotes associated with it.

There are two ways of getting into the Reuters Lookup tool:

1. By clicking on the Reuters Lookup button on your toolbar , located on the left-hand side of the command line.
2. Or, type the search command in the command line, and press **CTRL** + **↵** to confirm your search.

Always start by defining what type of search you are making: a name search, bond search or code search.

There are three types of search, depending on how you set the top left field in the dialogue box:

- **Name search** searches by company or issuer name to retrieve securities and their live quotes.
- **Bond search** uses basic criteria, such as issuer name, ticker, coupon and maturity date.
- **Code search** searches by any full or partial security ID or any clearing code.

CHAPTER 2

SIMPLE WAYS OF FINDING DATA

Name Search - GALLAHER GROUP PLC

Name: Contains: Find Stop

| Ticker | Coupon | Maturity | ID | Agency | Rating | Issued |
|--------|--------|------------|----|--------|--------|------------|
| GALHER | 5.75 | 06/02/2013 | | MOO | Baa3 | 15/01/2003 |
| GALHER | 6.625 | 21/05/2009 | | S&P | BBB | 27/04/1999 |
| GALHER | 5.875 | 06/08/2008 | | S&P | BBB | 16/07/1998 |
| GALHER | 5.75 | 02/10/2006 | | MOO | Baa3 | 21/09/2001 |
| GALHER | 6.47 | 30/03/2006 | | S&P | BBB | 14/03/2001 |
| GALHER | 4.875 | 28/01/2005 | | MOO | Baa3 | 16/01/2002 |
| GALHER | 3.003 | 04/12/2004 | | -- | -- | 04/12/2001 |

Previous Display Quotes Display All Quotes OK Cancel Apply



TIP

You can use the arrow buttons to expand and collapse the branches in the left-hand column and you can press ↵ to validate the selection of an issuer.

09

With Bond search, you can add a more specific search in the line where you enter the name, such as maturity date or coupon rate. For example:

BMW >2010

for BMW issues with a maturity greater than 2010.

BMW <5%

for BMW issues with a coupon of less than 5%.

BUND 6% 02/2006

for a German Bundesanleihe with a 6% coupon, maturing in 02/2006

Bond Search - BMW >2010

Bond: Starts With: Find Stop

| Issuer | Ticker | Coupon | Maturity | ID | Currency | Agency | Rating | Issued |
|-----------------------|--------|--------|------------|----|----------|--------|--------|------------|
| BMW FINANCE NV | BMWFNV | 0 | 21/04/2012 | D | EUR | ADF | AA3 | 21/04/1987 |
| BMW FINANCE NV | BMWFNV | 0 | 21/04/2017 | E | EUR | ADF | AA3 | 21/04/1987 |
| BMW FINANCE NV | BMWFNV | 5 | 06/08/2018 | | EUR | MOO | A1 | 22/07/2003 |
| BMW JAPAN FINANCE ... | BMWJAP | 2.256 | 15/05/2015 | | JPY | -- | -- | 15/05/2000 |
| BMW US CAPITAL LLC | BMWCAP | 4.625 | 20/02/2013 | | EUR | MOO | A1 | 04/02/2003 |



TIP


For convenience, you can set up some default values in the Lookup so that you don't have to select them individually each time. Use the command **Tools/Options/Services/Reuters Database Search**.

CHAPTER 2

SIMPLE WAYS OF FINDING DATA

CRITERIA SEARCH

This enables you to perform a criteria search through your database, including indices, options, futures, funds and economic indicators. There are two ways of starting a criteria search:

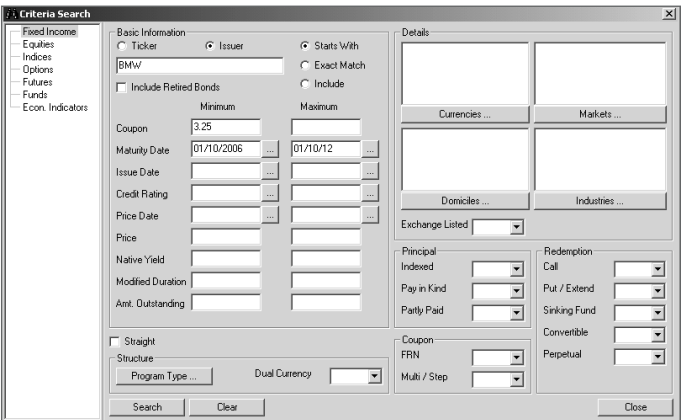
- Click on the criteria search button on your toolbar .
- Press **CTRL + F**.

Equities

For complex equities, you can search on a company level, such as profit/loss, income statements, balance sheet information or market ratios. Or you can search on issue-level information such as consensus estimates or growth rates.

Fixed income

For fixed income, you can search by the main characteristics of a bond, such as ranges of coupons/maturity dates and credit ratings, as well as particular features of the bond, e.g. call, put or sinking fund, or sector information such as market types and where issued.



Once you have selected your criteria, the search will return a result list of all matching stocks or bonds, which you can then sort or select.

DISPLAYING THE RESULTS OF A REUTERS LOOKUP OR CRITERIA SEARCH

Once you have your search results, here are three different ways of displaying the details:

1. Selecting an item and clicking **OK** will put the code into the active frame in your Reuters 3000 Xtra screen.



TIP

A flex sheet is the technical term for a display screen in Reuters Kobra or Reuters 3000 Xtra; these can display real-time prices, graphs and news, or historical, fundamental and analytical information. There are hundreds of pre-built displays in Reuters 3000 Xtra covering all asset classes; some of these are based on Kobra flex sheets; others are based on Microsoft Excel spreadsheets. You can also build your own screens to suit your exact information needs.

2. Selecting the item and right-clicking will give you a selection of different information types for which you can use the RIC.
3. When using the search facility in Microsoft Excel, the search result will be loaded directly into a cell.

ON-LINE DIRECTORY

The On-Line Directory has a new web interface that is much easier to use. It enables you to look up equity and fixed income instruments and click directly through to information displays.



The button that displays the On-line Directory is located on the browser toolbar.

If you are building your own pages in Reuters 3000 Xtra, insert the On-line Directory object into an empty frame.

In the On-line Directory, there are three types of search available to you:

- **name & code search**, where you know the name of a company or the code of an instrument
- **index member search**, where you want to find a company that is a member of a specific index
- **industry sector search**, where you want to find a company in a specific industry sector

CHAPTER 2

SIMPLE WAYS OF FINDING DATA

Online Directory

name & code search

name & code | [index member](#) | [industry sector](#) | [help](#) |

enter text, then click **search by name** or **search by code** :

queensland

☒ starting ☐ including ☐ exact

all code schemes

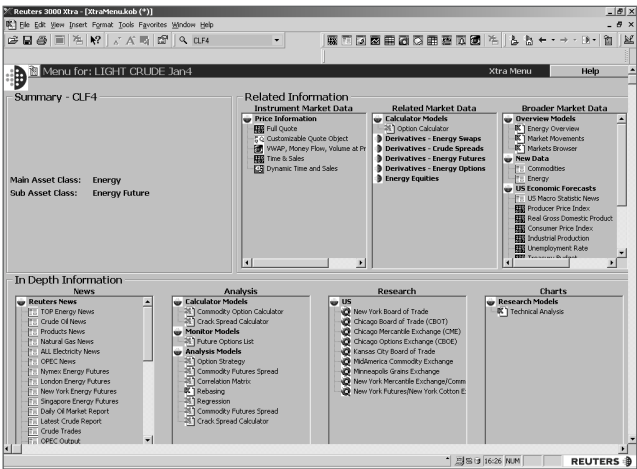
☒ group results ☐ show all (+ warrants)

search by name

search by code

Simply click on the relevant link at the top of the display and make your search. For more detailed information, click on the **help** link, which provides clear and well organised information and instruction.

12



XTRA MENU

The Xtra Menu gives Reuters 3000 Xtra users a simple way of finding every available display that is relevant to a given instrument, from stand-alone charts through to complete pre-built models in Reuters Kobra or Reuters PowerPlus Pro (Microsoft Excel). You can then click to view any display listed.

This can be used for instruments in any asset class. With the Xtra Menu on display, all you need to do is enter the RIC of the instrument in the command line.



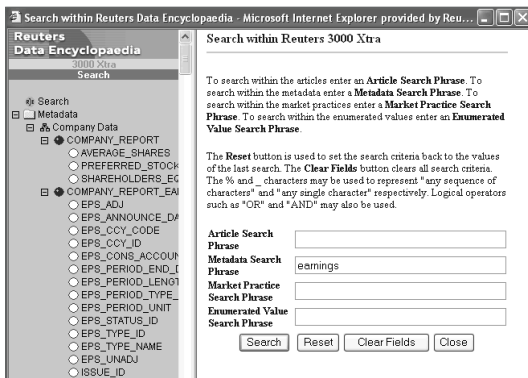
The button for displaying the Xtra Menu is on the Xtra Navigation toolbar.



REUTERS DATA ENCYCLOPAEDIA (RDE)

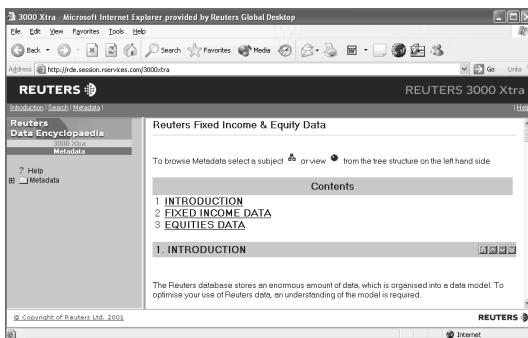
The Reuters Data Encyclopaedia (RDE) is designed to help advanced users of Reuters 3000 Xtra to understand and optimise their use of historical database structures, either when they design their own sheets or use historical data in spreadsheets.

It is available on the Reuters Web at: <http://rde.session.rservices.com/3000xtra>



From here, click on the **Search** link to search for a key word or phrase (for example, earnings). This is displayed in a separate window.

13



Alternatively, click on the **Metadata** link to find your way around the data models for equity and fixed income instruments.



TIP

RDE is also extremely useful to customers' own help desks. The easy-to-navigate format enables them to get straight to the information they need.

HOW TO KEEP TRACK OF DATA THAT HAS CHANGED

Reuters provides enhanced change notifications that help you to navigate the steady flow of detailed data changes that sweep across the world's markets.

This service provides easy, timely and comprehensive access to details of the changes that affect Reuters data, and includes new, changed and deleted data.

CHAPTER 2

SIMPLE WAYS OF FINDING DATA

The change notifications are driven by Reuters, exchanges, contributors and other institutional market data providers. These notifications are worth checking regularly, as they could affect your operations.

Each notification includes a brief summary, a detailed description of the underlying changes and appropriate details for technical users.

You can find this information at the following locations:

Reuters page **CHANGES**.

Reuters page **WORLD/CHANGES1** lists daily RIC additions/drops or changes sorted by country.

The internet: <http://xtraserv.session.rservices.com/datachanges>

The page **CHANGES** and the public internet provide an index of all change notifications and highlight the most significant ones, e.g. euro, fee-liable and short-notice changes.

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THE ALERTS SERVICE

Alerts provide details of unforeseen service interruptions affecting data, plus indications of problem resolution times. This now includes coverage of historical data.

You can find the Alerts service on the page **ALERT**.

For more information on changes to data and Alerts, please contact your local Reuters Sales Office.

A full list of offices can be found on our web site www.about.reuters.com/.

NEW DATA

To make sure you are aware of all the latest key datasets that have become available, you should regularly check the page **DATA**.

There are also associated news codes that cover the latest added data. They can be found on:

NEWDATA/D

News key or **F9** for fixed income

NEWDATA/E

News key or **F9** for equities

NEWDATA/M

News key or **F9** for money

The structure of Reuters data

To handle the complexity and diversity of the financial markets and their instrument types, Reuters has designed a flexible data structure that supports all asset classes.

All data is identified by codes, so to find a piece of information, you need to know the right code.

All codes in this guide appear in a box like this: **REUTERS**.

In this guide, ↵ (the Return key on your keyboard) is the default.

If no other key is mentioned, just press ↵ after you have typed the code in your command line.

WHAT ARE RICS AND PAGES?

There are two main types of code you need to know about to start with:

- **RICS** – these are Reuters Instrument Codes; they define individual financial instruments.

The code for the spot rate of the Swiss Franc is **CHF=**, for example,
and the code for Microsoft stock on NASDAQ is **MSFT.O**.

- **Pages** – these are whole pages of information provided either by Reuters or by other contributors to the Reuters network. They can include text information or sets of different prices.

For example, **CHFX** is the code for JP Morgan Chase's London spot and forward rates.



WHEN TO USE UPPER OR LOWER CASE

Reuters 3000 Xtra allows you to enter pages or RICS in either upper or lower case. There are exceptions: if a code consists of upper and lower-case letters, such as this continuation future **FLGc1**¹ or a RIC that contains brokerage characters, such as **DTEGn.DE**, you need to type exactly that syntax.

There is more information about brokerage characters and continuation futures in the relevant market sections of this guide.

¹ To retrieve this code, you will have to subscribe to the LIFFE exchange.

CHAPTER 3

THE STRUCTURE OF REUTERS DATA

REUTERS INSTRUMENT CODES (RICS)

IMPORTANT NOTE: Remember that RICs are protected by copyright, database rights and trademarks owned by Reuters. You are only allowed to use RICs in the manner and for the purposes specified in your agreement with us. Unless you have agreed any additional uses of RICs with Reuters, this will essentially be only for the retrieval of Reuters data. If you have any questions about your rights to use RICs, please contact your Reuters sales representative.

The rather technical term “RIC” is used to describe the unique codes used by Reuters to identify a piece of Reuters data. They generally represent either one financial instrument or a group of related instruments. These codes are also known as logical records, as they provide a structured means of capturing and displaying data on the Reuters network.

The information that is displayed when you enter a RIC depends on the type of instrument it defines. The display you get for a RIC on a stock traded on the London Stock Exchange is different from the display you get when you enter the RIC for a bond, for example. The bond display will show maturity date, coupon, price or yield, whereas the stock display will show bid, ask and last traded price.

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ADVANTAGES OF RICS

- they have structured coding (which simplifies data manipulation)
- they are clearly identifiable
- they can easily be transferred into spreadsheets, Reuters Graphics or the Graphics Object (RGO) in Reuters 3000 Xtra, or into Reuters Kobra for further processing
- they have market-consistent data location and format

RICs exist in two forms, as a **full quote** and as a **chain** or **tile**.

FULL QUOTES

A full quote provides full information on the requested financial instrument, e.g. **EUR=** for the euro spot rate.

| EUR= | | Latest Rates | | | | | | 23JAN04 17:18 | |
|------|-----------|--------------|-----|--------|------|-------|--------|---------------|--|
| | Bid/Ask | Contributor | Loc | Source | Deal | Time | High | Low | |
| ↑ | 1.2612/16 | BARCLAYS | GFX | BGFX | | 17:18 | 1.2775 | 1.2603 | |
| | 1.2612/15 | | | | | | Close | | |
| | 1.2612/14 | | | | | | | | |

CHAINS AND TILES

A chain or tile is a code that displays a set of related instruments, such as options on a specific stock. With a chain or tile, you can display a whole set of instruments using a single code.

SO WHAT IS THE DIFFERENCE BETWEEN A CHAIN AND A TILE?

The main difference between them is their retrieval method. Chains require the chain key or **F3** key, whereas tiles require the **↵** key, but we come to that in more detail later.

All market sectors make use of either chains or tiles, but not both. The FX and money market sectors use tiles, whereas most of the other market sectors use chains. Both chains and tiles can show all constituents of an index, all delivery months of a future, European spot rates, all at-the-money strikes of an option, all world indices and so on.

A chain is defined either by Reuters or by the organisation that contributes the data. A chain's content and format and the fields displayed can only be changed by the owners of the chain within certain limitations.

When you have a chain or tile on display, you can double-click on the code for any individual instrument to view a full quote on that instrument. Equally, you can copy one or more instrument codes and paste them into a spreadsheet for further processing.

HOW TO DISPLAY A CHAIN

There are three ways of displaying a chain:

- Double-click on any of the chain codes displayed in brackets, such as **<0#.INDEX>**. (All chain codes, when displayed, can be recognised by the 0# at the beginning.)
- Simply type the chain code, then press the function key **F3**. This is your chain key. It executes chain requests and automatically inserts the prefix **0#** in front of the RIC. E.g. enter the RIC without the **0#** e.g. **.INDEX** and press the **F3** key to request the code.
- You can enter the full command including the **0#** and press **↵**, e.g. **0#.INDEX ↵**.

If you have any problems when calling up chains, make sure you have used the correct syntax. See the chapter **Error messages/permissioning** for further information.

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THE STRUCTURE OF REUTERS DATA

Here is an example display of the Italian MIB 30 index chain:

| | | | | | | | | | | | |
|---|-------|------------|----------|---------------|-------|-----------------|--|----------------|--|---------------|-----------------------|
| .MIB30 F3 | | | | | | | | | | | |
| .MIBTE #20344 +0.6 % IFXC1 27305 .MIDEX #26801 +1.09 % EUR=X 1.2291 | | | | | | | | | | | |
| #. | MIB30 | MIB 30 | IDX COMP | ↑ | 27313 | | | | | +0.57 % | +154 at 16:41 H 27513 |
| | | | | | | | | | | | |
| Up 19 | | Down 11 | | Unchanged | | Untraded | | Mkt Vol 425.2m | | at 16:43 | |
| ALLEANZA ASS | | % | | % | | % | | % | | % | |
| B FIDEURAM | | *↓ 4.9000 | | -0.33% 0.160 | | B INTESA | | *#A13.7400 | | 0.37% 0.0500 | |
| B M. PASCHI SIENA* | | *↓ 2.7050 | | 0.11% 0.0030 | | B N LAVORO | | *#A3.1900 | | 0.03% 0.0010 | |
| BANCHE POP UNITE* | | *#A14.9000 | | 0.34% 0.0500 | | BCA ANTONVENETA | | ↓ 15.7500 | | -0.06% 0.0090 | |
| BCO POP VR E NO | | % | | % | | CAPITALIA | | *#A2.5050 | | 0.04% 0.0010 | |
| EDISON | | *#A1.5050 | | -0.2% 0.0030 | | ENEL | | *#A5.3400 | | -0.17% 0.0090 | |
| ENI | | *#A14.7200 | | 0.01% 0.0020 | | FIAT | | *#A6.3800 | | -0.3% 0.0190 | |
| FINMECCANICA | | *#A0.6460 | | 0.02% 0.0001 | | GENERALI ASS | | *#A21.4700 | | -0.09% 0.0200 | |
| LUXOTTICA | | % | | % | | MEDIASET | | ↓ 9.9300 | | -0.2% 0.0200 | |
| MEDIOBANCA | | *#A8.7600 | | 0.11% 0.0100 | | MEDIOLANUM | | *#A6.5700 | | 0.35% 0.0230 | |
| PARMALAT FIN | | % | | % | | RAS | | † 13.3200 | | 0.11% 0.0150 | |
| SAIPEM | | *#A6.2300 | | 0.16% 0.0100 | | SAN PAOLO-IMI | | *#A10.9800 | | -0.21% 0.0230 | |
| SEAT PAG GIALLE | | *#A0.7690 | | -0.13% 0.0010 | | SNAM RETE GAS | | *#A3.3300 | | % | |
| STMICROELEC. N.V | | *↓ 22.4700 | | -0.35% 0.0800 | | TELECOM ITALIA | | *#A2.4300 | | 0.12% 0.0030 | |
| TIM | | *#A4.4000 | | -0.05% 0.0020 | | UNICREDITO | | *#A4.3500 | | -0.02% 0.0010 | |

HOW TO DISPLAY A TILE

Tile names are not preceded by **0#**. A tile can be called up in the display application just like any ordinary page or RIC, simply by typing in the tile name e.g. **EFX=** ↵.

For markets such as foreign exchange and money markets, which use a lot of tiles to show market information, it's more intuitive than calling up a chain.

For example, this is the display for European spot rates. By double-clicking on any field in the display, you will retrieve a full quote with more information.

| | | | | | | | | | | | |
|------|--------------|--------------|--------------|-----|------|------|-------|---------|---------|--|--|
| EFX= | EUROPE SPOTS | | | | | | | | | | |
| RIC | | Bid/Ask | Contributor | Loc | Src | Deal | Time | High | Low | | |
| EUR= | ↓ | 1.2317/22 | CR LYONNAIS | HKG | CLHH | CLHH | 17:38 | 1.2323 | 1.2134 | | |
| JPY= | ↓ | 107.40/7.45 | RABOBANK GT | LON | RAB1 | RABX | 17:38 | 108.37 | 107.40 | | |
| GBP= | ↑ | 1.7466/71 | HSBC BANKPLC | LON | HSC1 | MIXL | 17:38 | 1.7480 | 1.7361 | | |
| CHF= | ↑ | 1.2603/09 | BARCLAYS | GFX | BGFX | | 17:38 | 1.2808 | 1.2600 | | |
| XAU= | ↓ | 408.80/9.55 | AIG INTL | GWH | AIGG | AIGG | 17:38 | 409.00 | 401.75 | | |
| XAG= | ↓ | 5.60/5.62 | AIG INTL | GWH | AIGG | AIGG | 17:38 | 5.61 | 5.48 | | |
| AUD= | ↓ | 0.7440/45 | CIBC | TOR | CIBT | CIBC | 17:38 | 0.7443 | 0.7371 | | |
| CAD= | ↓ | 1.3115/20 | RABOBANK GT | LON | RAB1 | RABX | 17:38 | 1.3258 | 1.3119 | | |
| SEK= | ↓ | 7.3101/61 | BARCLAYS | GFX | BGFX | | 17:38 | 7.389 | 7.3131 | | |
| NOK= | ↓ | 6.6736/66 | BARCLAYS | GFX | BGFX | | 17:38 | 6.7472 | 6.6729 | | |
| DKK= | ↑ | 6.0382/12 | BARCLAYS | LON | BARL | | 17:38 | 6.1039 | 6.0370 | | |
| RUB= | ↑ | 29.3800/00 | DEUTSCHEB M | MOW | DBMO | DBMO | 13:21 | 29.3981 | 29.3620 | | |
| TRL= | ↑ | 1423000/2000 | ISBANK | IST | ISBT | IBIT | 16:04 | 1437000 | 1427000 | | |
| ISK= | ↑ | 73.12/3.17 | LANDSBANKI | RVK | LAND | LAIX | 17:38 | 73.62 | 73.13 | | |
| PLN= | ↓ | 3.7765/60 | WEST LB | WAW | UDLA | WLBW | 17:38 | 3.8160 | 3.7840 | | |
| CZK= | ↑ | 26.059/077 | HSBC BANKPLC | LON | HSC1 | HKEL | 17:38 | 26.340 | 26.074 | | |
| HUF= | ↓ | 214.25/4.91 | COMMERZBUD | BUD | COBH | CBKB | 17:38 | 216.42 | 214.74 | | |
| UAH= | ↓ | 5.3375/01 | CITIBANK | KIE | CITU | CITU | 11:35 | 5.4200 | 5.3375 | | |
| ILS= | ↑ | 4.3710/10 | CITIBANK | NYC | CISE | CIFI | 16:51 | 4.3830 | 4.3530 | | |

For more information on tiles, have a look at the **MONEY** speed-guide.

PAGES

Pages can contain text or numbers, and are mainly used for speed-guides, over-the-counter traded instruments and emerging markets.

Not all these pages are owned by Reuters; some of them are owned by contributors to the Reuters network. Many of these are market players who want to offer their current rates or comment on the state of the market. There are also specialist data providers who offer expert analysis and market commentary.

In some cases, access to these pages is restricted. Brokers, for example, will not be able to see the pages of their competitors. In such cases, it is up to the owner of the page to grant access to the user. But in order to gain access rights to one of these pages, please contact your Reuters representative.

PAGE FORMATS

Some pages are larger than others:

- 64 x 14 (64 characters across x 14 rows down)
- 80 x 25 (80 characters across x 25 rows down)

All pages are accessible the same way; just type the code and press ↵.

If you are interested in displaying your data on the Reuters network, you'll find more information about customer-owned pages in the **Contributed data** chapter of this guide. Alternatively, contact your local Reuters representative to discuss which contribution methods suit you best.

SPEED-GUIDES

Speed-guides are key to finding any data item worldwide on any Reuters datafeed. These are pages provided by Reuters that provide easy access to codes for different markets.

You can find anything you want if you start by displaying the page **REUTERS**. This is the main speed-guide. Just type **REUTERS** ↵ in the command line of your display application.

The speed-guides are organised in a tree structure. So you can move down the hierarchy to find anything you want.

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THE STRUCTURE OF REUTERS DATA

The page **REUTERS** contains all top-level market pages. The next level down is either broken down into country names, which is a very popular option, or into two parts separated by /. One part is a reference to the marketplace or instrument involved and the second is a reference to the overall market sector, for example: **FR/DEBT**.

To display the next level of information, just double-click on the appropriate code in the display. The page for that code is then displayed, and you can keep double-clicking on the codes you see displayed until you reach what you need.

Alternatively, you can display a speed-guide by typing the code and pressing ↵.

FIELD IDENTIFIERS (FIDS)

Field identifiers, as the name indicates, identify each unique field of a RIC, such as LAST or NET CHANGE. Each RIC has a given set of FIDs, which reflect the fields that it needs for its market. On a display, you will see the most relevant information about a RIC. However, there are usually more FIDs available for a RIC than you see on a display.

WHY DO YOU NEED TO KNOW ABOUT FIDS?

You will need FIDs when using RICs in spreadsheets and when creating your own lists of RICs and you want to look at your own set of fields.



In Reuters 3000 Xtra, there is a button on the toolbar called **Display All Fields**, which allows you to toggle between the full quote and all the fields available.

FIELD NUMBERS

Every FID has a unique field number, which you can use as an alternative to the FID. For example, the field number for the closing price is 21. Field numbers are the same for Reuters 3000 Xtra and the Reuters Terminal, whereas the FIDs are not. Using numbers instead of FIDs can fractionally improve the update rate of your spreadsheet. To help you with the most frequently used FIDs and field numbers per market, we have included a table at the end of most of the chapters in this book.



IN BRIEF: RICS AND PAGES

Reuters uses RICs and pages to display data.

RICs (Reuters Instrument Codes) are codes that provide a structured means of retrieving data.

They can be displayed as

- a) **Full quotes** (showing all information about one financial instrument) or
- b) **Chains and Tiles** (showing key information on several financial instruments)

To call up full quotes and tiles, simply press the **↵** key.

To call up chains, which can be identified by 0#, type the code without the 0# and press **F3**, the chain key.

Pages are used by Reuters for speed-guides such as **REUTERS**, and by financial institutions such as banks and brokers to display prices or market commentary.

See **CONTRIBUTIONS** and **BROKER**.

Pages are also used by third-party data providers, who take advantage of the Reuters network to provide specialist data or commentary. See **SPECIAL** for a list of all specialist data providers.

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THE STRUCTURE OF REUTERS DATA

THE GENERAL RIC STRUCTURE

RICs are built from different elements that are used to identify different aspects of the information you want to view. RICs generally include some, but not necessarily all, of the following elements:

- A RIC root
- Period or time intervals
- The instrument identifier
- One or more delimiters
- A source code

These elements are necessary because of the diversity of markets that Reuters covers, and to avoid possible duplication of codes.

THE RIC ROOT

Because there are often several different issues or financial instruments based around a single entity, the RIC root identifies the most basic aspect of the instrument.

Examples:

Equity RIC roots: The RIC root for the RIC of FIAT traded in Milan (**FIA.MI**) is **FIA**

Money RIC roots: The RIC root for the euro one-month deposit (**EUR1MD=**) is **EUR**

Futures RIC roots: The RIC root for the short sterling future traded at LIFFE (**FSSZ4**) is **FSS**

WHAT IS THE ADVANTAGE OF KNOWING ABOUT RIC ROOTS?

If you know the RIC root and the other elements that make up specific instrument or code types, then you can just add these together to get the code you need. For example, if you know that the RIC root for a future is **FES** (for the Euro Swiss franc future traded at LIFFE) and you know that a future chain is indicated by a colon, then you automatically know that the chain RIC for that future is **FES:F3**.

They also make your life very easy when you use data in spreadsheets, for example. You can split RICs into their components and therefore make efficient use of your live links in Excel.

In the example below, we have split up the cross-rate **GBPMYR=R** into its components. So, if we now wanted to change the cross-rate from Malaysian Ringgit to another currency, e.g. HKD for Hong Kong dollar, all we need to do is replace the contents of the cell D5 with HKD, and Microsoft Excel will immediately update the information. This also works well for looking at benchmarks in different countries or any other instrument.

| fx =C5&D5&E5&F5 | | | | | | | |
|-----------------|-----|-----|-----|----------|---|--------|--------|
| B | C | D | E | F | G | H | I |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | BID | ASK |
| | GBP | MYR | = R | GBPMYR=R | | 6.5541 | 6.5593 |

PERIOD OR TIME INTERVALS

The delivery period is a characteristic of the transaction, as opposed to maturity or expiration, which are characteristics of the instrument.

Examples of period or time intervals can be found in foreign exchange and money RICs:

ON (overnight), SW (Spot week), 3X6 (3 months over 6 months), 1Y (one year).

Here are those periods within some RICs:

| | | | |
|---------------|---------------|-----------------|----------------|
| EURON= | EURSW= | JPY3X6F= | USD1YD= |
|---------------|---------------|-----------------|----------------|

These are primarily used in foreign exchange or money market RICs. For more information on period or time intervals, please see the **Foreign exchange and money markets** chapter of this guide.

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THE STRUCTURE OF REUTERS DATA

DELIMITERS

Delimiters are used to separate different components of a RIC. The following separators are currently used in RICs:

| SEPARATOR | INSTRUMENT | EXAMPLE CODES |
|--|---|--|
| ! | Bond Issuer (chain) (Sometimes used within a dummy code for Reuters internal RICs) | US=AA! F3 |
| = | Foreign exchange, money and capital markets | JPY1MD= |
| / (used as a prefix) / (used within a speed-guide name) | Closing or delayed data speed-guides | /.FTSE WORLD/INDICES1 |
| = X = S | Delayed data for currencies | EUR=X (10 min delay) EUR=S (2 min snapshot) |
| . | Equities and equity options | RTR.L or RTR*.L F3 |
| * (plus market separator) | Equity options (chain) | BAYG*.EX F3 |
| : | Futures chains | FEI: F3 |
| ^ | Expired futures (only available in Graphics or spreadsheets) | YANF8^9 |
| . | Indices and statistics | .GDAXI |
| + | Options on futures (chain) | FSSZ5+ F3 |
| ++ | At-the-money options | RTR*.L++ F3 or FSS++ F3 |
| - | Physical commodities | SUG-RCANE-EU |

SOURCE CODES

The source code is used to indicate the source of the data. It is usually the last component of a RIC.

The most common source codes are:

- Contributor code or Market Maker identifier
- Exchange identifier

CONTRIBUTOR CODE OR MARKET MAKER IDENTIFIER

A contributor code is used to identify any organisation that contributes information to the Reuters network.

The Market Maker identifier is used to identify a Market Maker who contributes quotes to a particular instrument.

The code is unique and consists of four upper-case letters.

e.g. **NL009260749=DBBL**

This code identifies a Dutch Government bond, with the rate supplied by Deutsche Bank in London (DBBL).

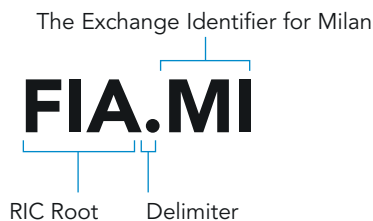
EXCHANGE IDENTIFIER

The exchange identifies the exchange where an instrument is traded. It consists of up to three upper- or lower-case letters.

Exchange identifiers for cash prices can be found on page **STOCL** and beyond.

Identifiers for derivatives exchanges are on page **RULES3**.

Example: The RIC **FIA.MI**, which we used earlier, consists of



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THE STRUCTURE OF REUTERS DATA



IN BRIEF: GENERAL RIC STRUCTURE

A RIC can be constructed by just knowing its components, which is a very effective way of working in data display applications or spreadsheet applications.

Diverse market conventions and instrument types make it necessary to have different RIC structures for each market.

The main elements of a RIC are:

1. RIC ROOT

Codes like **RTR**, **SUG**, **EUR**, **CHF**

2. PERIOD AND TIME INTERVALS

Codes like **ON**, **SN**, **SW**, **1M**, **2M**, **3M**, **6M**, **9M**, **1Y**, **2Y**, **1X4**, **2X5**, **1X6**, etc.

3. DELIMITERS

Characters such as **+** **=** **.** **/** **:** **!** ***** **^**

4. SOURCE CODES

- Contributor/Market Maker identifier
- Exchange identifier

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TIP 1

To see a full quote from chain of data, just double-click on the item.







TIP 2



All news stories of all companies in an index chain can be viewed by just activating the window with the chained information and then pressing the News key (**F9**).

Equity markets

TOOLS FOR FINDING DATA

| TOOLS | CONTENT | WHERE TO FIND IT |
|--|---|---|
| Reuters 3000 Xtra Search version 4.5 | From simple searches on a company or index name through to complex criteria searches based on specific details, such as P/E ratios |  Click on the Search button beside the command line. (Or simply type a company name and press CTRL and ↵ .) |
| Reuters 3000 Xtra criteria search version 4.0 | A flexible search engine that allows you to define criteria searches on the company and issue level. This search function is described in more detail in Simple ways of finding data . |  Click on the Criteria Search icon on the toolbar.  For any version below version 4, click on the Model Browser icon first, then click on the Binoculars icon in the dialogue box displayed. |
| Reuters 3000 Xtra Lookup version 4.0 | Search facility on command line of Reuters 3000 Xtra. This is described in more detail in Simple ways of finding data . | Command line. This search function is described in more detail in Simple ways of finding data . |
| Xtra Menu | If you know the RIC of an instrument, this shows you all the different displays that are available. |  Click on the Xtra Menu button on the Reuters 3000 Xtra navigation bar (v4.5 and above). |
| Open Access Diagnostics | Shows how SQL is interrogating the database. | Click on the Windows Start button, then select Programs/Reuters Administrative Tools/Open Access/Open Access Diagnostics . If SQL events are not being logged, go to Reuters 3000 Xtra and click on Tools/Options . In the dialogue box displayed, expand Services and Reuters Database Search . Make sure that Query Storage is set to Yes . |
| Data Definition Browser | Access to the tables used by RDE (see below). This helps you to find historical data categories and fields that can be used in spreadsheets. | In Reuters 3000 Xtra, click on Tools/Database/Data Definition Browser . |

TOOLS FOR FINDING DATA, CONTINUED

| TOOLS | CONTENT | WHERE TO FIND IT |
|----------------------------|---|---|
| Reuters Data Encyclopaedia | Contains data about data – the underlying data structures of historical data. Use this if you want to where in the database specific data items are retrieved from. | <p>On the Reuters Web: http://rde.session.rservices.com/</p> <p> Reuters 3000 Xtra. Use the Search link to search by keyword. Search results are displayed on the left of the window.</p> <p> TIP: Use the Metadata Search Phrase field and try to restrict your search to a single keyword.</p> |

SPEED-GUIDES, RICS AND PAGES

EQUITY

The equity speed-guide provides all codes for real-time data, news and economic data.

WORLD/INDICES1

All equity indices.

WORLD/CHAR1

All brokerage characters.

WORLD/TAS1

Index to all countries with Time and Sales information with explanations of the meaning of the fields in the display.

WORLD/DELAY1

List of exchanges offering delayed information, including the length of the delay.

DATA

Information on new data and codes.

BACKGROUND

A good place to find other useful speed-guides.

For speed-guides that begin with **WORLD**, you can usually go straight to a specific country by using the two-character country code at the beginning instead. For example, **DE/INDICES1** shows all indices in Germany; **IT/CHAR1** gives you brokerage characters for Italy.

FULL QUOTES FOR EQUITIES

Most equity RICs are based on short alphabetic codes based on the company name. This is followed by an identifier that indicates where the instrument is traded. For example:

MSFT.O Microsoft Corp (NASDAQ)

ULVR.L Unilever plc, (LSE)

SCHG.DE Schering AG (Xetra)

In all these cases, the characters before the dot are the RIC root and the characters after the dot are the exchange identifier.

You can find a list of all exchange identifiers on pages **EXCHID01** to **EXCHID09**.

In most cases, the RIC root is the same as the code used by the exchange. For this reason, some equity RICs are numeric. Most of these are Asian, for example:

7267.T HONDA motor Co. (Tokyo Stock Exchange)

0941.HK China Mobile (Hong Kong) Ltd. (Hong Kong Stock Exchange)

AMERICAN CONSOLIDATED QUOTES

In North America, there are consolidated quotes, where the best available rates can be taken from one of several exchanges (rather than a single exchange).

For these, all you need to use is the RIC root. For example: **GM**

EQUITY RICS INCORPORATING BROKERAGE CHARACTERS

Brokerage characters can be incorporated into the RICs of many equity instruments. These characters usually appear as an extension to the RIC root, and are used to distinguish different types of share from ordinary shares of a security issue. They can be a combination of special characters and/or lower-case letters, and they differ from country to country.

You can find reference information on all brokerage characters in the speed-guide **EQUITY** under **WORLD/CHAR1** and **WORLD/CHAR2**. You can go directly to a specific country by using the two-character country code at the beginning, instead of **WORLD**. For Chile, for example, go to **CL/CHAR1**.

It's worth noting that brokerage characters are one of the few cases when you need to be exact in your use of upper- and lower-case characters in a RIC. RIC roots must appear in capital letters, brokerage characters in lower-case letters, and the exchange identifier again in capital letters. For example: **DBKGn.DE** for Deutsche Bank (registered) name shares.

There are some special function keys on the keyboard that allow you to enter the most common brokerage characters easily:

| BROKERAGE CHARACTER | KEYBOARD FUNCTION KEY | SPREADSHEET SYMBOL |
|---------------------|-----------------------|--------------------|
| Units | Shift F4 | _u |
| Preferred | Shift F5 | _p |
| Rights | Shift F6 | _r |
| Warrants | Shift F7 | _t |
| When issued | Shift F8 | _w |

For example, when entering a warrant, type **AMMB_t.KL** or type **AMMB** press **Shift F7** then type **.KL**.

EQUITY INDICES

All major equity indices always start with a **dot** in front of the code. The best example is the chain that retrieves all equity indices globally: **.INDEX F3**

There are two ways of viewing an equity index:

- You can view the index value itself as a full quote. This shows information such as its current value, the previous day's close and today's open, and the day high and low. Exchanges provide most equity indices free of charge.
- You can view the constituents of the index as a chain – showing the instruments that make up the index. This type of display will also show the key values of the index itself.

So, to view the Swiss market index, type **.SSMI** ↵. This is simply a full quote that shows you all information about the index itself:

| .SSMI | | | | SWISS MARKET IND 998089 | | | | /SMX CHF | | | | 13NOV03 12:58 | | | |
|----------|-------------|-----------|----------|-------------------------|--|--|--|-------------|--------|--|--|---------------|--------------|------|--|
| Value | Net Chng | Pct. Chng | PE | | | | | | | | | News | Weighting | **** | |
| 5314.7 | +44.1 | | | | | | | | | | | | | | |
| 5314.7 | Cls 12NOV03 | High | 5328.4 | | | | | Pr.Yr. High | 6740.6 | | | | | | |
| 5314.7 | 5270.6 | Low | 5304.0 | | | | | Pr.Yr. Low | 4333.1 | | | Ask | 5317.4 | | |
| 5314.7 | Open | | Yr. High | 5445.2 | | | | Life High | 8489.0 | | | 21JUL98 | | | |
| 5314.6 | Cls. Pr. Yr | | Yr. Low | 3618.0 | | | | Life Low | 1279.0 | | | 15JAN91 | | | |
| Moves | | | | | | | | | | | | | | | |
| 4630.8 | | | | | | | | | | | | | | | |
| Volume | Turnover | | | | | | | | | | | ISN | CH0009980894 | | |
| 49999410 | 255585152 | | | | | | | | | | | | | | |

By contrast, a chain will show the constituents of the index. For example, **.SSMI F3** shows the constituents of the Swiss market index:

| .SSMI | | | | SWISS MARKET IND | | | | 5313.0 | | | | +0.8% | | | | +42.4 | | | | at 13:00 | | | | H 5328.4 | | | | L 5304.0 | | | |
|------------------|---------|-------------|----------|------------------|--------|--------|-------|--------|--|--|--|-------|--|--|--|-------|--|--|--|----------|--|--|--|----------|--|--|--|----------|--|--|--|
| Up 20 | Down 4 | Unchanged 2 | Untraded | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ABB LTD N | +8.37 | 2.7% | 0.22 | ADECO N | 80.65 | 1.0% | 0.80 | | | | | | | | | | | | | | | | | | | | | | | | |
| BALLOISE HLD N | +56.75 | 2.07% | 1.15 | CIBA SPECIAL N | 89.95 | 2.33% | 2.05 | | | | | | | | | | | | | | | | | | | | | | | | |
| CLARIANT N | +18.35 | % | | CS GROUP N | 44.85 | 1.59% | 0.70 | | | | | | | | | | | | | | | | | | | | | | | | |
| CIVAUDAN N | +598.00 | -0.99% | -6.00 | HOLCIM N | 58.55 | 2.09% | 1.20 | | | | | | | | | | | | | | | | | | | | | | | | |
| JULIUS BAER I | +435.00 | 1.05% | 4.50 | KUDELSKI | 44.40 | 3.14% | 1.35 | | | | | | | | | | | | | | | | | | | | | | | | |
| LOMZA GRP AG N | +65.00 | -0.31% | -0.20 | NESTLE AG N | 298.50 | -0.33% | -1.00 | | | | | | | | | | | | | | | | | | | | | | | | |
| NOVARTIS N | +51.90 | 0.87% | 0.45 | RICHEMONT I | 31.80 | 4.26% | 1.30 | | | | | | | | | | | | | | | | | | | | | | | | |
| ROCHE GS | +116.00 | 1.31% | 1.50 | SERONO I | 907.00 | 0.78% | 7.00 | | | | | | | | | | | | | | | | | | | | | | | | |
| SGS N | +747.00 | 0.54% | 4.00 | SWATCH GROUP I | 149.75 | 2.39% | 3.50 | | | | | | | | | | | | | | | | | | | | | | | | |
| SWATCH GROUP N | +30.00 | 2.21% | 0.65 | SWISS LIFE HLDG | 227.00 | -0.77% | -1.75 | | | | | | | | | | | | | | | | | | | | | | | | |
| SWISS REINSUR N | +85.05 | 0.77% | 0.65 | SWISSCOM N | 285.50 | % | | | | | | | | | | | | | | | | | | | | | | | | | |
| SYNGENTA N | +75.60 | 0.93% | 0.70 | UBS AG N | 54.30 | 0.06% | 0.05 | | | | | | | | | | | | | | | | | | | | | | | | |
| UNIKAS HOLDING N | +178.50 | 1.71% | 3.00 | ZURICH FIN N | 176.50 | 2.02% | 3.50 | | | | | | | | | | | | | | | | | | | | | | | | |



TIP

Reuters 3000 Xtra users can use the Equity Views to check for index constituents, leavers and joiners, and more. Right-click on the index RIC and select **Related Company Data**.

| Internet Explorer Browser: http://xtra.session.rservices.com/xcardstra/RIC-.FTSE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|-------|--------|-----|-------|----------|----------|-----------------------------|--|--|--|--|--|--|--|-----------|-----|-------|-----|----|----------|----------|----------------|--------------------------|--|--|--|--|--|--|--|----------|-------|--------|-----|-------|-------|------|----------------------|----------|-------|-------|-----|-------|-------|------|-----------------------------|----------------|-------|--------|-----|---|------|------|-------|------------------|-------|-----|-----|-------|-------|------|--------|----------------|-------|-----|-----|-------|-------|------|-------|---------------|-------|-----|-----|-------|-------|------|-----------|---------|-------|-----|-----|-------|-------|------|--------|--------------|-------|-------|-----|---|-------|------|----------------------------|----------------|------|-------|-----|---|-------|------|--------|
| REUTERS Indices Views | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Code is Enter code: FTSE GO News Quote Chart Research Top News Tear | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Overview Indices | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| FTSE 100 Index Support | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| You are here: Indices >> Overview >> Indices | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <div><div><div>+</div><div>Royal & Sun All</div><div>RYA.L</div><div>23Jun03</div></div><div><div>+</div><div>Canary Wharf Gp</div><div>CWG.L</div><div>15Apr03</div></div><div><div>+</div><div>Innorent Hotels</div><div>INH.L</div><div>15Apr03</div></div><div><div>+</div><div>Mitchels & But</div><div>MAB.L</div><div>15Apr03</div></div><div><div>+</div><div>Six Continents</div><div>SVC.L</div><div>15Apr03</div></div><div><div>+</div><div>British Airways</div><div>BAY.L</div><div>24Mar03</div></div><div><div>+</div><div>Cable & Wireless</div><div>CWL.L</div><div>24Mar03</div></div><div><div>+</div><div>Foreign Direct Inv</div><div>FRCL.L</div><div>24Mar03</div></div><div><div>+</div><div>Imvionys</div><div>ISVS.L</div><div>24Mar03</div></div><div><div>+</div><div>Kellogg Group</div><div>KEL.L</div><div>24Mar03</div></div><div><div>+</div><div>Provident Fin</div><div>PRO.L</div><div>24Mar03</div></div><div><div>+</div><div>Rolls-Royce Gp</div><div>RR.L</div><div>24Mar03</div></div></div> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Index Constituents (Click column title to sort data) Export data to Excel Price Chart Help 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table><tr><th>Company A</th><th>RIC</th><th>Close</th><th>Key</th><th>PE</th><th>% Change</th><th>% Weight</th><th>Current Sector</th></tr><tr><td colspan="8">No. of Constituents: 102</td></tr><tr><td>3i Group</td><td>III.L</td><td>616.25</td><td>Gbp</td><td>21.62</td><td>-4.01</td><td>0.37</td><td>Investment Companies</td></tr><tr><td>AB Foods</td><td>ABF.L</td><td>569.5</td><td>Gbp</td><td>13.53</td><td>-0.44</td><td>0.21</td><td>Food Producers & Processors</td></tr><tr><td>Abbey National</td><td>ANL.L</td><td>547.75</td><td>Gbp</td><td>-</td><td>0.23</td><td>0.75</td><td>Banks</td></tr><tr><td>Alliance Unichem</td><td>AUL.L</td><td>519</td><td>Gbp</td><td>14.24</td><td>-1.70</td><td>0.13</td><td>Health</td></tr><tr><td>AllianceUnicem</td><td>ALL.L</td><td>902</td><td>Gbp</td><td>12.24</td><td>-0.44</td><td>0.41</td><td>Banks</td></tr><tr><td>Allied Domecq</td><td>ALD.L</td><td>410</td><td>Gbp</td><td>12.97</td><td>-2.44</td><td>0.44</td><td>Beverages</td></tr><tr><td>Amerham</td><td>AME.L</td><td>739</td><td>Gbp</td><td>41.99</td><td>-0.14</td><td>0.49</td><td>Health</td></tr><tr><td>Amerscap PLC</td><td>AVZ.L</td><td>406.5</td><td>Gbp</td><td>-</td><td>-2.63</td><td>0.31</td><td>Speciality & Other Finance</td></tr><tr><td>Anglo American</td><td>AA.L</td><td>1,248</td><td>Gbp</td><td>-</td><td>-1.50</td><td>1.76</td><td>Mining</td></tr></table> | | | | | | | | | | | | | | | Company A | RIC | Close | Key | PE | % Change | % Weight | Current Sector | No. of Constituents: 102 | | | | | | | | 3i Group | III.L | 616.25 | Gbp | 21.62 | -4.01 | 0.37 | Investment Companies | AB Foods | ABF.L | 569.5 | Gbp | 13.53 | -0.44 | 0.21 | Food Producers & Processors | Abbey National | ANL.L | 547.75 | Gbp | - | 0.23 | 0.75 | Banks | Alliance Unichem | AUL.L | 519 | Gbp | 14.24 | -1.70 | 0.13 | Health | AllianceUnicem | ALL.L | 902 | Gbp | 12.24 | -0.44 | 0.41 | Banks | Allied Domecq | ALD.L | 410 | Gbp | 12.97 | -2.44 | 0.44 | Beverages | Amerham | AME.L | 739 | Gbp | 41.99 | -0.14 | 0.49 | Health | Amerscap PLC | AVZ.L | 406.5 | Gbp | - | -2.63 | 0.31 | Speciality & Other Finance | Anglo American | AA.L | 1,248 | Gbp | - | -1.50 | 1.76 | Mining |
| Company A | RIC | Close | Key | PE | % Change | % Weight | Current Sector | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| No. of Constituents: 102 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3i Group | III.L | 616.25 | Gbp | 21.62 | -4.01 | 0.37 | Investment Companies | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| AB Foods | ABF.L | 569.5 | Gbp | 13.53 | -0.44 | 0.21 | Food Producers & Processors | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Abbey National | ANL.L | 547.75 | Gbp | - | 0.23 | 0.75 | Banks | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Alliance Unichem | AUL.L | 519 | Gbp | 14.24 | -1.70 | 0.13 | Health | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| AllianceUnicem | ALL.L | 902 | Gbp | 12.24 | -0.44 | 0.41 | Banks | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Allied Domecq | ALD.L | 410 | Gbp | 12.97 | -2.44 | 0.44 | Beverages | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Amerham | AME.L | 739 | Gbp | 41.99 | -0.14 | 0.49 | Health | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Amerscap PLC | AVZ.L | 406.5 | Gbp | - | -2.63 | 0.31 | Speciality & Other Finance | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Anglo American | AA.L | 1,248 | Gbp | - | -1.50 | 1.76 | Mining | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |



If you are building your own screens, use the Index Movers object in Reuters 3000 Xtra to see which stocks are exerting the greatest influence (both up and down) on an index.

CHAPTER 4

EQUITY MARKETS

COMPANY NEWS

Many displays give an indicator if there is a recent news item related to the instrument. This could be:

| RIC | Stock Name | Last |
|---------|----------------|---------|
| ADSG.DE | ADIDAS SALOMON | ↓ 76.00 |
| ALVG.DE | ALLIANZ AG | ↓ 77.55 |
| ALTG.DE | ALTANA | ↑ 53.30 |
| BASF.DE | BASF AG | ↑ 38.50 |

- An asterisk symbol (*) near a RIC. Double-click on the asterisk to view the news item.

| RIC | Stock Name | Last |
|---------|----------------|---------|
| ADSG.DE | ADIDAS SALOMON | ↓ 76.00 |
| ALVG.DE | ALLIANZ AG | ↓ 77.55 |
| ALTG.DE | ALTANA | ↑ 53.30 |
| BASF.DE | BASF AG | ↑ 38.50 |

- A time displayed in the News field. Double-click on the time to display all the recent news headlines.

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If you're building your own screen, insert a News object, then enter the company RIC on the command line. Wherever a RIC is displayed in Reuters 3000 Xtra, you can right-click and select **Related News**.

TOP NEWS

This provides Reuters 3000 Xtra users with newspaper-like pages in a convenient browser format. Go to: <http://topnews.session.rservices.com>

From here, the menu on the left will take you to specific sectors.

The screenshot shows the Reuters Top News website interface. The main headline is "U.S. 2nd-qr economic growth faster than expected; consumer confidence falls". Below it, there's a sub-headline "Nokia restructures to meet competitive threat". The left sidebar contains a "News Search" box and a list of categories: Global Economy, U.S. Companies, Emerging Markets, European Companies, Asian Companies, World Politics & General, Foreign Exchange, Fund Management, Fixed Income, Media, Technology, Telecommunications, Banking and Financials, Health, Consumer products & retail, and Corporate Finance. The right sidebar features a "Charts (Snapshot)" section with a line chart for "Dow Jones Industrial Average" and a "Features/Special Reports" section with a headline "PC recovery?".

GLOBAL PRESS WATCH

As a research tool, use Global Press Watch (which is available to all Reuters 3000 Xtra users). This contains news from more than 550 different publications, including The Economist, The Washington Post and The Financial Times. When building your own screens, insert the Global Press Watch object. Most news codes are the same as those for Reuters news, for example, **E** for equity news. So, **DRU AND BE** finds headlines of articles relating to pharmaceuticals in Belgium.

| | |
|--|--|
| Global Press Watch - 13:15 04Dec03 - 45 headline(s) found (within the last 7 days) | |
| 01Dec03 | US may revive bid for UN ban on stem cell research. [lba] |
| 01Dec03 | Innogenetics capital hike subscription begins Weds. [lba] |
| 01Dec03 | Bourse de Bruxelles - Valeurs de clôture du Bel 20. [belgaf] |
| 01Dec03 | U.S. court dismisses HRT drug lawsuit - Solvay. [lba] |
| 01Dec03 | Belgian Omega Pharma Creates 2,079 Jobs in 1998-2002, Ranks 2nd in Europe's 500 [belgnd] |
| 01Dec03 | 'Je bent meer dan puistjes alleen'. [demorg] |

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SECOND-LEVEL (ORDER BOOK OR MARKET MAKER) CHAINS

Some order-driven exchanges offer market-maker or depth-of-market information. The depth of the market can be viewed by simply typing the RIC and confirming with the Chain key **F3**. For the order book on Vodafone, you'd type **VOD.L F3**.

| | | | | |
|-----------------------|---|-------------|-------------------|------------------|
| VOD.L *VODAFONE GROUP | | Prv | 144 1/4 - 144 1/2 | REUTERS |
| SET1 FE10 | GBP | XD | CLS | GMT 17:38 |
| Ac.Vol | 429.5m | Net - 1 1/4 | Cls 22JAN | 146 CIsPrc |
| Turnover | 595.6006 | x1M | LastUT | 144 3/4 |
| DrBk Vol | 193156288 | | LstVol | 10308879NMIS |
| DrBk VWAP | 144.796 | | OrBk Open | 146News |
| DrBk Turnover | 279.68161 | | OrBk High | 146Sector |
| DB Moves | 3676 | | OrBk Low | 144LastVol |
| Last 17:13 | ↑ C 144.2432 C 144.2432 L 143.9615 L 144.5481 | | | 144.68 |
| EuropeanPrice | 1772618 | LSE | 144.50/144.75 | LSE 821639 17:13 |
| 8 | 1772618 | 144.50 | C 144.75 | 821639 2 |
| 7 | 1468946 | 144.25 | 145.00 | 2965405 8 |
| 12 | 1628388 | 144.00 | 145.25 | 2282164 8 |
| 5 | 305632 | 143.75 | 145.50 | 3508270 9 |
| 10 | 2241145 | 143.50 | 145.75 | 1187182 5 |
| 8 | 967242 | 143.25 | 146.00 | 17703 3 |
| 11 | 1557800 | 143.00 | 146.25 | 182219 4 |
| 4 | 95685 | 142.75 | 146.50 | 417980 4 |
| 5 | 613009 | 142.50 | 146.75 | 140652 4 |
| 5 | 213278 | 142.25 | 147.00 | 126054 4 |
| 75/181 | 10864t | Total | Total | 11649t 51/177 |

NASDAQ VIEWS

Reuters 3000 Xtra provides a series of objects designed to give you sharp insight into the state of the market:

- NASDAQ Level 2 summary** enables you to create a list of stocks with ideal information for NASDAQ
- NASDAQ Level 2 Chart** graphically pinpoints liquidity for a chosen stock
- NASDAQ Level 2 Market Maker** shows the full depth of market on a selected stock by Market Maker



TIP

Use **CTRL+L** to link your NASDAQ Level 2 Summary to the Chart or Market Maker display. Then you simply need to double-click on a specific stock in the summary to change the other two displays.

TIME AND SALES

A Time and Sales display logs all trading activity for a given exchange-traded company over the last 13 calendar days.

The Time and Sales log is a snapshot, and is up-to-date at the moment it is requested. The display is not updated automatically. To update a log that is already on display, press **F8**.

The trade details in the log are displayed in reverse chronological order, i.e. the most recent trades are listed first. The fields of information displayed for each trade are determined by the stock exchange, so they differ from country to country.

For Fiat Milan, for example, type **FIA.MI** **F8**

| EFIA.MI | | FIAT | | | | |
|-------------|-------|--------|---------------|-------------|------|---------|
| 04DEC 14:39 | 3000 | 6.6600 | 6.6600-6.6700 | 3352x3153 | 2432 | 6532185 |
| 04DEC 14:39 | 3000 | 6.6600 | 6.6600-6.6700 | 3352x3153 | 2431 | 6529185 |
| 04DEC 14:39 | 1000 | 6.6600 | 6.6600-6.6700 | 6352x3153 | 2430 | 6526185 |
| 04DEC 14:39 | 5000 | 6.6600 | 6.6600-6.6700 | 7352x3153 | 2429 | 6525185 |
| 04DEC 14:39 | 2100 | 6.6600 | 6.6600-6.6700 | 14452x3153 | 2428 | 6520185 |
| 04DEC 14:39 | 50 | 6.6600 | 6.6500-6.6600 | 13403x1318 | 2427 | 6518085 |
| 04DEC 14:39 | 180 | 6.6600 | 6.6500-6.6600 | 13403x1318 | 2426 | 6518035 |
| 04DEC 14:39 | 1318 | 6.6600 | 6.6500-6.6600 | 13403x1318 | 2425 | 6517855 |
| 04DEC 14:39 | 30000 | 6.6600 | 6.6500-6.6600 | 13403x31318 | 2424 | 6516537 |
| 04DEC 14:38 | 1000 | 6.6500 | 6.6500-6.6600 | 14403x31318 | 2423 | 6486537 |
| 04DEC 14:38 | 6000 | 6.6600 | 6.6500-6.6600 | 14403x37318 | 2422 | 6485537 |
| 04DEC 14:37 | 500 | 6.6500 | 6.6500-6.6600 | 14903x37318 | 2421 | 6479537 |
| 04DEC 14:37 | 1000 | 6.6500 | 6.6500-6.6600 | 15903x37318 | 2420 | 6479037 |
| 04DEC 14:37 | 100 | 6.6500 | 6.6500-6.6600 | 16003x37318 | 2419 | 6478037 |
| 04DEC 14:37 | 1000 | 6.6600 | 6.6500-6.6600 | 16003x37318 | 2418 | 6477937 |
| 04DEC 14:37 | 50 | 6.6600 | 6.6500-6.6600 | 16003x37318 | 2417 | 6476937 |
| 04DEC 14:37 | 10000 | 6.6600 | 6.6500-6.6600 | 16003x37318 | 2416 | 6476887 |

Alternatively, just put a lower-case **t** in front of the RIC and press **↵**. For example:

tFIA.MI **↵**

See **WORLD/TAS1** for an explanation of the fields displayed for each country. Begin with a specific country code to go directly to that country; for example, **CA/TAS1** for Canadian exchanges.



TIP

For more details about Time and Sales, see page **TAS/HELP**.



If you are building your own screens in Reuters 3000 Xtra, use the Intraday Viewer object to view filtered Time and Sales for a stock over a selected period. This also displays WAP for the selected period.

EQUITY VIEWS

Reuters 3000 Xtra users have access to Equity Views. These are web-based displays that give you easy access to a whole range of information on a company. To view these details on a company, right-click on the RIC and select **Related Company Data**.

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| Background | | Company Report (EUR) | | Key Ratios | |
|-----------------------------|------------------------|---------------------------------|-----------|---|--------------------------------------|
| ISIN Code | DE0007172009 | Report Date | 31Dec02 | Return on Equity % | 29.55 |
| Local Code (WRT) | 717200 | Period Covered | 12 Months | Return on Total Assets % | 16.27 |
| Exchange | GER | Report (Consolidated) | Annual | Operating Margin % | 14.75 |
| Employees | - | Revenue | 5,023m | BVPS (EUR) | 14.93 |
| Website | www.schering.de | Operating Result | 741m | Quick Ratio | 3.38 |
| Events Diary | Kalends | Net Int Exp (Inc) | (17m) | Total Assets / Equity | 1.84 |
| Industrial Classifications | | Pretax Profit/Loss | 1,145m | Beta | 0.31 |
| DBAG | Pharma + Healthcare | Total Current Assets | 3,196m | Earnings Yld % | 11.38 |
| GCSC | Pharmaceuticals | <Cash & Equivalents | 408m | Price To Book | 2.55 |
| MSCI | Health & Personal Care | Fixed Assets | 2,196m | Total Liab / Equity | 0.83 |
| FTSE | Pharmaceuticals | Total Assets | 5,392m | | |
| Share Details | | Total Liabilities | 2,443m | | |
| Latest Shares in Issue | 196.3m | <Current Liabilities | 658m | | |
| (30Dec02) | | <Long Term Debt | 63m | | |
| EPS (Adj) (EUR) | 4.390 | Consensus Estimates (EUR) | | Index Relative | |
| DPS (Gross) (EUR) | 0.930 | Multex | Dec03 | Dec04 | PE Div Yld |
| Total Market Cap (USD) | 8,593.88m | | 2.30 | 2.52 | 8.79 2.44 |
| Total Market Cap (EUR) | 7,478.79m | | 1.00 | 1.10 | 17.17 2.44 |
| Performance | | | 3.97 | 4.18 | (DAX Index) |
| Closing Price (EUR) | 38.06 | Revenue | 4,844.00m | 5,137.00m | Sector Chart |
| 52 wk High (EUR) (26Sep02) | 53.11 | EBITDA | 1,002.65m | 1,108.00m | 14.32 1.91 |
| 52 wk Low (EUR) (13Feb03) | 32.41 | EBIT | 714.00m | 802.00m | (PRIME Xtra Pharma+Healthcare Index) |
| % Price Change 1 Month Ago | 5.14 | Net Profit | 448.00m | 492.80m | Source: Multex.com (18Sep03) |
| % Price Change 3 Months Ago | -11.30 | Source: Multex Global Estimates | | Warrants | |
| % Price Change 6 Months Ago | -0.96 | | | Recent Iss. Schering Plur Dec03 HSBCTBU | |

The overview provides summary details of key ratios, performance, details from the company report, share details and consensus estimates. Tabs give access to detailed information on ownership, comparisons, share data and all the other topics covered by the summary.

There is also a full search feature built in; this includes web links to other services, such as on-line company reports, corporate websites and Google search.

BACKGROUND PAGES

B1 – SUMMARY-LEVEL INTERIM AND PRELIMINARY PROFIT & LOSS FIGURES

For UK- and Irish-listed companies, as well as Egypt, Turkey and Ghana, you can view a background page that shows summary-level interim information and preliminary profit and loss account (income statement) information for the latest period, along with the figures for a comparable period and the latest full year. It also shows Earnings per Share, Dividend and Market Capitalisation information, as well as details of recent capital changes and key accounting and market ratios.

To display this background page for a stock, add **B1** to the end of the RIC. For example: instead of typing **RTR.L** for a full quote on Reuters in London, just type **RTR.LB1**.

B2 – AVAILABLE FOR ALL COMPANIES GLOBALLY WITH COMPANY ACCOUNTS COVERAGE

B2 shows summary-level annual profit and loss account (income statement), and balance sheet information for the last five years, where available. It also provides a brief description of a company's activities and offers the company's registered address and telephone numbers, as well as principal directors' names.

To display this page for a stock, add B2 to the end of the RIC. For example: instead of typing **VOD.L** for a full quote on Vodafone, just type **VOD.LB2**.

| | | | |
|------------------------|--|-------------------|-------------|
| Vodafone Group <VOD.L> | News (VOD.L) | Back <VOD.LB1> | VOD.LB2 |
| FULL YEAR PROFIT/LOSS | 31MAR2003C | 31MAR2002C | 31MAR2001C |
| Revenue | 30375m(GBP) | 22845m(GBP) | 15004m(GBP) |
| Operating Result | -5451m | -11.8b | -6998m |
| Pre-Tax Profit/Loss | -6208m | -13.5b | -8095m |
| Net Attributable | -9819m | -16.1b | -9763m |
| BALANCE SHEET | | | |
| Cash | 475m | 80m | 68m |
| Current Assets | 8591m | 9438m | 17690m |
| Fixed Assets | 154.6b | 153.4b | 154.3b |
| Total Assets | 163.2b | 162.9b | 153.3b |
| Current Liabilities | 14293m | 13455m | 12377m |
| Long-Term Debt | 13757m | 13118m | 11235m |
| Total Liabilities | 31746m | 29472m | 24283m |
| Minority Interests | 2863m | 2855m | 2389m |
| Shareholders Equity | 128.6b | 130.5b | 145.3b |
| Preferred Stock | 0 | 0 | 0 |
| Description | ():The provision of mobile telecommunication services. Web address: www.vodafone.com | | |
| Address:Vodafone Hse, | Tel:44 1635 33251 | Ch:Lord MacLaurin | |
| Newbury | Fax:44 1635 45713 | MD:A Sarin | |
| Berks | I Rel:44 1635 675310 | FD:K J Hydon | |
| RG14 2FN | | | |



TIP

Reuters 3000 Xtra users can find all this background information – and more – in a more convenient format using the Equity Views. Right-click on a company's RIC and select **Related Company Data**.

DELAYED EQUITIES AND INDICES

If you need the price level of a share or index but you don't have access to the relevant exchange, try a delayed quote. Most exchanges offer delayed data free of charge, and delay times depend on what the exchange is prepared to make available. Check the page `WORLD/DELAY1` for delay times by exchange.

For a delayed full quote on equity data and equity indices, put a forward slash (/) in front of the RIC. For Peugeot traded in Paris, for example, type `/PEUP.PA`.

Delayed data on index constituents works the same way; put a forward slash (/) between the chain command (O#) and the RIC (.DJI), e.g. `O#/.DJI` or type `/.DJI F3`.



TIP

Right-click in the displays and select **Refresh** to ensure that you have the most recent data from the database.

FIELD NAMES FOR QUOTE LISTS

If you want to set up a quote list in an Excel spreadsheet, then these are the most commonly used fields. For each field of information, you can use either the PowerPlus Pro identifier, the FID (field number) or the field identifier used by Reuters 3000 Xtra.

| FIELD | POWERPLUS PRO IDENTIFIER | FID NUMBER | REUTERS 3000 XTRA IDENTIFIER |
|------------------------|--------------------------|------------|------------------------------|
| RIC CODE | RIC NAME | -1 | X_RIC_NAME |
| Name of equity | DISPLAY NAME | 3 | DSPLY_NAME |
| Up/down arrow | TICK: UP/DOWN | 14 | PRCTCK_1 |
| News indicator | NEWS | 28 | NEWS |
| Last | LAST | 6 | TRDPRC_1 |
| Net change | NET CHANGE | 11 | NETCHNG_1 |
| Bid | BID | 22 | BID |
| Offer | ASK | 25 | ASK |
| Opening price | OPENING PRICE | 19 | OPEN_PRC |
| Official closing price | HISTORIC CLOSE | 21 | HST_CLOSE |
| VOLUME | VOL ACCUMULATED | 32 | ACVOL_1 |
| Day's high | TODAY'S HIGH | 12 | HIGH_1 |
| Day's low | TODAY'S LOW | 13 | LOW_1 |
| VWAP | VOLUME1xPRICE1 | 1379 | VOL_X_PRC1 |
| Ex dividend date | EX DIV DATE | 39 | EXDIVDATE |



IN BRIEF: EQUITY MARKETS

FULL QUOTES

Full quotes are Reuters Instrument Codes (RICs) that give you the full breadth of real-time price information, e.g. **RTR.L**. For equities, they include fields such as the last traded price, bid and offer, accumulated volume, today's and this year's highest and lowest prices, closing price, references to news, sectors and much more.

Most real-time exchange data and services from third-party data providers are charged separately. You should check your requirements with Reuters before you start using the system.

BACKGROUND DATA

To view the last five years' profit and loss figures, type **B2** after the RIC, e.g. **FIA.MIB2**.

For the United Kingdom, Ireland, Egypt, Ghana and Turkey you also have **B1** background pages, showing summary-level interim and preliminary profit & loss figures, e.g. **VOD.LB1**.

Reuters 3000 Xtra users can use Equity Views to see background data in much greater detail. Right click on the company RIC and select **Related Company Data**.

COMPANY NEWS

An asterisk symbol (*) beside a RIC on a display indicates that there is a recent news story on the company. Double-click on the asterisk to view the news item. Alternatively, you can type the RIC and press the News function key **F9** instead of ↵. For example, **FIA.MI F9**.

OTHER NEWS

Reuters 3000 Xtra users can view Top News in a web browser at:
<http://topnews.session.rservices.com>

For research taking in articles from more than 550 respected publications, use Global Press Watch. Codes are similar to those used in Reuters news.



IN BRIEF: EQUITY MARKETS, CONTINUED

EQUITY INDICES

Index RICs always begin with a dot. A **full quote** on an index displays all information about the index itself e.g. **.DJI**. Look up all equity indices on page **WORLD/INDICES1**.

Index **constituents** are available by typing the same code, but using the chain key, for example, **.DJI F3**. Note that this code shows real-time information, so you must have access to the underlying exchange.

SECOND-LEVEL (ORDER BOOK OR MARKET MAKER) CHAINS

Some equity exchanges offer Market Maker information, for which separate permission is needed. They can be viewed by typing the RIC and pressing the chain key **F3**. For example, **RTR.L F3**.

Reuters 3000 Xtra users have purpose-built objects for viewing NASDAQ order books in depth.

TIME AND SALES INFORMATION

Time and Sales information provides a 13-day history of trades of a company. To view this information, type the RIC then press **F8**, e.g. **RTR.L F8**. For a description of the exact details displayed for each exchange, look at page **WORLD/TAS1**.

Reuters 3000 Xtra users can use the Intraday Viewer object for these details, including VWAP.

DELAYED DATA

For a delayed full quote on equity data and equity indices, put a forward slash (/) in front of the RIC, e.g. **/PEUP.PA**.

Delayed data on index constituents can also be viewed; put a forward slash (/) between the chain command (**0#**) and the RIC (**.DJI**), e.g. **0#/.DJI** or **/DJI F3**.

Delayed data is offered by the exchanges on a discretionary basis. Delay times vary from exchange to exchange. Check the page **WORLD/DELAY1** for details.

Bond markets

TOOLS FOR FINDING DATA

| TOOLS | CONTENT | WHERE TO FIND IT |
|--|--|---|
| Reuters 3000 Xtra search Version 4.5 | From simple searches based on an issuer name through to complex criteria search. |  The Search button is located just to the left of the command line. |
| Reuters 3000 Xtra criteria search Version 4.0 | An advanced search facility for Reuters 3000 Xtra. See chapter 2, Simple ways of finding data . | Click on the Search button in Reuters 3000 Xtra. |
| Xtra Menu | If you know the RIC of an instrument, this display will direct you to all the different displays that are available to you for the instrument. |  Click on the Xtra Menu button on the Reuters 3000 Xtra navigation bar. Then enter the required RIC. |
| On-line directory | With its new web-based interface, this enables you to search for bonds, convertibles and warrants. You can click on the links returned to view price data immediately. |  Click on the yellow book button in the toolbar. Or, in Reuters 3000 Xtra, insert the On-line directory object into one of your own screens. |
| Reuters 3000 Xtra Lookup | Search facility on command line within Reuters 3000 Xtra. See chapter 2, Simple ways of finding data . | Command line of Reuters 3000 Xtra. |
| Bond Views Search | This enables you to search through a database of more than a million mortgage instruments. | On the Reuters web: http://rde.session.rservices.com/3000xtra Use the Search link to search by keyword. Search results are displayed on the left of the window. |
| Reuters 3000 Xtra Data Definition Browser | This helps you to find historical data categories and fields that can be used in spreadsheets. | In Reuters 3000 Xtra, click on Tools/Database/Data Definition Browser . |
| Reuters Data Encyclopaedia | This contains data about data, the underlying data structures of historical data. Use this if you want to know where in the database specific data items are retrieved from. | On the Reuters web: http://xtra.session.rservices.com/data/views/fixedincome/bonddetails? |

CHAPTER 5

BOND MARKETS

SPEED-GUIDES, RICS AND PAGES

| | |
|----------------------------|--|
| BONDS | Guide to all bonds |
| TREASURY | Guide to all government bonds |
| EUROBONDS | Guide to all eurobonds |
| FUT/IR1 | List of interest rate futures |
| YLDS1 | World yields |
| BENCHMARKS | World benchmarks |
| DEBT/INDICES1 | Debt indices |
| DEBT/FIXINGS | End-of-day fixings data for treasuries and eurobonds |
| US/DEBT | US debt data. Use the two-character country code for the relevant country, for example, DE/DEBT for Germany |
| LIQUIDCREDIT | Breakdown of liquid bonds according to criteria such as amount outstanding, rating and currency |
| RPSBONDS | Breakdown of USD-denominated domestic and foreign issues |
| NEWDATA/D F9 | Information on new key data sets |
| EUROCOMP F3 | Market overviews, e.g. for the euro |
| CONVERTIBLES | Convertible bonds |
| CDSINDEX | Credit Default Swaps |

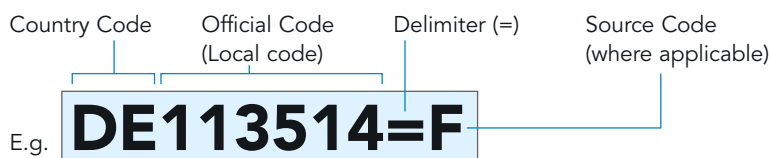
NAVIGATING BY CHAINS

You can use the following chains to navigate through to the details you need. As with all chains, either type the code and press **F3** (for example, **CDS** **F3**), or put **0#** at the beginning of the code and press ↵ (for example, **0#CDS** ↵).

| | |
|---------------------|-----------|
| BONDS | F3 |
| TREASURY | F3 |
| EUROBONDS | F3 |
| BENCHMARKS | F3 |
| CONVERTIBLES | F3 |
| CDS | F3 |

THE GENERAL STRUCTURE OF BOND RICS

Fixed income RICs are composed of several parts. Generally speaking, the RIC has the following components:



COUNTRY CODE

The country code is the ISO 3166 two-letter code specifying the country of issue. To find out more, look at the **Foreign exchange & money markets** section of this guide, and simply use the first two letters of the currency code, which represents the country code, e.g. **AT** for Austria or **FR** for France.

OFFICIAL CODE (LOCAL CODE)

The local code used varies from market to market and Reuters supports the full range of ID numbering agencies.

Some countries do not have an official code and have adopted a local market convention or a Reuters-derived code.

DELIMITER

The delimiter is always = .

SOURCE CODE

The source code tells you where the price comes from; typically this is either a contributor or an exchange.

- Contributor codes are used for OTC-traded instruments; they are usually mnemonics of the contributing organisation, **ABNL** is for ABN in London, **BNP** is for BNP in Paris, etc. Example: **DE113505=BAYM** (Bund 6⁷/₈ contributed by Bayerische Landesbank in Munich)

You can find a list of contributor codes on page **TREASURYID**.

- Exchange codes are one or two characters long, **F** is Frankfurt, **L** is London, **LU** is Luxembourg, **PMI** is the Swedish Summary Information exchange. Example: **DE113514=F** (Bund 6¹/₄ on the Frankfurt Stock Exchange)

CHAPTER 5

BOND MARKETS



In Reuters 3000 Xtra, you can right-click on a bond RIC and select **Related Bond Data** to view a huge range of information in a convenient web-based format.

Internet Explorer Browser: http://xtra.session.rservices.com/data/views/fixedincome/bonddetails/RIC-CH13...

Search: Data/RIC/CH1340991

Bond Details Enter Security ID: Enter REUTERS

Government/Corporate Company Details Related Services update: 5 Nov 2003 17:20:10 GMT

CSGF 0% 11-Jan-2005 CHF

CREDIT SUISSE GROUP FINANCE (LUX)

Basics Redemption Payments PY History RICs Euro Issuer Analytics Notes HELP

| | | |
|--|---|--|
| Closing Value Price as of 3-Nov-2003 102.750 | Payment Overview Status: Active Seniority: Senior Ownership: Bk Entry/Global Cert | Market Conventions Yield Convention: ISMA Settlement: Trade + 3B Value Date: Same as settlement Ex-Dividend: Same as coupon Day Count: 30/360 Holiday: Switzerland End of Month Code: Same day of month Price Rounding: Truncate after 3 places |
| Issue Description Domicile of Issuer: Luxembourg Market of Issue: Switzerland Industrial Class: Financial Services Coupon Type: Zero | Principal Payments Maturity Date: 11-Jan-2005 Final Redemption Value: 105.34241% of par Coupon Payments Coupon Type: Zero Current Coupon: 0% Coupon Currency: Swiss Franc Frequency: Annual Dated Date: First Coupon: Last Full Coupon: | Min. Denomination : 5,000.00 Min. Increment : 5,000.00 Price Quote : Without Accrued Withholding Tax : 0% |
| Issue Details Issue Date: 10-Dec-2001 Issue Price/Yield: 100.000 / 1.750 Issue Spread: Issue Currency: Swiss Franc Program Type: N/A Private: NO Placement: YES Prospectus on File: YES | Issue Level Ratings Date Agency Rating | Clearing Codes Type Value Common code 014046704 Valoren 1340991 Sedol 7269622 Wertpapier 826658 |

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SUPER RICS

Super RICs show key data for a bond, including the last three contributed prices and additional information, such as Open/High/Low/Close and calculated values (depending on the type of bond).

Super RICs have the same structure as government and treasury bonds (see above), except that there is no source code at the end, for example, **DE113514=**.

| | | | | | | | | | | | | | | | | | | | |
|------------------------|--|----------|--|--------------------|--|-------------|--|----------------|--|-------------|--|------------|--|--------------|--|------------------------------|--|--|--|
| DE113514= | | BUND BRD | | 6.25 % | | 04JAN30 | | STR | | EUR | | ISN | | DE0001135143 | | | | | |
| Latest | | | | | | | | | | | | | | | | | | | |
| B#117.440 | | A117.540 | | BldChg | | Reuters Yld | | BtYld Cg | | Contributor | | Loc Time | | Bmk Spd | | Swp Spd | | | |
| | | | | -0.680 | | 5.035 | | 5.028 | | +0.042 | | CITIGROUP | | LON 12:31 | | 06NOV -0.8 -2.3 | | | |
| B#117.270 | | A117.670 | | | | 5.045 | | 5.020 | | CDC MARCHES | | PAR 12:30 | | 06NOV | | | | | |
| B#117.340 | | A117.520 | | | | 5.041 | | 5.030 | | SOCIETE GEN | | PAR 12:30 | | 06NOV | | | | | |
| Source | | | | Phone | | | | e-mail | | | | | | | | | | | |
| SSBEUR014 | | | | INFO:<TSY/CHANGES> | | | | | | | | | | | | | | | |
| Real Time Calculations | | | | | | | | Reference Data | | | | Daily View | | | | | | | |
| Time/Date | | | | 12:31 06NOV | | | | Ticker | | | | BUND | | | | | | | |
| Latest | | | | B#117.440 A117.540 | | | | Issue Rating | | | | FCH AAA | | | | | | | |
| Reuters Yld | | | | 5.035 5.028 | | | | Ratings Svc | | | | <RRS0001> | | | | | | | |
| ISMA Yld | | | | 5.034 5.028 | | | | Issuer Dom | | | | DE | | | | | | | |
| Benchmark Spd | | | | -0.8 EU30YTRR | | | | Amt O/S | | | | 9.08 | | | | | | | |
| Swp / Asset Swp Spd | | | | -2.3 / -3.980 | | | | Pay Freq | | | | ANNUAL | | | | | | | |
| Swap Point / Curve | | | | | | | | Issue Price | | | | | | | | 100.06 | | | |
| Acc Int | | | | | | | | Issue Date | | | | | | | | 21JAN00 | | | |
| Mod Dur / BPV | | | | | | | | Ind News | | | | | | | | [GVD] | | | |
| Convex | | | | | | | | Related Data | | | | | | | | <0#FIXEDINCOME> | | | |
| Settle Date | | | | | | | | Issuer News | | | | | | | | 12:10 | | | |
| | | | | | | | | | | | | | | | | Chain 0#DE113514= WRT 113514 | | | |

For most major bond types, including eurobonds and treasuries, the key data displayed includes:

- Real-time spread to benchmark
- Real-time spread to interest-rate swap
- Real-time spread to asset swap
- Native and ISMA yield to maturity
- Accrued interest
- Modified duration
- Convexity
- Basis Point Value
- Reference data, including credit rating and clearing code



TIP

To view this data correctly, you must have display template v9.3 or greater.

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CHAIN – CONTRIBUTED PRICE FOR A SECONDARY (OTC) MARKET

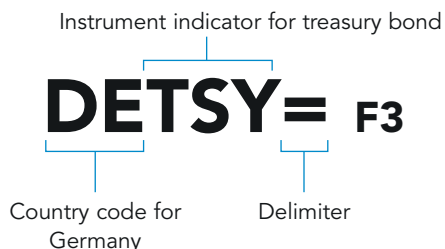
Often, the easiest way to find a bond is to start with the chain displays of OTC-traded bonds for each country.

To display a chain, you need to type the code and press the **F3** key. For the secondary (OTC) market, the chains show details of different issues and contributed prices from a range of market players.

The code is made up of:

- The two-character country code
- The instrument indicator
- The delimiter

For example:



CHAPTER 5

BOND MARKETS

This shows all the instruments in that chain – short-, medium- and long-term issues. You can view a single part of the chain by adding **S** (short), **M** (medium) or **L** (long) at the end.

You can change the RIC to view the relevant part of the chain, for example:

DETSYS= F3 (short-term bonds)

DETSYM= F3 (medium-term bonds)

DETSYL= F3 (long-term bonds)

COMPETING MARKET MAKER CHAINS

For a single treasury issue, you can view a chain of competing Market Makers.

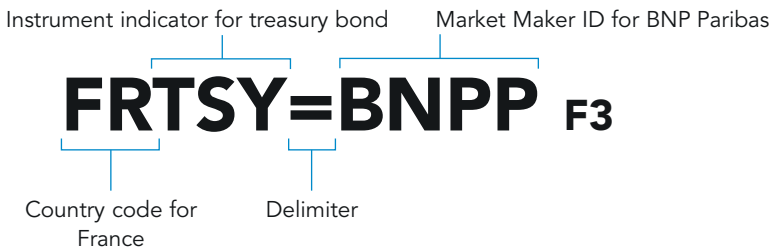
The code structure is: **DE113507= F3**.

| #DE113507= | EUR | BUND | BRD | STR | 4.75 % | 04JUL08 | Bkg |
|--------------|-------|-----------|----------|------------------|---------------|-----------------------|-----------------------------|
| Last | ABN | AMRO | GBX | B#104.370 | A104.430 | 14:25 | 04DEC |
| ReutersCalcs | Yield | 3.688 | 3.674 | Bmk Spd -4.0 | Swp Spd -10.5 | Asset Swp Spd -10.546 | |
| High | 07:08 | 104.460 | 3.697 | Open | 07:00 | 104.330 | 3.718 |
| Low | 07:10 | 104.240 | 3.667 | CLS | 03DEC | 104.340 | 3.696 |
| Best UBS-IB | LON | B#104.40 | 14:24 | LANDESBK R-P MNZ | A104.39 | 14:23 | |
| Contributor | Loc | Latest | Size | Yield: | Time | Date | Source |
| ABN AMRO | GBX | B#104.37 | A104.43 | x | 3.681 | 14:25 | 04DEC ABNGER02 |
| BARCLAYS | LON | B#104.380 | 104.410 | 75x75 | 3.685 | 3.678 | 14:24 04DEC BARCEGB |
| BayernLB | MUN | B#104.38 | 104.42 | 50x50 | 3.685 | 3.675 | 14:24 04DEC 0#GOV=BAYM |
| BNP PARIBAS | PAR | B#104.39 | A104.41 | x | 3.683 | 3.679 | 14:24 04DEC BNPPDE03 |
| BM-BANK | STG | 105.71 | 105.82 | x | | | 10:31 21MAR 0#BM-BONDS=BMBS |
| CAI | PAR | B#104.38 | A104.41 | x | 3.680 | | 14:22 04DEC CAIDE02 |
| CCF | PAR | B#104.38 | A104.42 | x | 3.681 | | 14:24 04DEC HSBCCCFBUND3 |
| CDC MARCHES | PAR | B#104.35 | A104.45 | x | 3.681 | | 14:25 04DEC CDCDM3 |
| COMMERZBANK | FFT | B#104.397 | A104.427 | 0000x0000 | 3.682 | 3.675 | 14:25 04DEC |
| CSFB | LON | B#104.37 | A104.41 | x | 3.687 | 3.678 | 14:24 04DEC |
| DEUTSCHE BK | FFT | B#104.36 | A104.46 | x | 3.69 | | 14:25 04DEC CSBONDAH |
| DRESDNER | FFT | B#104.37 | A104.43 | x | 3.68 | | 14:24 04DEC DBF07 |
| DZ Bank | FFT | 104.381 | 104.441 | x | 3.685 | 3.671 | 14:24 04DEC |
| FORTIS BANK | BRU | B#104.38 | A104.43 | x | 3.68 | | 14:24 04DEC FORTIS/BEFI09 |
| LANDESBK R-P | MNZ | B#104.35 | A104.39 | x | 3.683 | | 14:23 04DEC LRPGOVT02 |
| HELABA | FFT | 104.386 | 104.426 | 5x5 | 3.676 | | 14:24 04DEC |
| HVB | MUN | B#104.38 | A104.41 | x | 3.682 | | 14:24 04DEC HYBUND03 |
| ING BANK | AMS | B#104.36 | A104.40 | x | 3.689 | 3.680 | 14:24 04DEC INGBUND03 |

For a list of Market Maker IDs, see page **TREASURYID**, or display the Market Maker quote then double-click on the full name of the Market Maker.

CHAIN BY MARKET MAKER

You can view a chain of all treasury bonds quoted by a specific primary dealer or market maker using the following structure:



Quote Browser: Item Address: QO#FRTSY=BNPP

Search #FRTSY=BNPP

EUR BNP PARIBAS

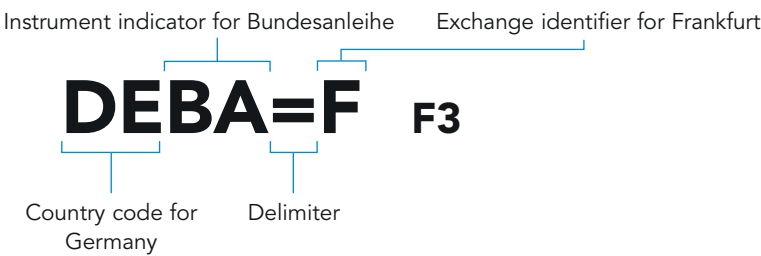
| Issue | Coupon | Maturity | Bid | Ask | Yield | Time | Date |
|----------------|---------|----------|-----------|----------|-------|-------|-------------|
| OAT 6.75 10/04 | 6.75000 | 25OCT04 | B† 103.78 | A 103.82 | 2.337 | 2.292 | 14:31 04DEC |
| OAT 7.50 04/05 | 7.50000 | 25APR05 | B† 106.53 | A 106.57 | 2.593 | 2.565 | 14:29 04DEC |
| OAT 7.75 10/05 | 7.75000 | 25OCT05 | B† 108.88 | A 108.92 | 2.821 | 2.800 | 14:29 04DEC |
| OAT 7.25 04/06 | 7.25000 | 25APR06 | B† 109.56 | A 109.60 | 3.012 | 2.995 | 14:29 04DEC |
| OAT 6.50 10/06 | 6.50000 | 25OCT06 | B† 108.94 | A 108.98 | 3.193 | 3.179 | 14:29 04DEC |
| OAT 5.50 04/07 | 5.50000 | 25APR07 | B† 106.62 | A 106.70 | 3.385 | 3.361 | 14:32 04DEC |
| OAT 5.50 10/07 | 5.50000 | 25OCT07 | B† 106.98 | A 107.06 | 3.540 | 3.518 | 14:33 04DEC |
| OAT 5.25 04/08 | 5.25000 | 25APR08 | B† 106.32 | A 106.37 | 3.655 | 3.643 | 14:33 04DEC |
| OAT 8.50 10/08 | 8.50000 | 25OCT08 | B† 120.84 | A 120.89 | 3.742 | 3.732 | 14:33 04DEC |
| OAT 4.00 04/09 | 4.00000 | 25APR09 | B† 100.63 | A 100.70 | 3.864 | 3.850 | 14:33 04DEC |
| OAT 3.00 07/09 | 3.00 | 25JUL09 | B† 106.12 | A 106.30 | 1.825 | | 14:33 04DEC |
| OAT 4.00 10/09 | 4.00000 | 25OCT09 | B† 100.16 | A 100.23 | 3.968 | 3.954 | 14:33 04DEC |
| OAT 5.50 04/10 | 5.50 | 25APR10 | B† 107.99 | A 108.06 | 4.048 | 4.036 | 14:33 04DEC |

By the way, all French primary dealers are listed on page **FR/GOVT2**.

COUNTRY CHAINS

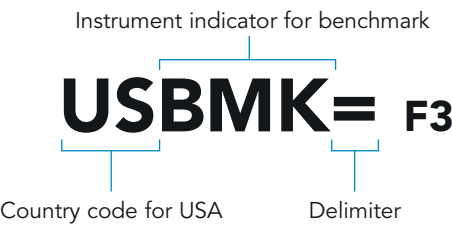
Every country has its own type of treasury bonds, such as Gilts, OATs, BTPs or Bunds. All these treasury bonds, exchange-traded or OTC, can be found on page **TREASURY**.

For example, you can display a chain of exchange-traded treasury bonds listed in Germany using the structure:



BENCHMARK CHAINS

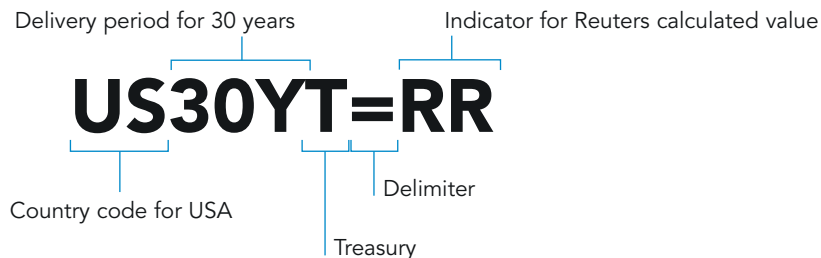
To find the code for a specific benchmark, see the speed-guide on page **BENCHMARKS**.



| #USBMK= | USD | US BENCHMARK | | | | | | | |
|--------------|------------|--------------|---------|----|--------|--------|--------|-------|-------|
| Issue/Issuer | Coupon | Maturity | B* | L | a | t | e | s | t |
| 1M UST | 04DEC03 | IB | 0.930 | IA | 0.925 | 0.9462 | 0.9411 | 15:09 | 06NOV |
| 3M UST | 05FEB04 | IB | 0.940 | A | 0.930 | 0.9579 | 0.9477 | 15:09 | 06NOV |
| 6M UST | 06MAY04 | IB | 1.035 | IA | 1.025 | 1.0578 | 1.0475 | 15:10 | 06NOV |
| 2Y UST | 1% 31OCT05 | IB | 99*09½ | IA | 99*10 | 1.9882 | 1.9801 | 15:10 | 06NOV |
| 3Y UST | 2% 15AUG06 | IB | 99*27½ | IA | 99*27½ | 2.4314 | 2.4227 | 15:10 | 06NOV |
| 5Y UST | 3% 15OCT08 | IB | 98*25½ | IA | 98*25½ | 3.3939 | 3.3904 | 15:10 | 06NOV |
| 10Y UST | 4% 15AUG13 | IB | 98*25½ | IA | 98*25½ | 4.4031 | 4.4011 | 15:10 | 06NOV |
| 30Y UST | 5% 15FEB31 | IB | 102*03½ | IA | 102*06 | 5.2279 | 5.2231 | 15:10 | 06NOV |

BENCHMARK CONSTITUENTS

The structure for treasury market yields is:



- Where yields are traded (rather than prices), Reuters takes the contributed yield to calculate the price.
- Where the price is traded, Reuters takes the contributed price to calculate the yield.

LOCAL CODES

GERMAN SECURITY CODES

| Code | Instrument |
|-----------|---|
| BA | Ten-year Government Bond (Bundesanleihe) |
| BO | Five-year Government Bond (Bundessobligation) |
| BP | Federal Mail Bond (Bundespost) |
| DB | Bahnanleihe – no bond in the market at the moment |
| BF | Unity Bond – no bond in the market at the moment |
| BS | Treasury Note (Bundesschatzanweisung) |
| TR | Treuhandanstalt |

GILTS

Codes for UK Gilts all begin GBT. They then have a number of components. These are discussed below.

Type indicators for Gilts are:

| Code | Instrument |
|------|--------------|
| T | Treasury |
| E | Exchequer |
| F | Funding |
| C | Conversion |
| IR | Irredeemable |
| IL | Index Linked |
| WAR | War bonds |

To identify the coupon rate, UK Gilt issues use a one- to three-character code. The code is in two parts; the first one or two characters represent the big figure (such as 9 or 10 per cent). The final character (when there are two or three) is a letter that represents any additional fraction value. The letters are:

| Letter | Meaning |
|--------|---------|
| E | 1/8 |
| Q | 1/4 |
| R | 3/8 |
| H | 1/2 |
| F | 5/8 |
| T | 3/4 |
| S | 7/8 |

So only one character is used for a single-digit integer such as 9%, whereas three characters are used for a two-digit integer plus a fraction such as 10⁷/₈%.

Confused? Try these examples:

12Q represents 12¹/₄%

9H represents 9¹/₂%

9 represents 9%

The final part of a UK Gilt RIC is two digits indicating the year of maturity. So a treasury bond with a coupon of 7.75% maturing in 2015 would be **GBT7T15=**.

US MATURITY MONTH CODES

| Months | General | US Registered | US Bearer tie-breaker |
|-----------|---------|---------------|-----------------------|
| January | A | 1 | a |
| February | B | 2 | b |
| March | C | 3 | c |
| April | D | 4 | d |
| May | E | 5 | e |
| June | F | 6 | f |
| July | G | 7 | g |
| August | H | 8 | h |
| September | I | 9 | i |
| October | J | O (letter) | j |
| November | K | N | k |
| December | L | D | l |

EUROBONDS

MEDIUM-TERM NOTES (MTNs)

To find the code for a specific MTN, see the speed-guide on page **MTNINDEX**.

Most medium-term notes can vary from 30 days to 30 years. MTNs are issued under a programme that states the maximum total amount to be issued. Each tranche of securities issued under the programme will also have a pricing supplement giving details of the terms of issue.

For larger publicly issued EMTNs, the RICs available on Reuters have the same structure as eurobonds (see overleaf).

NEW EUROBOND ISSUES

For listings of new eurobond issues, use the chain **0#NEWCORP** (or **NEWCORP F3**) or try any of these news codes:

New eurobonds index by currency **IND/BONDS**

Eurobond new issues news **EUB-ISU**

Eurobond expected new issues **NEW/EUB**

Third-party new issues page **IIIA** International Insider – Screen Insider.
This page is subject to a subscription fee.

Eurobonds and the most liquid MTNs follow the structure:

Issuer's Country Code Common Code Delimiter (=)

NL016929255=

| | | | | | | | | | | | | | | | |
|------------------------|---------|-----------------|--|----------------------|--|-----------|--|----------------------|--|--------|--|--------|--|------------------|--|
| NL016929255= | | RABOBANK | | 2.625 % | | 29DEC06 | | STR | | EUR | | ISN | | XS0169292553 | |
| Latest | | Bid Chg | | Reuters Yld | | BYld Cg | | Contributor | | Loc | | Time | | Date | |
| B98.040 | A98.160 | -0.080 | | 3.310 | | 3.268 | | +0.029 HVB | | MUN | | 14:39 | | 04DEC +20.8 -6.2 | |
| B98.040 | A98.150 | | | 3.310 | | 3.271 | | HVB | | MUN | | 14:38 | | 04DEC | |
| B98.040 | A98.160 | | | 3.310 | | 3.268 | | HVB | | MUN | | 14:37 | | 04DEC | |
| Source | | | | Phone | | | | | | e-mail | | | | | |
| HVFIN03 | | | | INFO:<ZCODE/CHANGES> | | | | | | | | | | | |
| Real Time Calculations | | | | Reference Data | | | | Daily View | | | | | | | |
| Time/Date | | 14:39 04DEC | | Ticker | | RABKND | | Bid | | Bid | | Yld | | | |
| Latest | | B98.040 A98.160 | | Issue Rating | | MDY Aaa | | Open | | 07:00 | | 97.960 | | 3.338 | |
| Reuters Yld | | 3.310 3.268 | | Ratings Svc | | <RRS0001> | | High | | 14:36 | | 98.110 | | 3.353 | |
| ISMA Yld | | 3.309 3.267 | | Issuer Dom | | NL | | Low | | 07:06 | | 97.920 | | 3.285 | |
| Benchmark Spd | | +20.8 EU3YT=RR | | Amt O/S | | 1.0B | | Cw | | 03DEC | | 98.120 | | 3.281 | |
| Swp / Asset Swp Spd | | -6.2 / -8.804 | | Pay Freq | | ANNUAL | | | | | | | | | |
| Swap Point / Curve | | | | Issue Price | | | | Codes | | | | | | | |
| +3.372 / <EURIRS> | | | | 101.131 | | | | | | | | | | | |
| Acc Int | | | | Issue Date | | | | Chain 0#NL016929255= | | | | | | | |
| 1.366 | | | | 19MAY03 | | | | CCE 016929255 | | | | | | | |
| Mod Dur / BPV | | | | Ind News | | | | ZNLR | | | | | | | |
| 2.84 / 2.825 | | | | [BNK] | | | | | | | | | | | |
| Convx | | | | Related Data | | | | | | | | | | | |
| 11.05 | | | | <0#FIXEDINCOME> | | | | | | | | | | | |
| Settle Date | | | | Issuer News | | | | | | | | | | | |
| 09DEC03 | | | | | | | | | | | | | | | |

The speed-guide for all Eurobonds is **EUROBONDS**.

EUROBOND CHAINS

Eurobond chains are grouped together by currency and type (straight, floater or convertible). For details, see the following pages:

By currency of issue: **EUROBOND1** to **EUROBOND7**

All euro-denominated issues: **EUROBOND8** to **EUROBOND9**

Swiss USD/EUR-quoted eurobonds, sorted by maturity date: **EUROBOND11** to **EUROBOND12**

EIB EARN programme: **EIBEARN01**

Alpha characters before the delimiter indicate the alpha range of issues in the chain.

Example: **EUROCADSAB= F3** displays all the Canadian dollar-denominated straight eurobonds by entity, starting with the letters A or B.

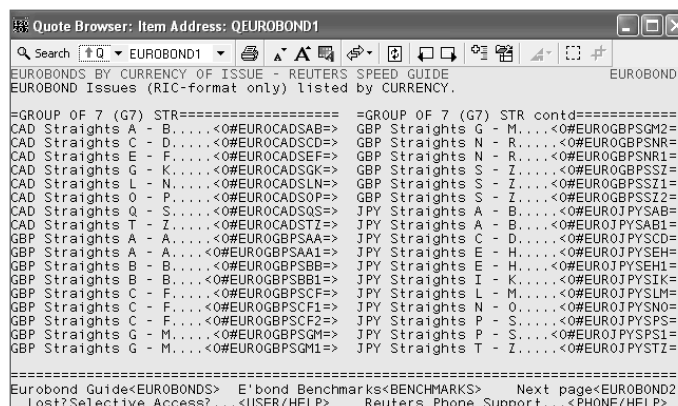
FLOATING RATE NOTES AND CONVERTIBLE CHAINS

Floating rate notes and convertible chains take the same structure as above, and include the Eurobond type of either **F** for FRN or **C** for convertibles.

FRNs and convertibles: **EUROBOND9** to **EUROBOND10**

CONVERTIBLES

CONVERTIBLES F3



REUTERS Z-CODES

Z-code pages are the old method of showing some terms and conditions of eurobonds and MTNs. You can now find all the relevant details in the Super RIC for the bond. If you do display a Z-code page (for example **ZR4T**), it now only contains a link to the Super RIC for the bond.

US MORTGAGES

Reuters 3000 Xtra users have access to US Mortgage information in web format at: <http://xtra.session.rservices.com/data/views/fixedincome/bonddetails?lookup=tbas>

From here, you can search for mortgage bonds by various criteria (such as type, coupon or pool number) to display specific details.

| Bond Details | | | | | | | | | | | | | REUTERS | | | | | | | | | | | | | | | | | | | | |
|---|------|---|------|----------------------|--|----------------------|--|------|--|------|--|-------|-----------|------|-------------------------------|------|--|------|--|------|--|----------------|--|------------|--|------|--|------|--|------|--|-----|--|
| Government/Corporate | | Enter Security ID: <input type="text"/> | | | | | | | | | | Enter | | | | | | | | | | | | | | | | | | | | | |
| FNCL 000057 8.500 1-Jul-2007 | | | | | | | | | | | | | 31360AB21 | | FN 30yr | | | | | | | | | | | | | | | | | | |
| WAM:36(1-Nov-2006) WAC:9.000 SvcFee:0.500 5,176,525(Apr-1982) 0.01675549(Nov-2003) AvgLife: 1.24(PSA 457) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| AvgOrig:360(1-Mar-1982) Delay Days: 55 | | | | | | | | | | | | | PSA | | 1:68 3:430 6:463 12:542 L:211 | | | | | | | | | | | | | | | | | | |
| Desc | Vals | Hist | Calc | | | | | | | | | | | HELP | | | | | | | | | | | | | | | | | | | |
| <input type="radio"/> Table <input type="radio"/> Graph | | | | Orig/Serv... | | 1 Month History | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pool vs Aggregate | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | PSA | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | CPR | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | Pool | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | Aggr | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Orig Bal: | | | | 5,176,525 | | 418,556,152 | | Pool | | 68 | | 241 | | 836 | | 77 | | 994 | | 167 | | 202 | | 119 | | 113 | | 1321 | | 675 | | 555 | |
| Curr Bal: | | | | 86,735 | | 6,644,577 | | 441 | | 446 | | 511 | | 478 | | 466 | | 437 | | 593 | | 533 | | 397 | | 377 | | 440 | | 348 | | | |
| Factor: | | | | 0.01675549(Nov-2003) | | 0.01587499(Nov-2005) | | 4.1 | | 14.4 | | 50.2 | | 4.6 | | 59.7 | | 10.0 | | 12.1 | | 7.1 | | 6.8 | | 79.2 | | 40.5 | | 33.3 | | | |
| WAC: | | | | 9.000 | | 9.050 | | 26.5 | | 26.7 | | 30.7 | | 28.7 | | 28.0 | | 26.2 | | 35.6 | | 32.0 | | 23.8 | | 22.6 | | 26.4 | | 20.9 | | | |
| Orig | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| WAC: | | | | 9.000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Curr | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| WAM: | | | | 36(1-Nov-2006) | | 36(1-Nov-2006) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Orig | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| WAM: | | | | 360 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Age: | | | | 259 | | 187 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Aggregate Info | | | | Prepay Averages | | | | | | | | | | | | | | | | | | Factor History | | | | | | | | | | | |
| FNCL 8.500 1-Oct-2006 M | | | | 1Mo | | | | | | | | | | | | | | | | | | Date | | Factor | | | | | | | | | |
| FN 30yr WAC: 9.050 | | | | 68 | | | | | | | | | | | | | | | | | | 1-Nov-2003 | | 0.01675549 | | | | | | | | | |
| Cusip: 99E000Y62 | | | | PSA | | | | | | | | | | | | | | | | | | 1-Oct-2003 | | 0.01721927 | | | | | | | | | |
| NetCpnBin: 8.500 | | | | Pool | | | | | | | | | | | | | | | | | | 1-Sep-2003 | | 0.01785213 | | | | | | | | | |
| WAMDateBin: Oct-2006 | | | | M | | | | | | | | | | | | | | | | | | 1-Aug-2003 | | 0.01934848 | | | | | | | | | |
| | | | | Pool Count: 63 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

YIELDS

World yields priced from the **BENCHMARKS** RICs can be found on **YLDS1**.

Individual yields of bonds can come either from Reuters or from market contributors on the Reuters network. The yields are part of the full quote display of bonds.

Alternatively, Reuters also provides Reuters PowerPlus Pro software, which calculates the yield of any bond of your choice in real time.

CHEAPEST TO DELIVER

The following codes give useful overviews of cheapest-to-deliver bonds.

CTD1

CTD F3

CHEAPEST F3

CHEAPEST2 F3

DLV F3 all deliverable bonds by future

CONVERSION FACTORS

G24/FACTOR1 G24 conversion factors

CF F3 Conversion factor chain

CREDIT RATINGS

If you want to look up a specific credit rating, the best place to start is: **RRS0001**.

This is the starting point for checking ratings on the Reuters Ratings Service. If your interests in credit ratings are more general, start at the home page **RATINGS**.

Here you will find links to US and International Bond Rating Reviews, actions and assignments, ratings news, analysis and domestic services.

```

RATINGS - REUTERS SPEED GUIDE                                RATINGS
Welcome to the RATINGS GUIDE. To access information double-click in < > or [ ].

-KEY SERVICES=====
REUTERS RATINGS SERVICE provides comprehensive coverage from five top rating
agencies of all European issuers, global sovereign and supra-national issuers.
RRS HOME PAGE.....<RRS0001>

-NEWS, ANALYSIS & REGIONAL SERVICES=====
All Reuters Debt News.....<DEBT/NEWS1>
Ratings News.....[AAA]
Regional Services.....<RATINGS1>
Reuters Guide To Credit Ratings, Scales and Terms.....[RATINGS/]

=====
Broker Guide<BROKER>      Main Guide<REUTERS>      Debt Guide<BONDS>
Lost? Selective Access?...<USER/HELP>      Reuters Phone Support...<PHONE/HELP>

```

The Reuters Ratings Service provides comprehensive coverage from five top rating agencies of all European, global sovereign and supra-national issuers. This unique source of senior unsecured (short and long-term) and subordinated (long-term) issuer credit ratings also provides extensive cross-referencing to related information, such as Reuters news service, fixed income information and equity prices.

NOTE that this service only covers international credit ratings.

DEBT INDICES

Debt indices can be found on **DEBT/INDICES1** and **DEBT/INDICES2**.

Yields of global bond indices for government, pfandbrief, corporate and emerging markets can be found on **BONDTOP**.

```
Welcome to the FTSE Global Bond Index Series
Realtime FTSE Global Government Bond Indices.....<GOVTOP>
Realtime FTSE Euro Pfandbrief Indices.....<PFANDTOP>
Realtime FTSE Euro Corporate Bond Indices.....<CORPTOP>
FTSE Euro Emerging Market Indices.....<EMTOP>
LOGICAL RECORD FORMAT.....<O#BONDTOP>
Index Constituents .....<O#BONDTOPBONDS>
EURO CORP CREDIT SPREADS.....<O#EUCREDITSPREAD>
Other Realtime Information
Government Par Yields.....<O#GOVTOPPARYLD>
Government Zero Yields.....<O#GOVTOPZEROLDS>
Pfandbrief Zero Yields.....<O#PFANDTOPPYZ>
Pfandbrief Par Yields.....<O#PFANDTOPPYP>
Euro Corporate Rating & Yield Matrix.....<CORPTOP04>
Performance Matrix.....<BONDTOP01>
For further information please visit the FTSE website <www.ftse.com>
```

The following corporate bond indices can also be found in the **BONDTOP** suite:

- CORPTOP** the Euro corporate bonds index contains a portfolio of 80 corporate bonds.
- CORPTOP16** all bonds in the portfolio can be monitored and their yields viewed against swaps and government bonds.
- CORPTOP03** allows the tracking of credit spreads by rating and industry sector in real time.

Government bond indices are covered by:

- GOVTOP** This index includes eight indices for major bond markets outside the EMU: USA, Canada, Japan, Britain, Australia, Denmark, Sweden and Switzerland.



RELATED SERVICES

Reuters 3000 Xtra users have access to related services for fixed-income instruments, from prospectus information to electronic trading. Right-click on an instrument and select **Related Service**. This displays a web page where you can select the required service. (Note that some services may be fee-liaible.)

To view prices on instruments on Deutsche Bank's autobahn® service, go to the page **DBAUTOBahn**. Reuters 3000 Xtra users who are registered to trade on autobahn® can simply right-click on an instrument to trade.

NOTE: To use any related service, you must be running Microsoft Internet Explorer 5.5 or greater.

FIELD NAMES FOR QUOTE LISTS

If you want to set up a quote list in an Excel spreadsheet, then these are the most commonly used fields. For each field of information, you can use either the PowerPlus Pro identifier, the FID (field number) or the field identifier used by Reuters 3000 Xtra.

| FIELD | POWERPLUS PRO IDENTIFIER | FID NUMBER | REUTERS 3000 XTRA IDENTIFIER |
|-----------------------|--------------------------|------------|------------------------------|
| RIC CODE | RIC NAME | -1 | X_RIC_NAME |
| Name of bond | DISPLAY NAME | 3 | DSPLY_NAME |
| Up/down arrow for bid | ACT TYPE 1 | 270 | ACT_TP_1 |
| Bid | PRIM ACT 1 | 393 | PRIMACT_1 |
| Offer | SECOND ACTVY 1 | 275 | SEC_ACT_1 |
| Annual yield | RT YIELD 1 | 356 | RT_YIELD_1 |
| Semi-annual yield | SEC YLD 1 | 970 | SEC_YLD_1 |
| Coupon rate | COUPON RATE | 69 | COUPN_RATE |
| Maturity | MATURITY DATE | 68 | MATUR_DATE |
| Contributor | CONTRIBUTOR 1 | 831 | CTBTR_1 |

CHAPTER 5

BOND MARKETS



IN BRIEF: BOND MARKETS

REUTERS 3000 XTRA

To find a bond by issuer name, click on the **Search** button, and set the **Look For** field to **Fixed Income**, and the **Where** fields to **Issuer** and **Begins With**.

To find a bond where you know its clearing code, click on the **Search** button, and set the **Look For** field to **Any Instrument**, and the first **Where** field to the relevant code type. Change the third field to **Is**.

Bond RICs are formed using the country code, the official code and a delimiter as a minimum.

Extensions and variations include:

Exchange-traded bonds (full quote)

Include the exchange identifier e.g. **DE113492=F**

Exchange-traded bonds (chain)

Shows bonds of the same type or same maturity e.g. **DEBA=F F3**

Competing Market Makers (chain)

Gives a list of all competing Market Makers with the best bid and offer e.g. **DE113513= F3**

Eurobonds and MTNs

pages **EUROBONDS** and **MTNINDEX**

Yields

pages **YLDS1** and **BENCHMARKS**

Cheapest to Deliver

page **CTD1** etc.

Conversion factors

page **G24/FACTOR1** or **CF F3**

Debt indices

page **DEBT/INDICES1**

Deutsche Bank prices on autobahn®

page **DBAUTOBahn**

Foreign exchange and money markets

TOOLS FOR FINDING DATA

| TOOLS | CONTENT |
|-------------------------------|--|
| Money Datafinder (MDF) | <p>MDF uses web technology to find any money item in the world. Using combinations of keyword or category searches, it returns all matches within a few seconds and includes background information, such as the availability of historical data.</p> <p>http://datafinder.session.rservices.com</p> <p>Reuters page reference: DFKEY</p> |

SPEED-GUIDES, RICS AND PAGES

| | |
|---------------------|---|
| MONEY | The money speed-guide provides all codes related to the FX and money markets for real-time data, news and economic data |
| FX/HELP | FAQ on enhanced spot displays |
| DEAL/1 | Reuters Dealing Dealt Rate data |
| DEALT1 | Reuters Dealing 2000-2 |
| EBS/1 | EBS Dealt Rate data |
| FUT/FX1 | Foreign Exchange Futures |
| FUT/IR1 | Interest Rate Futures |
| PRIME/1 | Global prime and discount rates by country |
| NEWDATA/M F9 | Finding new FX and money data |
| CHANGES | Index of all change notifications affecting data |

SPOT RATES

This is easy. If you know the SWIFT code for the currency, then you know the currency's RIC; just add the = sign at the end.

In most cases, the spot rate for a currency is shown against the US dollar.

e.g. **GBP=** shows the spot rate dollar against the British pound Sterling.

CHF= shows the spot rate Swiss franc against US dollar.

| CHF= | | Latest Rates | | Source | | Deal | Time | High | Low | Close | 04DEC03 15:55 |
|-----------|-------------|--------------|-----|--------|------|------|-------|--------|--------|-------|---------------|
| Bid/Ask | Contributor | Loc | TOR | CIBT | CIBC | | | | | | |
| 1.2942/52 | CIBC | | | | | | 15:55 | 1.2960 | 1.2805 | | |
| 1.2944/50 | | | | | | | | | | | |
| 1.2947/50 | | | | | | | | | | | |

CHAPTER 6

FOREIGN EXCHANGE AND MONEY MARKETS

0#EUR= shows enhanced currency guide for the euro.

Pre-defined lists of spot rates can be found on page **SPOT/1**. This also provides a list of all spot RICs in alphabetic order by country. The list continues on page **SPOT/2** and beyond.

Most, but not all, currencies are quoted with the US dollar as the base currency. You can see which are quoted inversely to the USD by viewing the currency background pages on **MONEY/BKGDINFO1**.

CROSS-RATES

For cross-rates, simply use the SWIFT code for each currency, then add the = sign at the end. The currency you specify first is always the base currency, and the second is the counter-currency.

The RIC **GBPCHF=** will therefore tell you how many Swiss francs can be obtained for one pound Sterling.

There are two types of cross-rate:

CONTRIBUTED CROSS-RATES

Liquid cross-rates are usually contributed by financial institutions as indicative prices. You can find rates for specific instruments either in pages or in RICs. However, they are also available in lists by currency. For example, you can find liquid cross-rates on the British pound on the display **GBPX1=**

| GBP CROSS RATES | | | | | | | | | |
|-----------------|---|-------------|--------------|------|------|------|-------|----------|---------|
| RIC | | Bid/Ask | Contributor | Loc | Src | Deal | Time | High | Low |
| GBP= | ↑ | 1.7191/96 | HSBC BANKPLC | LON | HSCI | MIXL | 15:58 | 1.7288 | 1.7178 |
| GBPJPY= | ↑ | 186.16/6.22 | DIALOG-OPTIM | MOW | DIAL | DIAL | 15:58 | 187.22 | 186.16 |
| EURGBP= | ↑ | 0.7010/15 | RABOBANK GT | LON | RAB1 | RABX | 15:58 | 0.7046 | 0.6992 |
| GBPCHF= | ↓ | 2.2227/46 | BARCLAYS | LON | BARL | | 15:57 | 2.2307 | 2.2090 |
| GBPAUD= | ↓ | 2.3430/55 | BARCLAYS | LON | BARL | | 15:57 | 2.3481 | 2.3375 |
| GBPCZK= | ↑ | 46.216/276 | ZIVNOSTENSKA | PRG | ZIVP | ZIVP | 15:57 | 46.468 | 45.894 |
| GBPHRK= | ↑ | 10.9859/17 | ZAGREBACKA | ZAG | ZBZH | ZBZH | 15:57 | 11.0182 | 10.9426 |
| GBPHUF= | ↓ | 380.81/1.51 | KONZUMBANK | BUD | KONZ | KOZB | 15:36 | 387.84 | 380.83 |
| GBPIRR= | ↓ | 14391/4404 | BK TEJARAT | THR | TJRT | BTEJ | 05:51 | | |
| GBPIISK= | ↓ | 127.44/7.56 | LANDSBANKI | RVK | LAND | LAIK | 15:57 | 127.79 | 127.10 |
| GBPKZT= | ↓ | 249.86/0.18 | CITIBANK | ALA | CTKZ | CTKZ | 15:56 | 252.38 | 250.18 |
| GBPLTL= | ↓ | 4.9214/63 | NORD/LB LITH | VIS | | AGBL | 15:57 | | |
| GBPPLM= | ↑ | 6.5985/25 | B G Z | WAM | BGZW | BFEW | 15:57 | 6.6413 | 6.5937 |
| GBPROL= | ↓ | 57485/7561 | TRANSILVANIA | BUM | TRAN | TRAN | 15:58 | | |
| GBPRUB= | ↑ | 51.0230/80 | DIALOG-OPTIM | MOW | DIAL | DIAL | 15:57 | 51.3200 | 51.0300 |
| GBPSIT= | ↓ | 337.21/7.54 | UZ SAVINGS | UZHB | UZHB | | 15:57 | 338.1000 | 335.82 |
| GBPSKK= | ↑ | 58.565/675 | UNIBANKA | BRA | UNSL | UBSK | 15:58 | 58.783 | 58.249 |

A list of all cross-rates can be found on page **SPOT/2** and beyond, or from each currency's individual speed guide **XXX/1** (where XXX is the SWIFT code for the currency).

CALCULATED CROSS-RATES

For currency pairs that are not generally quoted, Reuters provides calculated rates. These are calculated from the two contributed spot rates that are involved. The codes for these calculated rates RICs have **=R** or **=REU** at the end.

For example:

GBPCHF=R which is calculated from the prices on **GBP=** and **CHF=**

or as a tile **GBPX=** to display a list of all pound Sterling calculated rates from Reuters.

| GBP X-RATES CALC | | | | | | | |
|------------------|----------|----------|------------|----------|--------|--------|----------|
| GBPX= | Bid | Ask | Src Time | RIC | Bid | Ask | Src Time |
| GBP= | 1.7195 | 1.7200 | SEBN 16:00 | | | | |
| GBPAED=R | 6.3159 | 6.3181 | 16:00 | AUDGBP=R | 0.4265 | 0.4269 | 16:00 |
| GBPARS=R | 5.1075 | 5.1173 | 16:00 | CADGBP=R | 0.4428 | 0.4432 | 16:00 |
| GBPAUD=R | 2.3426 | 2.3447 | 16:00 | CHFGBP=R | 0.4497 | 0.4502 | 16:00 |
| GBPBGN=R | 2.7833 | 2.7850 | 16:00 | CYPGBP=R | 1.2007 | 1.2033 | 16:00 |
| GBPBHD=R | 0.6483 | 0.6485 | 16:00 | DKKGBP=R | 0.0942 | 0.0943 | 16:00 |
| GBPBIF=R | 827.6112 | 862.7400 | 16:00 | EURGBP=R | 0.7012 | 0.7016 | 16:00 |
| GBPBRL=R | 5.0542 | 5.0605 | 16:00 | FJDGBP=R | 0.3326 | 0.3362 | 16:00 |
| GBPBWF=R | 7.3272 | 7.3765 | 16:00 | HKDGBP=R | 0.0749 | 0.0749 | 16:00 |
| GBPCAD=R | 2.2561 | 2.2585 | 16:00 | IDRGBP=R | 0.68 | 0.68 | 16:00 |
| GBPCDF=R | 634.569 | 677.719 | 16:00 | JPYGBP=R | 0.5370 | 0.5373 | 16:00 |
| GBPCHF=R | 2.2214 | 2.2237 | 16:00 | MTLGBP=R | 1.6302 | 1.6356 | 16:00 |
| GBPCLP=R | 1043.86 | 1044.96 | 16:00 | MMKGBP=R | 0.0054 | 0.0055 | 16:00 |
| GBPCYP=R | 0.8311 | 0.8328 | 16:00 | NOKGBP=R | 0.0867 | 0.0868 | 16:00 |
| GBPCZK=R | 46.202 | 46.265 | 16:00 | NZDGBP=R | 0.3747 | 0.3753 | 16:00 |
| GBPDJF=R | 300.9475 | 288.3240 | 16:00 | PENGBP=R | 0.1671 | 0.1672 | 16:00 |
| GBPDKK=R | 10.6055 | 10.6120 | 16:00 | PGKGBP=R | 0.1738 | 0.1797 | 16:00 |

You'll find that there are many more calculated rates available than contributed rates. So if you need to find a cross-rate and you don't know whether it is contributed or calculated, there are two ways of finding out:

1. Go though the speed-guide **SPOT/2** and click through until you find the base currency for the cross-rate.
2. Or, the faster option, make an intelligent guess. Type the currency code of the base currency (you can find a list of SWIFT codes for currencies at the end of this section) and add the counter-currency, followed by =R. If that doesn't work, try the other way round. For example, **GBPMYR=R** or **MYRGBP=R**.

The base currency is the currency you pay one unit for and receive the equivalent amount in the counter-currency. In the **GBPMYR=R** example, the base currency is GBP.



TIP

Some Reuters services, especially domestic services, only allow you to see delayed spot and cross rates. The ending **=X** means the rate is delayed 10 minutes, **=S** is a 2-minute snapshot, for example **EUR=X** or **EUR=S**. There are more details in the **Delayed data** chapter of this guide.

CHAPTER 6

FOREIGN EXCHANGE AND MONEY MARKETS

DEPOSITS AND FORWARDS

The codes for retrieving deposits and forwards are based on the spot codes. Insert **DEPO** or **FWD** into the RIC before the **=**, for example:

GBPDEPO= can also be used to view deposits on the British pound

GBPFWD= can also be used to view just the forwards

To view both forwards and deposits for a currency, insert **F** into the RIC before the **=**, for example:

GBPF= displays all deposits and forwards for the British pound.

There are also chains that follow a similar format:

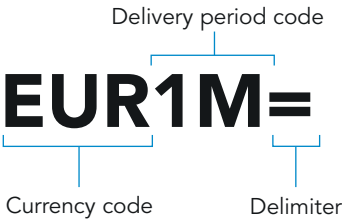
0#EURF= (or **EURF= F3**) enhanced forwards guide for the euro

0#EURD= (or **EURD= F3**) enhanced deposits guide for the euro

| EUR/USD FORWARD ENHANCED GUIDE | | | | | | | | | |
|--------------------------------|--------|--------|--------|-------|---------|----------|---------------|---------------------|--|
| 1.2064/68 REAL TIME | | | | | | | | | |
| RELATED DATA | | | | | | | | | |
| Term | Bid | Offer | Source | Time | Start | Maturity | Outright | | |
| EUR0N= | -0.365 | -0.335 | BAFX | 15:59 | 04DEC03 | 05DEC03 | 1.206364/6766 | <FWD/1> | |
| EUR1M= | -1.07 | -1.04 | BAFX | 15:59 | 05DEC03 | 08DEC03 | 1.206293/6696 | <DEPO/1> | |
| EUR3M= | -0.35 | -0.32 | BOAF | 15:59 | 08DEC03 | 09DEC03 | 1.206365/6768 | <FUTURES> | |
| EUR5M= | -2.62 | -2.10 | AIBM | 16:02 | 08DEC03 | 15DEC03 | 1.206138/6590 | <SPOT/1> | |
| EUR2M= | -4.78 | -4.70 | RZBA | 15:57 | 08DEC03 | 22DEC03 | 1.205922/6330 | <EURVIEW> | |
| EUR1M= | -10.73 | -10.55 | RABN | 16:02 | 08DEC03 | 08JAN04 | 1.205327/5745 | <ECBMENU> | |
| EUR2M= | -21.33 | -21.13 | SGSW | 16:02 | 08DEC03 | 09FEB04 | 1.204267/4687 | <EURIBOR01> | |
| EUR3M= | -30.54 | -30.29 | SGSW | 16:02 | 08DEC03 | 08MAR04 | 1.203346/3771 | <0#MONEY> | |
| EUR4M= | -40.6 | -40.1 | RZBA | 16:01 | 08DEC03 | 08APR04 | 1.202340/2790 | <BROKER> | |
| EUR5M= | -50.7 | -50.2 | RZBA | 16:01 | 08DEC03 | 10MAY04 | 1.201330/1780 | | |
| EUR6M= | -59.52 | -59.02 | SGSW | 16:02 | 08DEC03 | 08JUN04 | 1.200448/0898 | ECONOMIC INDICATORS | |
| EUR7M= | -68.37 | -67.37 | DRE4 | 16:01 | 08DEC03 | 08JUL04 | 1.199563/0063 | <0#G7TODAY> | |
| EUR8M= | -77.37 | -76.37 | DRE4 | 16:01 | 08DEC03 | 09AUG04 | 1.198663/9163 | <ECONOMY> | |
| EUR9M= | -85.28 | -84.28 | SGSW | 16:02 | 08DEC03 | 08SEP04 | 1.197872/8372 | <INDICATOR/NEWS1> | |
| EUR10M= | -92.7 | -91.2 | RZBA | 16:01 | 08DEC03 | 08OCT04 | 1.197130/7680 | NEWS | |
| EUR11M= | -99.87 | -98.37 | DRE4 | 16:01 | 08DEC03 | 08NOV04 | 1.196413/6963 | <FXNEWS> | |

FORWARDS

To construct a forward RIC, you need the following components:



Typical delivery period codes are:

| | | | |
|-----------|---------------|-----------|-------------|
| ON | Overnight | 3M | Three month |
| TN | Tomorrow next | 6M | Six month |
| SN | Spot next | 9M | Nine month |
| SW | Spot week | 1Y | One year |
| 1M | One month | 2Y | Two year |
| 2M | Two month | | |

OUTRIGHT FORWARDS

Forwards are usually quoted as forward points (incremental values that need to be added to the spot price in order to achieve the outright forward price). If you want a forward quote as an 'outright' price, insert **OR** into the RIC in front of the **=**; for example, **RUB1MOR=**.

CONTRIBUTED EURO CROSS FORWARDS

Contributed prices are available for the following euro currency pairs:

| | |
|------------------|-------------------|
| EUR/GBP Forwards | EURGBPFW= |
| EUR/JPY Forwards | EURJPYFW= |
| EUR/CHF Forwards | EURCHFFWD= |
| EUR/CZK Forwards | EURCZKFW= |
| EUR/EEK Forwards | EUREEKFW= |
| EUR/HUF Forwards | EURHUFFWD= |
| EUR/SEK Forwards | EURSEKFW= |
| EUR/NOK Forwards | EURNOKFW= |
| EUR/DKK Forwards | EURDKKFW= |
| EUR/LVL Forwards | EURLVLFWD= |
| EUR/PLN Forwards | EURPLNFW= |
| EUR/SKK Forwards | EURSKKFW= |

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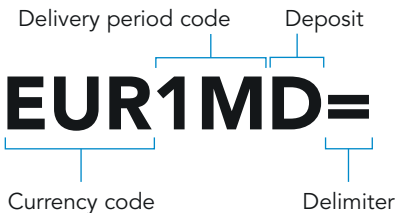


TIP

If you can't find any forwards for a particular currency then it may be because the market you are looking at tends to deal more in non-deliverable forwards. Try looking on the speed-guide **NDF/1** instead of **FWD/1**.

DEPOSITS

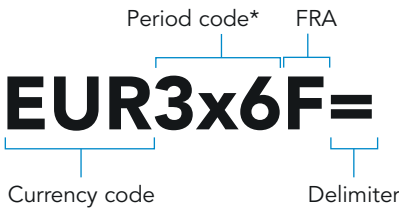
To construct a deposit RIC, you need the following components:



The same delivery periods apply as to forwards. Deposit RICs can be found on the **DEPO/1** speed-guide.

FORWARD RATE AGREEMENTS (FRAs)

Forward rate agreements are built in the following way:



* The first period refers to the starting month from today, the second period refers to the expiry from today, e.g. **3x6** (meaning the contract starts in three months and runs for three months).

FRA/1 lists the full range of available FRAs.

| FORWARD RATE AGREEMENTS - REUTERS SPEED GUIDE | | FRA/1 |
|---|---|-------|
| Detailed below are retrieval codes for key FORWARD RATE AGREEMENT displays. | | |
| =MAJOR CURRENCY FRAS===== | =NEWS and ANALYSIS===== | |
| Major Currency FRAS.....<TOPFRA> | All Reuters Money News....<MONEY/NEWS1> | |
| Totam Capital.....<TOPFRA=TKFX> | Daily Diary.....[M-DIARY] | |
| Tradition UK FRAS.....<TOPFRA=TRDL> | | |
| Tullett & Tokyo Liberty...<TOPFRA=TTKL> | =RELATED GUIDES===== | |
| | Broker Index.....<BROKER> | |
| =FRAS by CURRENCY===== | Specialist Data Guide.....<SPECIAL> | |
| AUD - CHF.....<FRA/2> | Cross Market Package.....<CROSS/MKT1> | |
| TWD - USD.....<FRA/3> | | |

SWAPS

All basis swaps by currency are listed on pages [SWAP/1](#) and [SWAP/2](#).

Major interest-rate swap codes are on page [SWAP/1](#) and a listing of IRSs by currency are on pages [SWAP/2](#) to [SWAP/4](#).

ZERO CURVES

Reuters currently covers swap-based zero curves for these currencies:

| | |
|-----------------------|---------------------------|
| AUD Zero Coupon Yield | AUDZ=R F3 |
| CAD Zero Coupon Yield | CADZ=R F3 |
| CHF Zero Coupon Yield | CHFZ=R F3 |
| CZK Zero Coupon Yield | CZKZ=R F3 |
| DKK Zero Coupon Yield | DKKZ=R F3 |
| EUR Zero Coupon Yield | EURZ=R F3 |
| GBP Zero Coupon Yield | GBPZ=R F3 |
| HKD Zero Coupon Yield | HKDZ=R F3 |
| INR Zero Coupon Yield | INRZ=R F3 |
| JPY Zero Coupon Yield | JPYZ=R F3 |
| KRW Zero Coupon Yield | KRWZ=R F3 |
| NOK Zero Coupon Yield | NOKZ=R F3 |
| NZD Zero Coupon Yield | NZDZ=R F3 |
| PLN Zero Coupon Yield | PLNZ=R F3 |
| SAR Zero Coupon Yield | SARZ=R F3 |
| SEK Zero Coupon Yield | SEKZ=R F3 |
| SGD Zero Coupon Yield | SGDZ=R F3 |
| TWD Zero Coupon Yield | TWDZ=R F3 |
| THB Zero Coupon Yield | THBZ=R F3 |
| USD Zero Coupon Yield | USDZ=R F3 |
| ZAR Zero Coupon Yield | ZARZ=R F3 |

To see all zero coupon yield curves:

[ZERO/1](#)

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FOREIGN EXCHANGE AND MONEY MARKETS

HOW THE ZERO CURVE IS CONSTRUCTED

The swap zero curve is based on a minimum of tom/next, two-year, five-year, seven-year and ten-year prices in the cash and swap markets. Ask prices are provided by major broking firms and by Reuters, using calculations based on analytics from the French specialists, Marvin. The full curve is then constructed by interpolating values for the intermediate dates and calculating each point on the curve (otherwise known as bootstrapping) using the derived discount factors.

This combination of real-time data from the swap market, interpolation and bootstrapping along the full length of the curve provides a smooth curve that eliminates yield curve distortions at points where liquidity is poor. A range of discount factors is derived from the curve that can be used to estimate absolute and relative changes in the cash-flow profile of most interest rate transactions.

By providing ten-minute updates for each currency, Reuters provides an engine that can be used with any risk-analysis tool throughout the trading day. If you want to create your own curve, you can build one using the Marvin analytics contained in Reuters PowerPlus Pro tools. A demonstration can be arranged by local Reuters offices.

VOLATILITIES

FOREIGN EXCHANGE VOLATILITIES

Contributed OTC FX option volatilities

Risk reversal

Implied volatility of currency options traded on Philadelphia exchange

OPS/FX1 to OPS/FX3

OPS/FX3

PHVM

INTEREST RATE VOLATILITIES

Caps and floors

Swaptions

IRGS/1

SWAPTION/1

FIXINGS**EURO INTERBANK OFFERED RATES**

Euribor Act/360

EURIBOR=

Euribor Act/365

EURIBOR365=**LONDON INTERBANK OFFERED RATES**

Libor (BBA)

FRASETT

BBA LIBOR source banks

BBALIBORS**OTHER FIXINGS**

Other interbank offered rates

FIX/1 to **FIX/2**FX volatilities/Strangles/Risk Reversal Fixings/
Overnight Fixings**FIX/4**

European overnight fixing

EONIA

European overnight fixing

EONIA=

European overnight fixing

EONIARECAP

W.M.B.A. O/N fixing rate

SONIAOSR=

W.M.B.A. O/N fixing rate

SONIA1 to **SONIA2**

W.M.B.A. O/N fixing rate

SONIARECAP

London closing spot rates: WM company

WMRFWDC

Bank of England spot settlement rates:

GBP spot settlement rates

GBPSSR=

Spot settlement rates

BOE/SAF

ISDA Interest Rate Swap fixing

ISDAFIX1 to **ISDAFIX5**

CHAPTER 6

FOREIGN EXCHANGE AND MONEY MARKETS

CURRENT LIST OF ALL CURRENCY CODES FOR SPOT RATES

(The three letters before the = sign represent the SWIFT code for each currency)

A

Afghanistan Afghani
Albanian Lek
Algerian Dinar
Andorran Franc
Andorran Peseta
Angolan New Kwanza
Argentine Peso
Aruba Florin
Australian Dollar
*Austrian Schilling

B

Bahamian Dollar
Bahraini Dinar
Bangladesh Taka
Barbados Dollar
*Belgian Franc
Belarussian Rouble
Belize Dollar
Bermuda Dollar
Bhutan Ngultrum
Botswana Pula
Bolivian Boliviano
Brunei Dollar
Brazilian Real
British Pound
Bulgarian Lev
Burundi Franc

C

Cambodia Riel
Canadian Dollar
Cape Verde Escudo
Cayman Islands Dollar
CFA Franc
(African Financial Community)

AFN= CFA Franc
ALL= (African Financial Community)
DZD= Chilean Peso
ADF= Chinese Renminbi
ADP= Colombian Peso
AOA= Comoro Franc
ARS= Congo Democratic Franc
AWG= Costa Rica Colon
AUD= Croatian Kuna
ATS= Crna Gora & Serbian Dinar
Cuban Peso
Cyprus Pound
Czech Koruna

D

BSD=
BHD=
BDT=
BBD= Danish Krone
BEF= Djibouti Franc
BYR= Dominican Peso
BZD= *Dutch Guilder

E

BMD=
BTN=
BWP= Ecuadorian Sucre
BOB= Egyptian Pound
BND= El Salvador Colon
BRL= Estonian Kroon
GBP= Ethiopian Birr
BGN= Eritrea Nakfa
BIF= Euro

F

KHR= Falkland Islands Pound
CAD= Fiji Dollar
CVE= *Finnish Mark
KYD= *French Franc
XAF=

XOF=

Gambian Dalasi
*German Mark
Ghanian Cedi
Gibraltar Pound
Gold
*Greek Drachma
Guatemala Quetzal
Guinea Franc
Guyana Dollar

DKK=

DJF=

DOP=

NLG=

ECS=

EGP=

SVC=

EEK=

ETB=

ERN=

EUR=

FKP=

FJD=

FIM=

FRF=

G

Gambian Dalasi
*German Mark
Ghanian Cedi
Gibraltar Pound
Gold
*Greek Drachma
Guatemala Quetzal
Guinea Franc
Guyana Dollar

H

Haiti Gourde
Honduras Lempira
Hong Kong Dollar
Hungarian Forint

I

Iceland Krona
Indian Rupee
Indonesian Rupiah
Iranian Rial
Iraqi Dinar
*Irish Punt
Israeli Shekel
*Italian Lira

J

Jamaican Dollar
Japanese Yen
Jordanian Dinar

K

Kazakhstan Tenge
Kenyan Shilling
Korean Won
Kuwaiti Dinar

GMD=

DEM=

GHC=

GIP=

XAU=

GRD=

GTQ=

GNF=

GYD=

HTG=

HNL=

HKD=

HUF=

ISK=

INR=

IDR=

IRR=

IQD=

IEP=

ILS=

ITL=

JMD=

JPY=

JOD=

KZT=

KES=

KRW=

KWD=

* Although these currencies are no longer traded, the RICs can still be used to display historical data in Reuters Graphics or Excel.

L

Lao Kip
Latvian Lat
Lebanese Pound
Lesotho Loti
Liberian Dollar
Libyan Dinar
Lithuanian Litas
*Luxembourg Franc

M

Macedonian Dener
Macau Pataca
Malagasy Franc
Malaysian Ringgit
Malawi Kwacha
Maldives Rufiyaa
Maltese Lira
Mauritania Ouguiya
Mauritius Rupee
Mexican Nuevo Peso
Moldovan Leu
Mongolian Tugrik
Moroccan Dirham
Mozambique Metical
Myanmar Kyat

N

Namibian Dollar
Nepalese Rupee
Neth. Antilles Guilder
New Zealand Dollar
Nicaragua Cordoba
Nigerian Naira
North Korean Won
Norwegian Krone

LAK=

LVL=

LBP=

LSL=

LRD=

LYD=

LTL=

LUF=

MKD=

MOP=

MGF=

MYR=

MWK=

MVR=

MTL=

MRO=

MUR=

MXN=

MDL=

MNT=

MAD=

MZM=

MMK=

NAD=

NPR=

ANG=

NZD=

NIO=

NGN=

KPW=

NOK=

O

Omani Rial

P

Pacific Franc
Pakistani Rupee
Palladium
Panama Balboa
Papua New Guinea Kina
Paraguayan Guarani
Peruvian Nuevo Sol
Philippine Peso
Platinum
Polish Zloty
*Portuguese Escudo

Q

Qatar Rial

R

Romanian Leu
Russian Rouble

S

Samoa Tala
Sao Tome Dobra
Saudi Arabian Riyal
Seychelles Rupee
Silver
Sierra Leone Leone
Singapore Dollar
Slovak Koruna
Slovenian Tolar
Solomon Islands Dollar
Somali Shilling
South African Rand
*Spanish Peseta
Sri Lanka Rupee

OMR=

XPF=

PKR=

XPD=

PAB=

PGK=

PYG=

PEN=

PHP=

XPT=

PLN=

PTE=

QAR=

ROL=

RUB=

WST=

STD=

SAR=

SCR=

XAG=

SLL=

SGD=

SKK=

SIT=

SBD=

SOS=

ZAR=

ESP=

LKR=

St Helena Pound
Sudanese Dinar
Sudanese Pound
Surinam Guilder
Swaziland Lilageni
Swedish Krona
Swiss Franc
Syrian Pound

T

Taiwan Dollar
Tanzanian Shilling
Thai Baht
Tonga Pa'anga
Trinidad & Tobago Dollar
Tunisian Dinar
Turkish Lira

U

UAE Dirham
Ugandan Shilling
Ukraine Hryvnia
Uruguayan New Peso
Uzbekistan Sum

V

Vanuatu Vatu
Venezuelan Bolivar
Vietnam Dong

Y

Yemen Riyal

Z

Zambian Kwacha
Zimbabwe Dollar

SHP=

SDD=

SDP=

SRG=

SZL=

SEK=

CHF=

SYP=

TWD=

TZS=

THB=

TOP=

TTD=

TND=

TRL=

AED=

UGX=

UAH=

UYU=

UZS=

VUV=

VEB=

VND=

YER=

ZMK=

ZWD=

* Although these currencies are no longer traded, the RICs can still be used to display historical data in Reuters Graphics or Excel.

CHAPTER 6

FOREIGN EXCHANGE AND MONEY MARKETS

FIELD NAMES FOR QUOTE LISTS

If you want to set up a quote list in an Excel spreadsheet, then these are the most commonly used fields. For each field of information, you can use either the PowerPlus Pro identifier, the FID (field number) or the field identifier used by Reuters 3000 Xtra.

| FIELD | POWERPLUS PRO IDENTIFIER | FID NUMBER | REUTERS 3000 XTRA IDENTIFIER |
|---------------------|--------------------------|------------|------------------------------|
| Bid | BID | 22 | BID |
| Offer | ASK | 25 | ASK |
| Previous bid | BID 1 | 23 | BID_1 |
| Previous offer | ASK 1 | 26 | ASK_1 |
| Name of contributor | DISPLAY NAME | 3 | DSPLY_NAME |
| Contributor page | BACKGROUND PAGE | 105 | BCKGRNDPAG |
| Dealing code | OFFICIAL CODE | 78 | OFFCL_CODE |
| Up/down arrow | TICK: BID | 115 | BID_TICK_1 |
| Today's bid high | TODAY HIGH BID | 203 | BID_HIGH_1 |
| Today's bid low | TODAY LOW BID | 204 | BID_LOW_1 |
| Time of update | TIME OF UPDATE | 5 | TIMPACT |
| Date of update | ACTIVE DATE | 17 | ACTIV_DATE |



IN BRIEF: FOREIGN EXCHANGE AND MONEY MARKETS

The codes for FX and money instruments are made up of very simple elements. They all begin with the internationally known SWIFT codes (such as JPY for the Japanese Yen). The other elements are equally straightforward.

For instruments based on currency pairs, you simply need to begin with the SWIFT codes for each currency.

For example, consider the RIC: **EURJPY6M=ABNL**

| | | | | | | | |
|--|------------|------------|----------|----------|--|----------|-------------|
| First currency/SWIFT code | EUR | | | | | | |
| Second currency code needed for cross rates | | JPY | | | | | |
| Period | | | 6 | | | | |
| Delivery period indicator | | | | M | | | |
| Delimiter | | | | | | = | |
| Broker/Market Maker code | | | | | | | ABNL |

```

EURJPY6M=ABNL
Latest          Contributor Loc Srce Deal Bkg Time H
-146.1/44.9     ABN AMRO      LON ABNL ABNT 16:13 L
-146.0/44.8     16:12 O
-146.1/44.9     16:11 C
FWD              EURJPY              6M
  
```

So this RIC gives you the six-month forward rate for the euro against the Japanese yen, contributed by ABN AMRO (ABNL).

CHAPTER 6

FOREIGN EXCHANGE AND MONEY MARKETS



IN BRIEF: FOREIGN EXCHANGE AND MONEY MARKETS, CONTINUED

Speed-guide: **MONEY**

| MARKET | MARKET TILES | SUPER RIC | CONTRIBUTOR RIC | SPEED GUIDE |
|---------------|----------------------|-----------|--------------------|----------------|
| Spot rates | EFX= AFX= NFX= | EUR= | EUR=BARL | SPOT/1 |
| Cross rates | EUR= EURX1= | EURCHF= | EURCHF=BARL | SPOT/1 |
| Forward rates | EURF= | EUR1M= | EUR1M=TTKL | FWD/1 |
| Deposit rates | DM= EURF= | EUR1MD= | EUR1MD=TTKL | DEPO/1 |
| FRAs | TOPFRA | EUR1X4F= | EUR1X4F=TTKL | FRA/1 |

Futures

Futures contracts exist for stock indices, commodities and for the interest rate and bond markets. These contracts are traded on their respective futures exchange in real time. If you want to see this information, make sure you have subscribed to the relevant futures exchange.

SPEED-GUIDES, RICS AND PAGES

You can find codes for futures data on the following pages:

| | |
|--------------------|-------------------------------------|
| FUTURES | The main speed-guide for futures |
| FUTURES F3 | Futures chain, easier to drill down |
| COMMOD/1 | Commodities futures |
| ENERGY/1 | Energy futures |
| EQUITY/FUT1 | Index futures |

Alternatively, all futures are available listed by country and exchange. If you're looking for the S&P 500 future traded on Chicago Mercantile Exchange (CME):

1. From the **FUTURES** speed-guide page go to the US futures and options speed-guide page **US/FUTEX1**.
2. From there, go to the CME page **CME/FUTEX1** or straight to the relevant exchange if you know the three-letter exchange code, e.g. **LIF/FUTEX1** for the London International Financials Futures Exchange.

FUTURES CONTRACTS

Codes for individual futures contracts incorporate indicators that tell you what the delivery month and year are.

Once you know the root code, you can easily construct your own futures contracts.



CHAPTER 7

FUTURES

DELIVERY MONTH CODES FOR FUTURES

| | | | | | |
|----------|----------|--------|----------|-----------|----------|
| January | F | May | K | September | U |
| February | G | June | M | October | V |
| March | H | July | N | November | X |
| April | J | August | Q | December | Z |

DELIVERY YEARS FOR FUTURES

4 for the year 2004, **5** for the year 2005 and so on.

Individual futures contracts will always be available on a real-time display until they officially expire.

CONTINUATION RICS

The most convenient way to display futures contracts is by using continuation RICS. These always display the details of the present contract. So there is no need to change the month and year code in a display every time the contract expires. The continuation code will automatically roll over to the next one.

The structure for continuation RICS is:

1. RIC root code,
2. followed by the lower-case letter "c" and
3. the front contract number, e.g. 1 for the first front contract, 2 for the second front contract, 3 for the third front contract and so on.

To stay with our three-month Euribor example:

FEI Is still the RIC root for the three-month Euribor traded on LIFFE

c This stands for continuation (lower case)

1 For the first front contract

Please note that continuation RICS are another instance where the code must use upper- and lower-case exactly.

SERIAL FUTURES CONTRACTS

Some short interest rate futures settle not only in March, June, September and December, but also in odd months. For these serial futures contracts, you need to add the extra lower-case letter m after the c, for example, **FEIcm1**, **FEIcm2**.

This will always display the main months, even when the contracts roll over to the next one.

FUTURES CHAINS

Futures chains allow you to see all available contracts for a future in one display. Here are three simple ways of retrieving a futures chain:

- Display the relevant speed-guide (for example **EUR/FUT1**), then double-click on one of the futures codes displayed in angle brackets. For example: **<0#FEI:>**

(Remember that anything beginning with **0#** will display a chain.)

A chain displays the individual futures contract **with all contract months** – in this case, the three-month Euribor futures, traded on LIFFE.

- Type the chain RIC of a futures contract and press the chain key **F3**. In this case, you do not include the standard chain indicator **0#** at the beginning. For example: **FEI: F3**.

| #FEI: | | LIFFE EURIBOR | | | LIF/LIF EUR | | | | | | | |
|-------|--------|---------------|--------|--------|-------------|--------|--------|--------|--------|--------|-------|--|
| High | Last | Net Ch | Bid | Ask | Settle | Open | High | Low | Volume | Op.Int | Time | |
| DEC3 | 97.850 | +0.005 | 97.845 | 97.850 | 97.850 | 97.845 | 97.855 | 97.840 | 27768 | 540044 | 17:55 | |
| JAN4 | 97.855 | +0.015 | 97.790 | | 97.850 | 97.840 | 97.855 | 97.840 | 2 | 1701 | 17:54 | |
| FEB4 | | +0.010 | | | 97.815 | | | | | 75 | 09:50 | |
| MAR4 | 97.790 | +0.020 | 97.790 | 97.795 | 97.795 | 97.800 | 97.800 | 97.765 | 37732 | 488619 | 17:59 | |
| APR4 | | +0.030 | | | 97.750 | | | | | | | |
| MAY4 | | +0.030 | | | 97.690 | | | | | | | |
| JUN4 | 97.625 | +0.035 | 97.620 | 97.625 | 97.625 | 97.620 | 97.640 | 97.595 | 45940 | 387685 | 17:59 | |
| SEP4 | 97.395 | +0.040 | 97.395 | 97.400 | 97.400 | 97.390 | 97.415 | 97.365 | 46211 | 287389 | 17:59 | |
| DEC4 | 97.130 | +0.050 | 97.125 | 97.130 | 97.130 | 97.120 | 97.150 | 97.090 | 42094 | 271692 | 17:59 | |
| MAR5 | 96.895 | +0.050 | 96.890 | 96.895 | 96.895 | 96.885 | 96.910 | 96.855 | 17958 | 213846 | 17:59 | |
| JUN5 | 96.675 | +0.055 | 96.670 | 96.675 | 96.670 | 96.650 | 96.690 | 96.630 | 11193 | 170796 | 17:59 | |
| SEP5 | 96.485 | +0.055 | 96.485 | 96.490 | 96.480 | 96.460 | 96.495 | 96.440 | 8915 | 97237 | 17:59 | |
| DEC5 | 96.310 | +0.055 | 96.305 | 96.315 | 96.305 | 96.295 | 96.320 | 96.270 | 2218 | 66631 | 17:56 | |
| MAR6 | 96.155 | +0.045 | 96.160 | 96.250 | 96.160 | 96.145 | 96.180 | 96.130 | 3878 | 28239 | 16:55 | |
| JUN6 | 96.015 | +0.050 | 95.940 | 96.085 | 96.005 | 95.995 | 96.015 | 95.975 | 3918 | 28908 | 15:59 | |
| SEP6 | 95.870 | +0.050 | 95.800 | 95.935 | 95.860 | 95.840 | 95.875 | 95.840 | 226 | 13763 | 15:52 | |
| DEC6 | 95.750 | +0.050 | 95.655 | 95.810 | 95.730 | 95.750 | 95.750 | 95.750 | 1 | 4065 | 15:52 | |
| MAR7 | | +0.050 | | | 95.620 | | | | | 1673 | 08:31 | |

- Type the RIC for the contract **including** the standard chain indicator **0#** at the beginning, then press **↵**. For example, **0#FEI:**.

CHAPTER 7

FUTURES

FUTURES CHAINS SHOWING MARKET DEPTH

Some exchanges offer the market depth for their derivatives as an additional service.

The way to retrieve these is by typing the current full individual contract then pressing the chain key.

For example:

For long gilt futures: **FLGM4 F3** for June 2004

Or for the FTSE 100 Index **FFIM4 F3** for June 2004

DELAYED FUTURES DATA

You can view delayed full quotes on futures by typing a forward slash (/) in front of the RIC, for example: **/FEIZ4**.

This is only available for contracts for specific months and expiry dates – continuation RICs will not provide delayed data.

You can display delayed futures in Reuters Graphics even if you have not subscribed to the relevant real-time exchange.

EXPIRED FUTURES

Expired futures can not be viewed in any real-time application, but can be viewed in applications that allow you to see historical data:



Reuters 3000 Xtra users can use the Graphics object or the spreadsheet to view expired futures.

The RIC structure for this data is a small variation on the standard format. The key point is that you need to specify the decade of the expiry year (the standard format only specifies the last digit). For example:

YANF8^9 where **YAN** is the root RIC for the ANZ (stock) future traded at the Sydney Futures and Options exchange (SFE).

F8 indicates it is a January contract, traded in a year with a so far unknown decade (19?8). In order to specify the exact decade, simply add a hat symbol (^) and the desired decade (**9** in this case for 1998).

FIELD NAMES FOR QUOTE LISTS

If you want to set up a quote list in an Excel spreadsheet, then these are the most commonly used fields. For each field of information, you can use either the PowerPlus Pro identifier, the FID (field number) or the field identifier used by Reuters 3000 Xtra.

| FIELD | POWERPLUS PRO IDENTIFIER | FID NUMBER | REUTERS 3000 XTRA IDENTIFIER |
|----------------|-----------------------------|---------------|------------------------------------|
| RIC CODE | RIC NAME | -1 | X_RIC_NAME |
| Name of future | DISPLAY NAME | 3 | DSPLY_NAME |
| Contract month | CONTRACT MONTH | 41 | CONTR_MNTH |
| Bid | BID | 22 | BID |
| Offer | ASK | 25 | ASK |
| Net change | NET CHANGE | 11 | NETCHNG_1 |
| Today's high | TODAY'S HIGH | 12 | HIGH_1 |
| Today's low | TODAY'S LOW | 13 | LOW_1 |
| Open interest | OPEN INTEREST | 64 | OPINT_1 |
| Volume | VOL ACCUMULATED | 32 | ACVOL_1 |



IN BRIEF: FUTURES

The main speed-guide for futures is **FUTURES**.

DISPLAYING ALL CONTRACTS FOR ONE FUTURE

Most chains are based on a two- or three-character root code followed by a colon. They can be entered as follows:

US: **F3** for the 30-year US treasury bond future, or **0#US:** ↵

DISPLAYING SINGLE CONTRACTS

Continuation RICs automatically retrieve the present contract for a future, so you don't need to re-enter the present month and year every time a future expires. For example:

USc1 The structure is RIC root followed by **c1**.

For a quote on a contract on a specific month and year, add the alphabetic month code then the last digit of the expiry year to the end of the RIC root.

DELIVERY MONTH CODES FOR FUTURES

| | | | | | |
|----------|----------|--------|----------|-----------|----------|
| January | F | May | K | September | U |
| February | G | June | M | October | V |
| March | H | July | N | November | X |
| April | J | August | Q | December | Z |

DELIVERY YEARS FOR FUTURES

4 for the year 2004, **5** for the year 2005 and so on.

For example:

USH5 for the March 2005 contract of the 30-year US treasury bond.

DELAYED FUTURES

Delayed full quote futures can be retrieved by typing a forward slash (/) in front of the RIC. Please note that only Month and Year contracts, but not continuation RICs, allow you to retrieve delayed data. For example **/FEIZ4**.

Have a look at what futures are available on page **WORLD/DELAY1**.

Options

Options can be traded on a broad variety of financial instruments: equities, currencies, commodities, interest rate and bond futures, or equity indices, to name just a few. There are also options on futures.

TOOLS FOR FINDING DATA

| | |
|-------------------------|--|
| OPTIONS | The main speed-guide for options |
| OPT/IR1 | Interest rate and bond options |
| OPT/FX1 | Foreign exchange options |
| OPS/FX1 | Foreign exchange options volatilities |
| COMMOD/1 | Commodities options and futures |
| EQUITY/OPT1 | Equity options |
| COMMOD-ATM F3 | Commodities at-the-money options chain |
| FINANCIAL-ATM F3 | Financial at-the-money options chain |
| OPTIONS F3 | Options chain, easier to drill down |

Alternatively, all futures are available listed by country and exchange. For example, to find the Eurodollar 1 Year Midcurve option traded on Chicago Mercantile Exchange (CME):

1. From the **FUTURES** speed-guide, go to the US futures and options speed-guide **US/FUTEX1**.
2. In this display, double-click on the CME page **CME/FUTEX1** or go straight to the relevant exchange if you know the three-letter exchange code e.g. **LIF/FUTEX1** for the London International Financials Futures Exchange.

Chains are the easiest way of viewing options, as they allow you to look at the whole range of puts and calls, and individual contracts can be easily selected by double-clicking on them.

CHAPTER 8

OPTIONS

EQUITY CASH OPTIONS

CHAINS OF OPTIONS ON CASH EQUITIES

Chain RICs for cash equity options are made from the following components:

1. Root RIC
2. * (an asterisk)
3. . (a dot)
4. Exchange identifier of the exchange where the option is traded.
5. In some cases, there can be an option chain extension (for example, ++ for at-the-money options).

For example, **RTR*.L F3** for all Reuters options traded on LIFFE, or **GDAX*.EX++ F3** for-at-the-money DAX options traded on Eurex.

OPTION EXCHANGE IDENTIFIERS

These can also be found on page **RULES3**.

| | |
|-------------------------------------|--------------------------------------|
| American Stock Exchange Options | .A |
| Australian Stock Exchange | .AX |
| Austrian Stock and Options Exchange | .v |
| Belgian FOX | .b |
| Boston Options Exchange (BOX) | .B |
| Chicago Board Options Exchange | .W |
| Copenhagen Stock Exchange | .CO |
| Deutsche Terminboerse | .d |
| European Options Exchange | .E |
| EUREX | .EX or .d or .Z |
| Finnish Options Exchange | .h |
| Stock Exchange of Hong Kong | .HK |
| Hong Kong Futures Exchange | .HF |
| International Securities Exchange | .Y |
| London Traded Options Market (LSE) | .L |
| MEFF Renta Variable | .i |

OPTION EXCHANGE IDENTIFIERS, CONTINUED

| | |
|--|------------|
| Nagoya | .NG |
| Norwegian Options Exchange | .n |
| MATIF Traded Options | .m |
| Milan ISO | .MI |
| Montreal Stock & Options | .M |
| OPRA | .U |
| Osaka Stock Exchange | .OS |
| Pacific Stock & Options Exchange | .P |
| Paris Traded Options | .p |
| Philadelphia Options Exchange | .X |
| Sao Paulo, Bolsa de Valores | .SA |
| Stockholm Options Market | .ST |
| Swiss Options & Financial Futures Exchange | .Z |
| Tokyo Stock Exchange | .T |

US OPTIONS TRADED ON OPRA

OPRA, the Options Price Reporting Authority, reports prices on US equity, index, currency and interest rate options from the following exchanges:

| | |
|--------------|-----------|
| AMEX | .A |
| Boston | .B |
| Chicago | .W |
| ISE | .Y |
| Pacific | .P |
| Philadelphia | .X |

Reuters provides two separate OPRA services:

OPRA STANDARD SERVICE

The OPRA Standard Service is available via Reuters real-time Integrated Data Network (IDN).

CHAPTER 8

OPTIONS

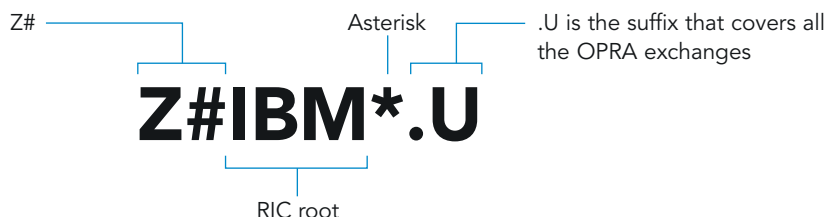
This gives you:

- All currency and interest rate options
- National Best Bid/Offer (NBBO) quotes on debt, equity and equity index options. The quote shows the last trade and the best bid and offer available across all the options exchanges, along with an identifier showing which exchanges those rates are offered on. (Note: when the market opens each day, quotes on contracts that have no open interest are embargoed for 1.5 hours to ensure that the network remains reliable at peak times.)

The easiest way to find currency options traded on the Philadelphia Options Exchange is to start at page [OPT/FX1](#). From here, you can drill down via currency. The easiest way to find interest-rate options on OPRA is to start at page [OPT/IR1](#). Again, you can drill down from here.

The easiest way to find NBBO debt, equity and equity index options is to use the **Z#** codes, which are based on RIC roots. These display the chains available for that series of options, and you can then double-click on the call or put for the relevant strike to view a quote.

The structure of **Z#** codes is:



OPRA PREMIUM SERVICE

The OPRA Premium Service is available over a separate network – the OPRA Premium Delivery Network (OPDN). This network carries only OPRA data – there are no equity prices or news, for example – and it provides all US options data.

This ensures that all prices are available in real time (no embargoes) and you can have quotes directly from individual exchanges within OPRA.

The easiest way to view a series of options is to use the generic **.U** suffix that covers all the OPRA exchanges. The code structure is:

RIC root ——— Asterisk ——— .U is the suffix that covers all the OPRA exchanges

IBM*.U F3

This automatically displays the calls (on the left) and puts (on the right) for different strike prices at the primary exchange. You can double-click on a specific call or put to display a quote on that contract.

To check the prices on a specific exchange, use the relevant exchange identifier at the end of the code when you display the chain. The RIC structure is:

RIC root ——— Asterisk ——— Exchange identifier (.Y is the International Securities Exchange)

IBM*.Y F3

This displays the calls (on the left) and puts (on the right) for different strike prices at that exchange. You can double-click on a specific call or put to display a quote on that contract.

**TIP:**

You can find out which exchanges a series of options is traded on by displaying a full quote on the underlying instrument.

CHAPTER 8

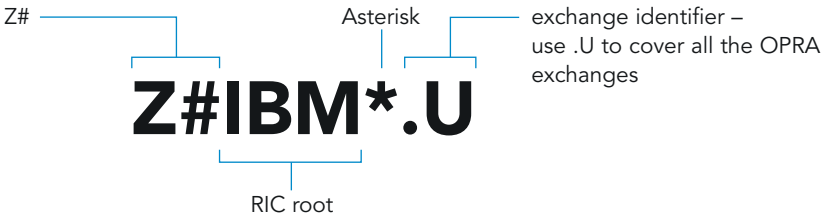
OPTIONS

| | | | | | | |
|---------------|---------------|------------------|------------|--------------|--------------|---------------|
| IBM | 21NOV03 | INTL BUS MACHINE | 21NOV03 | NYQ | USD | CUS 459200101 |
| Last THM | 17:38 | St | Quote Time | Bid NYS | Ask NYS | |
| 88.52 | +0.13 | /R / | 17:38 | 88.51 | 88.52 | |
| 88.52 | 0.15 % | VWAP | Open | Cls.Bid | Cls.Ask | |
| 88.51 | Volume | 88.5231 | 88.40 | | | |
| 88.51 | 400 | Blk.Vol | High | Cls: 88.39 | | |
| 88.51 | 2663900 | 849000 | 88.85 | 20NOV03 | | |
| SpecTrade/Typ | | L.Blocks | Low | Yr.High: | | |
| 88.5964 | 377 | 19 | 88.23 | 94.5400 | | |
| Spec.Vol | | Options | | Yr.Low: | | |
| 400 | | YAPWX | | 73.1700 | | |

The letters underneath **Options** tell you on which exchanges the option is traded. In this example, the option is traded on ISE, AMEX, Pacific, Chicago and Philadelphia.

A useful way of finding options on an underlying instrument is to use **Z#** codes to display chains of chains.

The structure of Z# codes is:



TIP:

For a general search, use the **.U** suffix. Otherwise, you can use the identifier of the primary exchange where options on that underlying instrument are traded.

| | | |
|-----------|----------------------------------|---------|
| Z#IBM*.U | INTL BUS MACHINE | WCB/WCB |
| RIC | Last Net.Ch Open High Low His.Cl | |
| O#IBM*.Y | | |
| O#IBZ*.Y | | |
| O#RATL*.W | | |
| O#WIB*.Y | | |
| O#ZIB*.Y | | |
| O#ZRA*.W | | |
| O#ZVB*.Y | | |

You can double-click on any of the codes displayed on the left-hand side to see a list of current prices for its puts or calls. Codes incorporating the letters **V**, **W**, **X**, **Y** and **Z** generally indicate leaps.

MONTHLY OPTION CHAINS

Reuters provides monthly option chains for Euronext-LIFFE equity and FTSE index options.

The current syntax of the monthly option chains for LIFFE is:

| | |
|---------------------------------|------------|
| RIC root | VOD |
| Future month expiry code (June) | M |
| Year digit (2005) | 5 |
| Asterisk | * |
| Exchange identifier | .L |

For example:

VODM5*.L F3 (June 2005 contracts)

Alternatively, to see a list of all months on an equity option contract.

VOD*.L+ F3

For interest rate, FX and money market options, you add a **+** after the month and year code. For Euribor traded on LIFFE, the JUN4 futures contract is **FEIM4**, so the monthly options chain is **FEIM4+ F3**.

AT-THE-MONEY CHAINS

At-the-money (ATM) chains currently exist for LIFFE equity options and FTSE index options. Information on any new markets that the at-the-money chains are created for will be announced on the NEWDATA news codes listed on page **DATA**.

For a standard equity option the ATM chains consist of:

- the at-the-money strike contracts (or closest value)
- 3 strikes below the at-the-money strike
- 3 strikes above the at-the-money strike

They track price movements of the underlying equities throughout the day. All contract expiries for the relevant strike prices are also included in the chain.

The RIC structure for an at-the-money chain is:

| | |
|--------------------------------|------------|
| RIC root | RTR |
| Asterisk (*) | * |
| Dot and exchange identifier | .L |
| Two plus signs | ++ |
| Confirm with the F3 key | F3 |

For example: **RTR*.L++ F3**

THE STRUCTURE OF SINGLE-OPTION CONTRACTS

As we have seen, the best way of finding a specific contract is nearly always to drill down from speed-guide or to display a chain based on the underlying instrument. Nevertheless, it is useful to be able to interpret the codes that are displayed for single contracts.

The RIC structure is:



This example shows the September 182 call option for the British Pound on the Philadelphia Options Exchange.

To construct a single contract, here are the delivery month codes for options:

| CALL OPTIONS: | | | | PUT OPTIONS: | | | |
|---------------|----------|-----------|----------|--------------|----------|-----------|----------|
| January | A | July | G | January | M | July | S |
| February | B | August | H | February | N | August | T |
| March | C | September | I | March | O | September | U |
| April | D | October | J | April | P | October | V |
| May | E | November | K | May | Q | November | W |
| June | F | December | L | June | R | December | X |

EUREX CONTRACTS

An example code would be **DGXG380aF5.EX** for the German Degussa AG June 2005 Strike 38 call option. Refer to **DE/DATA06** for specific RIC construction rules on Eurex.

FIELD NAMES FOR QUOTE LISTS

If you want to set up a quote list in an Excel spreadsheet, then these are the most commonly used fields. For each field of information, you can use either the PowerPlus Pro identifier, the FID (field number) or the field identifier used by Reuters 3000 Xtra.

| FIELD | POWERPLUS PRO IDENTIFIER | FID NUMBER | REUTERS 3000 XTRA |
|----------------|---------------------------------|-------------------|--------------------------|
| RIC CODE | RIC NAME | -1 | X_RIC_NAME |
| Name of future | DISPLAY NAME | 3 | DSPLY_NAME |
| Contract month | CONTRACT MONTH | 41 | CONTR_MNTH |
| Bid | BID | 22 | BID |
| Offer | ASK | 25 | ASK |
| Net change | NET CHANGE | 11 | NETCHNG_1 |
| Today's high | TODAY'S HIGH | 12 | HIGH_1 |
| Today's low | TODAY'S LOW | 13 | LOW_1 |
| Open interest | OPEN INTEREST | 64 | OPINT_1 |
| Volume | VOL ACCUMULATED | 32 | ACVOL_1 |

CHAPTER 8

OPTIONS



IN BRIEF: OPTIONS

Option chains are the most straightforward way of calling up options.

Equity options incorporate an asterisk, which stands for the variable of the strike prices e.g. **RTR*.L**.

For equity options on OPRA, use **Z#** chains to get consolidated quotes from all the exchanges, e.g. **Z#EBAY*.U**.

For users with OPRA Premium Service, you can view chains from individual exchanges, e.g. **EBAY*.Y F3**.

Interest-rate options incorporate the RIC root and a colon, e.g. **FSS: F3**.

Options on futures incorporate the full quote of the future and a plus sign: e.g. **FSSU4+ F3**.

At-the-money options exist on two levels:

As equity chains, e.g. **RTR*.L++ F3** or as interest rate futures chains **FSS++ F3**.

For a list of all currently available ATM options, have a look at **FINANCIAL-ATM F3** or **COMMOD-ATM F3**.

Commodities and energy markets

NAVIGATION BY CHAINS

| CHAIN | DESCRIPTION |
|--------------------------------|---|
| 0#COMMOD (or COMMOD F3) | <p>The main chain for commodities. From this chain you can double-click on any of the eleven types of commodity data from futures or cash to indices or stock levels.</p> <p>This enables you to drill down through chains to reach the required sector and product without needing to know a code.</p> |
| 0#ENERGY (or ENERGY F3) | <p>The main chain for energy. From this chain you can double-click on any of ten types of energy data from futures or cash to weather or spreads.</p> <p>This enables you to drill down through chains to reach the required sector and product without needing to know a code.</p> |

NAVIGATION BY SPEED-GUIDES

89

| SPEED-GUIDE | DESCRIPTION |
|-----------------|--|
| COMMOD | The main speed-guide for commodities, containing information on base and precious metals, grains, oilseeds and livestock. While the chain navigates to logical RICs (standard templates), the speed-guide also points to page displays where less standard formats are used. |
| COMMOD/1 | Futures and options menu by market sector. |
| COMMOD/2 | Cash market prices menu by product/alphabetical order. |
| COMMOD/3 | Glossary of terms and conversion table. |
| COMMOD/4 | Cash specification details. |
| ENERGY | The main speed-guide for energy, with all codes for power, gas and oil cash prices, futures and news. While the chain navigates to logical RICs (standard templates), the speed-guide also points to page displays where less-standard formats are used. |
| ENERGY/1 | Energy futures by product (alphabetical). |
| ENERGY/2 | Energy cash prices by product (alphabetical). |
| ENERGY/3 | Energy glossary of terms. |

CHAPTER 9

COMMODITIES AND ENERGY MARKETS

CASH INSTRUMENTS

Commodities and energy RICs cover a wide variety of markets, so the best way to find data on instruments is to use the chains and speed-guides (see above).

The RICs for cash instruments can be up to 15 alphanumeric characters long. Typically, they consist of up to three main components, separated by a delimiter:



1. The **RIC root** is a mnemonic indicating the physical instrument. This root code is from one to four alphanumeric characters long and will normally be the futures market commodity root, e.g. "LH" for live hogs.

In some cases, energy instruments have specification details as the RIC root for energy product RICs. This is to avoid unnecessarily long codes. For example, **BK180-ANT** for 180 centistoke bunker fuel.

2. **Type/specification/delivery** is up to eight alphanumeric characters long. The individual elements are optional, but at least one must be present. The order of precedence is:

- Type
- Specification
- Delivery



TIP

Specification pages are available for many of the more specialist or complex cash prices. From the **COMMOD** speed-guide select **COMMSPECSA** or for energy go to **ENERGY** speed-guide and select **ENGSSPECA**.

3. **Location**. This code specifies the location or the source of the physical commodity.

Two-character ISO codes are used for countries; three-character ISO codes for cities, where applicable. All other abbreviations are standard for all RICs, e.g. W for White, DLY for daily, but D for day (as in 15-day average).

As well as the ISO regional/city codes, the following codes are also used:

| CODE | REGION/CITY | CODE | REGION/CITY |
|--------------|----------------------|-------------|--------------------------------|
| CAR | Caribbean | AMER | North, South & Central America |
| EURO | European | AFR | Africa |
| BE | Bremen, Germany | INDO | Indonesia |
| SAN | Santos, Brazil | PO | Pontianak, Indonesia |
| PA | Palembang, Sumatra | NIN | North India |
| LA | Lampung, Sumatra | SIN | South India |
| TP | T Priok, Indonesia | NE | Nuwa Eliya, Sri Lanka |
| SU | Surabaya, Indonesia | SUM | Sumatra |
| UP | U Pandang, Indonesia | JAV | Java |
| LATAM | Latin America | GUW | Guwahati, India |

All commodity abbreviations are standard for full quotes:

| CODE | COMMODITY |
|------------|-----------|
| PEP | Pepper |
| SUG | Sugar |
| CC | Cocoa |
| COF | Coffee |
| RUB | Rubber |
| TEA | Tea |

So, for example, **PEP** is the root code for pepper.

These RIC structures are used for heavily-traded cash instruments. Lightly-traded instruments may not have RICs in this format. If in doubt, use the speed-guides (such as **COMMODITY** or **ENERGY**), to drill down to the instrument you need.

CHAPTER 9

COMMODITIES AND ENERGY MARKETS

CASH COMMODITIES CHAINS

Chains provide a way of navigating directly from a high level down to specific detail. You don't need to know a RIC or any other code because there is a simple description of the content at every stage. In the example below, you just need to know that you want a London cash price for coffee.

1. Type **COMMOD** and press **F3** for the main commodities chain. This offers a range of choices; double-click on **0#COMMOD/CASH** (this is the same as **COMMOD/CASH** followed by **F3**).
2. In the **0#COMMOD/CASH** display, double-click on any of the chains displayed to drill further down until you reach the required individual instrument.

A typical navigation could be:

1. **0#COMMOD** – Main commodities chain
2. **0#COMMOD/CASH** – Commodity physicals
3. **0#SOFTS/CASH** – Softs physicals
4. **0#EUROFFEE/CASH** – European coffee
5. **0#EUROFFEE-LDN** – Coffee London

This then presents you with a list of quotes – just double-click on the desired description to see the quote displayed in standard format.

RICS FOR COMMODITY CHAINS

Chain RICs usually have two parts: the commodity code and a source or type indicator. Unfortunately, the commodity code for cash commodities chains is not always the same as the root code for the full quote. For example, the root code for Sugar is **SUG**, but for a cash commodity chain, the code is **SUGAR F3** or **0#SUGAR**. The best way to find out is using the speed-guide **COMMOD/2**.

The structure for the chain code is:



Further examples: **PEPPER F3** for global pepper, **COFFEE-ARA F3** for global Arabica coffee.

ENERGY CASH PRICE CHAINS

Energy cash chains work in the same way as commodities (see above).

Start your navigation at **0#ENERGY**.

For example, this search drills down to find a spot price for jet fuel at New York Harbor.

1. **0#ENERGY** – Main energy chain
2. **0#ENERGY/CASH** – Energy physicals
3. **0#PRODUCTS/CASH** – Products cash
4. **0#P-NYH** – US Products New York Harbor

This displays a list of quotes. Double-click on the description JET NYH Prompt.

RICS FOR ENERGY CASH CHAINS

An example of the regional code structure is **P-HKG F3** for cash oil product in Hong Kong.

You can view lists of the available root codes by displaying the following chains:

| | | | |
|---------------|-----------------------|---------------|-------------------------|
| C-A F3 | Crudes, Asia | P-A F3 | Products, Asia |
| C-E F3 | Crudes, Europe | P-E F3 | Products, Europe |
| C-N F3 | Crudes, North America | P-N F3 | Products, North America |

CHAPTER 9

COMMODITIES AND ENERGY MARKETS

TYPE CODE STRUCTURE

An example of the type code structure is **BRT- F3** for cash Brent oil.

The location codes used for energy contracts are:

| CODE | LOCATION | CODE | LOCATION |
|------------|-----------------------------|------------|------------------------------|
| A | Asia | MED | Mediterranean |
| AFR | Africa | N | US |
| AG | Arabian Gulf | NVA | Norfolk Virginia |
| ARA | Amsterdam-Rotterdam-Antwerp | NWE | North West Europe |
| BKK | Bangkok | NYH | New York Harbor |
| CA | Canada | PNW | Pacific Northwest |
| E | Europe | SF | San Francisco |
| G3 | Group 3 | SIN | Singapore |
| HKG | Hong Kong | TWN | Taiwan Kaohsiung |
| IN | Inland Rhine Market | TYO | Tokyo (Tokyo-Yokohama-Osaka) |
| KOR | South Korea | USG | US Gulf |
| LA | Los Angeles | WC | US West Coast |
| MC | US Mid-continent | | |

These RIC structures are used for heavily-traded cash instruments. Lightly-traded instruments may not have RICs in this format. If in doubt, use the speed-guides (such as **COMMODITY F3** or **ENERGY F3**) to drill down to the instrument you need.

MORE EXAMPLES

To give you an idea about the structure and diversity of markets, we have grouped the commodities and energy markets into sub-sections; there are example codes for each:

| | | |
|------------------------|-------------------------|---|
| Metals | METAL | Main Metals speed-guide covering Base, Precious and Minor |
| Base metals | LME/INDEX | Index page for the London Metal Exchange |
| | BASE F3 | Base metals chain |
| Minor metals | MINOR F3 | Minor metals chain |
| Precious metals | PREC F3 | Precious metals chain |
| Grains | GRAIN1 | Grain speed-guide |
| | WHEAT-HARD-US F3 | US hard wheat chain |
| Oilseeds | CNUT-AFR F3 | African coconut |
| | CRUSHPL1 | Reuters crush profit-margin calculator |
| Livestock | MEAT-UK F3 | London Central Markets – Smithfield |
| | HOGS F3 | Hogs Main Menu |
| Softs | EUCOCOA-ICCO F3 | International Cocoa Org daily prices |
| | ASTEA-DHA F3 | Dhaka weekly tea auction prices |
| Energy | ENERGY | Energy overview |
| | ELECTRICITY | General electricity overview |
| Power | NORDPOOL or | Nordpool information and index pages |
| | EL/NORDIC | |
| | NAPOWER | North American power index page |
| | EUROPOWER | European power index page |
| Gas | NG-GB F3 | United Kingdom natural gas |
| Oil | OILOIL | IPE – NYMEX futures composite display |

CHAPTER 9

COMMODITIES AND ENERGY MARKETS

METALS PRODUCTION DATABASE (MPD)

The Metals Production Database gives you historical and projected figures for all known base-metal operations around the world. Its simple web interface enables you to drill down quickly from a world view to a specific mine, refinery, smelter, etc.

To view the home page for the database, go to: <http://mpd.session.rservices.com>

REUTERS

Global Home | Site Map | Help

Metal Production Database

[Commodities Home](#)

[World View](#)

[Feedback](#)

[About this Site](#)

[Search](#)

[Reports](#)

[Help](#)

World View - All Metals (2003)



| Metal (Refined) | Capacity | Production | CAP% |
|-----------------------------------|----------|------------|-------|
| Copper | 18,956 | 15,848 | 83.6 |
| Nickel | 1,486 | 1,217 | 81.86 |
| Primary Aluminium | 29,973 | 27,886 | 92.37 |
| Zinc | 11,995 | 10,044 | 83.73 |

TONNE (1000s) Selected Year: 2003

All Metals

[Switch to: Capacity/Production 5 Year Figures](#)

Site last updated on 15-DEC-2003 16:44:56

| | Metal | Plant Type | Country | Plant Company | Plant Name | Note |
|-----------------------------------|-------|------------|--------------------|----------------------------------|-----------------------------|--|
| Copper | MCU | Mine | Chile | Codelco | Andina | 15-Dec-2003 Chile Andina copper mine back at 60 pct capacity |
| Nickel | MZN | Refinery | Russian Federation | Chelyabinsk Zinc | Chelyabinsk | 15-Dec-2003 Russia Chelyabinsk 11-month zinc output up 7 pct |
| Primary Aluminium | MNI | Refinery | China | Various | Various | 15-Dec-2003 China January-November nickel output |
| Zinc | MZN | Smelter | China | Various | Various | 15-Dec-2003 China January-November zinc output |

Measurement Unit
Metric Tonnes

FIELD NAMES FOR QUOTE LISTS

If you want to set up a quote list in an Excel spreadsheet, then these are the most commonly used fields. For each field of information, you can use either the PowerPlus Pro identifier, the FID (field number) or the field identifier used by Reuters 3000 Xtra.

| FIELD | POWERPLUS PRO IDENTIFIER | FID NUMBER | REUTERS 3000 XTRA IDENTIFIER |
|--------------|--------------------------|------------|------------------------------|
| Product Name | DISPLAY NAME | 3 | DSPLY_NAME |
| Bid | BID | 22 | BID |
| Offer | ASK | 25 | ASK |
| Today's High | TODAY'S HIGH | 12 | HIGH_1 |
| Today's Low | TODAY'S LOW | 13 | LOW_1 |
| Volume | VOL ACCUMULATED | 21 | ACVOL_1 |

CHAPTER 9

COMMODITIES AND ENERGY MARKETS



IN BRIEF: COMMODITIES AND ENERGY MARKETS

There are many different types of code for these markets – one way of checking how RICs are constructed for a particular sector is to check the examples section (above).

For cash instruments, the structure is normally:

RIC root | Type/Specification/Delivery | Location

For example:

WHEAT-HARD-US F3 US hard wheat chain

The best way of finding RICs is through the speed-guides or chains.

For speed-guides, start at either **COMMOD** or **ENERGY**

For chains, start at either **COMMOD F3** or **ENERGY F3**

The commodities and energy futures and options follow the generic futures and options structure in the futures and options chapters.

Delayed data

If you want market prices in real time, then in most cases, you'll have to pay access fees to the exchange. However, nearly all exchanges allow you to retrieve recent prices – delayed prices – free of charge.

It depends on the individual exchange just how much of a delay there is. In some cases, it will be just a few minutes. In others, it might be the closing price at the last trading session.

For a guide to all delayed data, check the page:

WORLD/DELAY1

This gives details of the delays for all exchanges.

DELAYED EQUITY AND INDICES FULL QUOTES

So if you have access to the equity service, but you have not subscribed to a particular exchange, you can still view a delayed full quote on an instrument on that exchange. All you need to do is to put a forward slash (/) in front of the RIC.

For example, type **/RTR.L** instead of **RTR.L**.

CLOSING RUNS

The closing run is a housekeeping exercise performed by Reuters that prepares the display template for the next trading session. To see when the closing runs are performed, see page **CLOSE/RUN1**.

DELAYED CHAINS

Chains work the same way. Just put a forward slash in front of the code:

/GDAXI F3 for the German Dax index

or **0#/GDAXI**

Note that if you use the **0#** format, the forward slash goes after the **0#**.

Please note that delayed chains are available for most futures and equity indices, but not for all.

CHAPTER 10

DELAYED DATA

DELAYED FOREIGN EXCHANGE QUOTES

There is also delayed data for the foreign exchange markets. In FX, there are two different types of delay:

Two minutes, which is called a snapshot and is expressed by the letter S and

Ten minutes, which is expressed by using the letter X.

Example codes for these delays would be:

EUR=X (ten-minute delay)

EUR=S (two-minute delay)

You can find a complete list of delayed FX quotes in the cross-market package as described below.

CROSS-MARKET PACKAGE

The cross-market package from Reuters gives you a limited amount of real-time and delayed data free of charge. If you have only subscribed to only one asset class service from Reuters, this gives you useful indicators of the state of other markets. You can find out more details on the page:

CROSS/MKT1



TIP:

Delayed quotes can also be displayed in a graph. Just treat the delayed RIC as if it were a normal RIC.

Contributed data

Many leading market participants, such as investment banks, dealers and brokers, publish financial information on the Reuters network. This can include price, analysis and market commentary. These contributors provide insight and market rates in all the different asset classes, from vanilla equities to exotic energy derivatives.

The contributed data is available in pages and in RICs.

Index page **CONTRIBUTIONS** is the logical starting point. From here you can search for data by country, then specific market and finally contributor name. Main index pages are also available for each contributor and with just a few mouse clicks you can locate contributed data for all your business and trading needs.

Expert information is also available from specialist data providers who publish analytics and market commentary. This can be ordered in addition to the Reuters service you have subscribed to. For an overview of all specialist data on the Reuters network, type **SPECIAL**.

Reuters ensures that the quality of data published is always high. All contributors have contractually agreed:

- to provide data that reflects their position or trading in the marketplace
- to update in a timely manner, reflecting the level of activity in a particular market
- not to copy data from another source and republish onto their pages/RICs
- not to publish defamatory or obscene material, or include advertising statements on behalf of third parties

RICS AND FIDS

RICs (also known as logical records) are now the preferred format for publishing information on Reuters. Each RIC has a set of fields that hold specific items of information about a single financial instrument (BID/ASK/HIGH/LOW etc.). These are also referred to as FIDs (Field Identifiers) because each field has a unique numeric identifier.

Example full quote contributed RIC: **EUR=BARL**

| | | | | | | |
|----------|-----------|-------------|-----|------|------|------------------|
| EUR=BARL | | | | Bkg | | |
| Latest | | Contributor | Loc | Srce | Deal | Time |
| B↓ | 1.1517/21 | BARCLAYS | GFX | BGFX | | 15:30 |
| B↓ | 1.1520/24 | | | | | 15:30 |
| B↓ | 1.1521/25 | | | | | 15:29 |
| | | SPOT | EUR | | | |
| | | | | | | H L O C |

When you request a full quote on a RIC, the key information for the instrument is displayed e.g. Bid, Ask, Contributor, Location, Time, Date etc. Reuters uses a **display template** to control this display.

It is important to realise that a RIC contains many more FIDs than are shown in the full quote. These are defined by the **record template**.



Reuters 3000 Xtra users can use the **display all fields** button to toggle between the display template and the record template, to find out what fields are contained in a record template and available for a specific RIC.



| | | |
|------------|--------|----------|
| X RIC_NAME | (-1): | EUR=BARL |
| PROD_PERM | (1): | 692 |
| RDNDISPLAY | (2): | 153 |
| RDN_EXCHID | (4): | |
| TRDPRC_1 | (6): | +0 |
| HIGH_1 | (12): | +0 |
| LOW_1 | (13): | +0 |
| CURRENCY | (15): | |
| OPEN_PRC | (19): | +0 |
| HST_CLOSE | (21): | +0 |
| BID | (22): | +1.1436 |
| BID_1 | (23): | +1.1435 |
| BID_2 | (24): | +1.1434 |
| ASK | (25): | +1.1440 |
| ASK_1 | (26): | +1.1439 |
| ASK_2 | (27): | +1.1438 |
| NEWS | (28): | |
| NEWS_TIME | (29): | : |
| TRD_UNITS | (53): | INT |
| OFFCL_CODE | (78): | |
| HSTCLSDATE | (79): | |
| BOND_TYPE | (104): | |
| BID_FTOK_1 | (115): | ↑ |
| PRC_QL_CD | (118): | |
| PRC_QL2 | (131): | |

In short: Reuters has thousands of different fields (FIDs) to cover the whole breadth of every market requirement. For a specific RIC, only some of those fields are relevant. It is the **record template** that indicates which ones are relevant. The fields for a cash instrument, for example, will be different from those required for a future. Therefore, the cash and futures RICs have different record templates.

In turn, the **display template** defines the fields that are shown when you view a full quote. These are always the most important fields from the record template.

THE ADVANTAGES OF CONTRIBUTING TO RICS

If you want to be a contributor, RICs have significant advantages over page-based items. The following table summarises the relative merits:

| LOGICAL CONTRIBUTION (RICS) | PAGE CONTRIBUTION |
|--|--|
| Real-time intra-day prices | Free format – contributor determines the content and display format |
| Record/display templates determine content and format of the display | Potentially more than one instrument per page |
| Discrete FID (Field Identifier) list per instrument type | Can be combination of price, commentary, menus, disclaimers etc. |
| Predictable format (bid/ask etc.) | Content limited by size of page |
| Consistent logical structure | No automatic inclusion in aggregated displays but data can be parsed into other applications such as Microsoft Excel |
| Ripple fields to show price history | Page should be relevant to content and contributor |
| Automatic sourcing to value added displays (Super RICs) e.g. EUR= | Page content is not archived |
| Use of colour improves readability | Monochrome only |
| Chains and tiles available to retrieve multiple instruments in a single display e.g. 0#GBTSY= | |
| Historical data available | |
| Easy to export/control e.g. to Microsoft Excel or in-house applications | |
| Tick Indicators | |
| RIC name specifies instrument | |
| Single instrument per record | |

CHAPTER 11

CONTRIBUTED DATA

RESTRICTED DATA SETS (RDS)

The vast majority of contributed data is made available to all Reuters clients subscribing to the relevant Reuters service. For example, a contributor page classified to hold foreign exchange (FX) information will be available to all Reuters clients subscribing to a Reuters service containing FX information. This is known as unrestricted or public data.

Some contributed pages may have restricted access to protect the publishers of the data from their competitors. Brokers, for example, will restrict competing brokers from viewing their contributed pages on Reuters.

Restricted Data Sets (RDS) control who can and who cannot view their contributed data. Contributors use the data sets to restrict access. The options are described below.

- **Public Restricted.** Public restricted data is released to all subscribers to the relevant service, except those specified by the contributor. A public RDS is typically used in cases where a contributor requires a wide audience for the data, with certain key exclusions.
- **Private Restricted.** Private data is released only to those Reuters subscribers specified by the contributor. A private RDS is typically used as a means of communication between different sites of the contributor, or to send information to a limited number of subscribers. These subscribers can view the RDS data regardless of the products to which they subscribe.

WHAT DO I DO WHEN I CAN'T SEE A RIC OR PAGE THAT I THINK I SHOULD BE ABLE TO VIEW?

Access is usually granted per billing address. If you've changed your office location or your billing address, it can affect your access to some restricted data sets. Contact the Reuters Help Desk or your Reuters Account Administrator. We can tell you whether you are still entitled to see that information or not. You may need to contact the owner of the restricted data set to arrange for permission to see that data again.

SUPER RICS

Some contributed prices on pages or RICs can also appear on Super RICs. A Super RIC displays a single issue with the three latest contributed prices available. These prices may be sourced from a single contributor or from three different ones. The example below shows two Super RICs. On top is **EUR=**. The last three rates are shown, plus the identifier of the most recent contributor (Barclays). The lower part of the display shows a German Bund **DE113514=**. In this case, much greater depth of data is shown, but note the three latest prices and contributors near the top of the display.

| | | | | | | | | |
|------------------------|-------------------|--------------------|-------------|----------------|-----------------|-------------|------------------------------|----------------------|
| EUR= | Latest Rates | | | | 04DEC03 17:09 | | | |
| | Bid/Ask | Contributor | Loc | Source Deal | Time | High | Low | |
| ↑ | 1.2091/95 | BARCLAYS | GFX | BGFx | 17:09 | 1.2155 | 1.2030 | |
| | 1.2088/93 | | | | | Close | | |
| | 1.2089/93 | | | | | | | |
| | | | | | | | | |
| DE113514= | BUND BRD | | 6.25 % | | 04JAN30 | STR | EUR | ISN DE0001135143 |
| | | | | | | | | |
| Latest | | BidChg | Reuters Yld | B Yld Cg | Contributor | Loc | Time | Date Bmk Spd Swp Spd |
| B†116.790 | A116.970 | +0.330 | 5.074 | 5.063 | -0.021 | BayernLB | MUN 17:09 | 04DEC -0.4 -3.3 |
| B†116.720 | A116.920 | | 5.078 | 5.066 | | DRESOENR | FFT 17:08 | 04DEC |
| B†116.790 | A116.970 | | 5.074 | 5.063 | | SOCIETE GEN | PAR 17:08 | 04DEC |
| Source | | Phone | | | e-mail | | | |
| O#GOV=BAYM | | INFO:<TSY/CHANGES> | | | | | | |
| Real Time Calculations | | | | Reference Data | | | Daily View | |
| Time/Date | 17:0904DEC | | | Ticker | BUND | | Bid | Bid Yld |
| Latest | B†116.790 | A116.970 | | Issue Rating | FCH AAA | | Open | 07:00 116.470 5.094 |
| Reuters Yld | 5.074 | 5.063 | | Ratings Svc | <RRS0001> | | High | 15:06 117.005 5.061 |
| ISMA Yld | 5.074 | 5.062 | | Issuer Dom | DE | | Low | 07:06 116.140 5.115 |
| Benchmark Spd | -0.4 | EU30YT=RR | | Amt O/S | 9.0B | | Cls | 03DEC 116.460 5.095 |
| Swp / Asset Swp Spd | -3.3 | / -0.814 | | Pay Freq | ANNUAL | | | |
| Swap Point / Curve | +5.107 / <EURIRS> | | | Issue Price | 100.06 | | Codes | |
| Acc Int | 5.805 | | | Issue Date | 21JAN00 | | Chain O#DE113514= WRT 113514 | |
| Mod Dur / BPV | 13.069 / 16.034 | | | Ind News | [GVD] | | | |
| Convxx | 262.26 | | | Related Data | <O#FIXEDINCOME> | | | |
| Settle Date | 09DEC03 | | | Issuer News | 17:04 | | | |

The recommended method is to contribute price information directly to logical records. The Super RIC updates are triggered automatically by updates from the contributed RICs, as long as the updates meet the relevant tolerance requirements. (This ensures that clearly incorrect updates are not passed through automatically and maintains the integrity of the composite display.)

LOGICISATION

If you contribute to pages rather than RICs (see below), it may be possible for your page-based contributions to be passed automatically to the Super RIC. The process for doing this is called **logicisation**. With logicisation, Reuters picks up the co-ordinates of an instrument in your page and inserts the information into a RIC or Super RIC.

Because logicisation depends on knowing the precise location and format of each piece of data on the contributed page, you have to notify Reuters in advance if you want to make any changes to the format of that page.

CHAPTER 11

CONTRIBUTED DATA

CONTRIBUTED PAGES

Pages are the alternative medium for contributing. Most obviously, they are useful if you want to publish text of any kind. There are two sizes of page available: small and large.

- An IDN small page is a single instrument made up of 14 rows, each with 64 characters e.g. **CHFX**

| | | | | | | | | | | | |
|--|--|-------|------------|------|------------|------|------------|------|------------|-------|------|
| 1659 | JP MORGAN CHASE BANK TEL 0207-705 6040 TELEX 26674 | | | | | | | | | | CHFX |
| | STG | | EUR | | YEN | | CHF | | EUR/YEN | | |
| SPOT | 1.7190- 95 | | 1.2060- 65 | | 108.30- 35 | | 1.2920- 25 | | 130.63- 70 | | |
| 1M | 39.2 | 38.9 | 10.9 | 10.3 | 11.7 | 10.7 | 10.2 | 9.7 | 25.6 | 24.7 | |
| 2M | 81.4 | 81.0 | 21.6 | 20.8 | 22.5 | 21.8 | 20.6 | 19.8 | 50.0 | 48.3 | |
| 3M | 119.3 | 118.8 | 30.9 | 29.9 | 32.4 | 31.6 | 29.7 | 28.4 | 72.7 | 70.8 | |
| 6M | 245.2 | 243.7 | 60.2 | 58.5 | 68.6 | 67.1 | 58.7 | 56.7 | 150.2 | 146.8 | |
| 1Y | 480 | 477 | 106 | 102 | 167 | 164 | 121 | 116 | 320 | 313 | |
| 2Y | 810 | 796 | 133 | 129 | 467 | 455 | 303 | 283 | 737 | 717 | |
| 3Y | 985 | 960 | 136 | 128 | 830 | 805 | 536 | 437 | 1160 | 1110 | |
| 4Y | 1152 | 1087 | 144 | 63 | 1237 | 1168 | 763 | 630 | 1577 | 1507 | |
| 5Y | 1175 | 1075 | 117 | 34 | 1621 | 1522 | 1042 | 792 | 1972 | 1872 | |
| DEALING: CHKL (SPOT) - CHFL (FWD) : INTERBANK 0171 777 4303 | | | | | | | | | | | |
| PAGE CHRL FOR MORE INFO ON CHASE PAGES - ALL PRICES INDICATIVE | | | | | | | | | | | |

- An IDN large page is a single instrument made up of 25 rows, each with 80 characters e.g. **SGTRE**

| | | | | | | |
|------------------------|---|-----------|-------------|-------------|-----------------|-----------------|
| 17:18 04DEC03 | SOCIETE GENERALE PARIS | | | | FR07436 | SGTRE |
| SPOT TEL: 33 142136307 | DEALING: SGSP / DEPOT TEL: 33 142136963 | | | | DEALING: SOGP | |
| EUR/USD | EUR/GBP | SPOT | EUR/CHF | USD/JPY | EUR/JPY | |
| 1.2094-98 | 0.7023-28 | 1.5565-71 | 108.12-20 | 130.76-90 | | |
| DEPOT EUR | USD | GBP | JPY | CDs | 6.0 13/03/00 | BMTN |
| ON 1.99 2.11 | 0.94 1.06 * | 3.72 3.88 | -0.06 +0.04 | USD EUR | 6.0 19/03/01 | |
| TN 1.99 2.11 | 0.94 1.06 | 3.72 3.88 | -0.08 +0.02 | 1.00 2.00 | 6.0 18/03/02 | |
| 1W 2.00 2.12 | 0.98 1.10 | 3.70 3.84 | -0.15 +0.02 | 1.07 2.05 | 6.0 17/03/03 | |
| 1M 2.05 2.17 | 1.04 1.16 | 3.77 3.91 | -0.08 +0.02 | 1.07 2.07 | 6.5 15/03/04 | |
| 2M 2.07 2.19 | 1.05 1.17 | 3.86 4.00 | -0.08 +0.02 | 1.08 2.08 | 6.5 14/03/05 | |
| 3M 2.08 2.20 | 1.15 1.27 | 4.06 4.20 | -0.07 +0.03 | 1.18 2.14 | 6.8 13/03/06 | |
| 6M 2.14 2.26 | 1.29 1.41 | 4.23 4.37 | -0.06 +0.04 | 1.32 2.26 | 6.8 19/03/07 | |
| 9M 2.26 2.38 | 1.48 1.60 | 4.41 4.55 | -0.04 +0.06 | 1.51 2.39 | | |
| 1Y 2.39 2.51 | | | | | | |
| DKK | SEK | NOK | CAD | CHF | | |
| TN 2.00 2.15 | 2.73 2.88 | 2.53 2.73 | 2.74 2.84 | 0.06 0.18 * | FOR INFORMATION | |
| 1W 2.06 2.21 | 2.72 2.87 | 2.57 2.72 | 2.75 2.85 | 0.06 0.19 | | |
| 1M 2.06 2.18 | 2.71 2.83 | 2.74 2.89 | 2.76 2.88 | 0.11 0.23 | | |
| 2M 2.09 2.21 | 2.70 2.82 | 2.68 2.83 | 2.74 2.86 | 0.13 0.25 | | |
| 3M 2.09 2.21 | 2.71 2.83 | 2.61 2.76 | 2.70 2.82 | 0.16 0.28 | | |
| 6M 2.21 2.33 | 2.74 2.86 | 2.66 2.81 | 2.67 2.79 | 0.26 0.38 | | |
| 9M 2.33 2.45 | 2.87 2.99 | 2.76 2.91 | 2.70 2.82 | 0.42 0.54 | | |
| 1Y 2.48 2.60 | 3.03 3.15 | 2.90 3.05 | 2.78 2.90 | 0.58 0.70 | | |
| | | | | | | * = NOT UPDATED |

The top row of each page is owned by Reuters. It usually contains a date and time stamp (reflecting the time of the most recent insert), together with the name and subscriber number of the page owner. The rest belongs entirely to the contributor.

UPDATING YOUR PAGES AND RICS

As a contributor, you'll find that RICS and pages can be updated with minimal effort, either manually (simply by typing the updated quote), or automatically using spreadsheets. Your Reuters Account Manager will be able to advise you on the most appropriate contribution method for your requirements.

There are several different applications that enable you to control your contributions and make your updates. These are introduced below.

INSERTLINK

Insertlink enables users to contribute prices and text data to pages and RICS to the Reuters IDN network and to third parties. Tailored displays and automated manual contributions can be set up to suit your convenience, allowing you to contribute with just a few mouse clicks. It can be installed on a range of platforms and your Reuters representative can advise you on the specific versions for further details.

REUTERS SPREADSHEET PUBLISHER (RSP)

This is an add-in to Microsoft Excel, enabling you to contribute directly to Reuters and to third parties. Ideally suited to RIC-based contribution, RSP can be installed on any desktop that has Microsoft Excel and Windows NT*. By using simple Microsoft Excel wizards, Reuters contribution functions can be created, enabling you to send updates on a manual, automatic or timed basis, providing you with feedback and error messages for all the inserts that you have sent.

*Minimum versions are Microsoft Office 2000 Service Pack 1 and Microsoft NT4 Service Pack 6

MARKETLINK-IP (MLIP)

This is a datafeed that provides a gateway into Reuters, enabling client systems to insert real-time updates from multiple desktops. It can support both page-based and RIC contributions.

CHAPTER 11

CONTRIBUTED DATA



IN BRIEF: CONTRIBUTED DATA

Reuters customers can publish their own rates using RICs (otherwise known as logical records) or pages.

Contributors are contractually obliged to ensure the quality and accuracy of the information they publish.

Data can be contributed in public, public restricted or private restricted format

- **Public (Unrestricted)** – any customer with access to the service can see it.
- **Public Restricted** – everyone except a particular user group defined by the owner of the contributions can see that page.
- **Private Restricted** – only a group of pre-defined customers can see the information.

Logicisation is the process of transforming page-based information into record-based information.

News

Finding the news you need is easy. You can retrieve specific stories using:

- Keywords
- Codes
- RICs
- Quote chains
- Speed-guides



Reuters 3000 Xtra users can also view Top News in an internet browser.

Press **F7** to display a browser window, then enter the URL:

<http://topnews.session.rservices.com>

From the front page of Top News, you can easily move to specific new items or topics using the links or the menu on the left-hand side.

CHAPTER 12

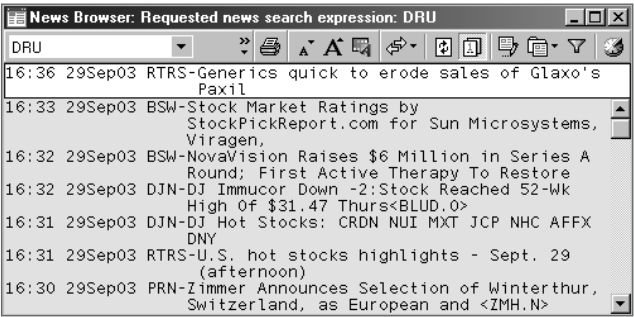
NEWS



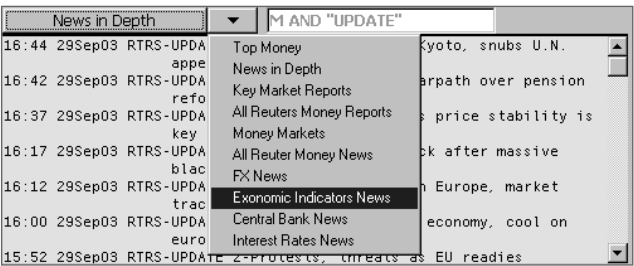
HOW TO SEARCH FOR NEWS

In Reuters 3000 Xtra, there are three ways of retrieving news:

- Press **F9** to open a News Browser, enter news code(s), keyword(s) or RIC(s) and press **↵**.



- If you are building your own screen, double-click in an empty frame and select **News**. Then type the code(s), keyword(s) or RIC(s) and press **↵**.
- In a pre-built screen, either select from the menu or enter your own news code(s), keyword(s) or RIC(s) and press **↵**.



NEWS SPEED-GUIDES

On Reuters 3000 Xtra, click in a quote frame or press **F4** for a quote browser. Then type the code for the speed-guide and press ↵.

| CODE | CONTENT |
|-------------------------|--|
| NEWS | Reuters news speed-guide |
| EQUITY/NEWS1 | Guide to all equities news |
| DEBT/NEWS1 | Guide to all fixed-income news |
| MONEY/NEWS1 | Guide to all money news |
| COMMOD/NEWS1 | Guide to all commodities news |
| ENERGY/NEWS1 | Guide to all energy news |
| DIARY/NEWS1 | Guide to all Reuters diaries |
| IND/NEWS1 | Guide to all sector news codes |
| IPO/NEWS1 | Guide to all news on IPOs |
| G7DIARY1 | G7 economic indicator data diary |
| EUROLAND01 | Guide to Euroland economic data |
| EMRGDIARY01 | Emerging markets economic data diary |
| POLL1 | Guide to Reuters polling information, including asset allocation surveys and forex and interest-rate forecasts |
| PMI/1 | Reuters purchasing managers indices |
| THIRDPARTY/NEWS1 | Guide to all third-party news |

Reuters news codes offer a fast and accurate means of finding news; they are designed to be logical and easy to remember.

CHAPTER 12

NEWS

CODES

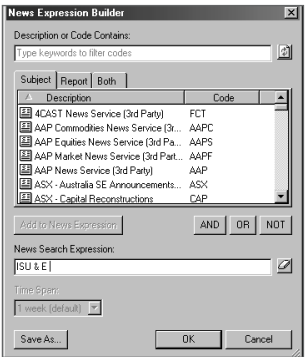
- ECI** for news about economic indicators.
- EMRG** for news about emerging markets.
- PL** for news relating to Poland.

You can find the codes you need using Reuters speed-guides:

- In Reuters 3000 Xtra, type **NEWS** in a Quote object and press ↵.

Alternatively, you can view a list of all news codes:

- In Reuters 3000 Xtra, use the News Expression Builder, available from the toolbar and right-click menu.



KEYWORDS

Simply type **AUCTION** to retrieve headlines containing this word.

Or type **US CREDIT OUTLOOK** to find headlines containing this phrase.

Alternatively, to search **both the headline text and story text** for a specific keyword, just type the keyword within quotation marks and press the **SHIFT** and **F9** keys simultaneously. With this method, the headlines are not updated automatically; you'll need to re-enter the code each time you want to check for the latest news.

RICS

Simply input **RTR.L** to retrieve headlines about Reuters.

Or type **FTSE** to retrieve headlines about the FTSE index.

Alternatively, if you are already looking at the Reuters share price, simply press **F9** and this will retrieve the same headlines. This will also work for quote chains.

HOW TO CUSTOMISE YOUR NEWS SEARCH

By combining codes, RICs and keywords, you can make your search as specific as you require.

To narrow your search, type more than one code or keyword and join them together with either a hyphen or the word AND:

E.g. **ECI-EMRG** or **ECI AND EMRG** gives news on economic indicators in emerging markets.

To broaden your search, type more than one code or keyword and either leave a space between them or join them together with the word OR:

E.g. **ECI EMRG** or **ECI OR EMRG** gives all news on economic indicators anywhere in the world and all types of emerging markets news.

To specifically exclude codes, RICs and keywords, you should precede them by the word NOT:

E.g. **ECI-EMRG NOT PL** gives news on economic indicators in all emerging markets except Poland.

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GLOBAL PRESS WATCH

Global Press Watch, which is available to all Reuters 3000 Xtra users, is an excellent research tool, providing access to a database of articles from hundreds of respected publications, including The Financial Times, The Washington Post and The Economist.

When building your own screens, insert the Global Press Watch object. Most news codes are the same as those for Reuters news, for example, **E** for Equity news. So, **CEN AND EMRG** finds headlines of articles relating to central banks in emerging countries.

```
Global Press Watch - 17:31 04Dec03 - 442 headline(s) found ( within the last 7 days )
04Dec03 Czech cbank meeting ends, no comment on content. [lba]
04Dec03 Bankovní rada skončila jednání, žádné podrobnosti. [reutcz]
04Dec03 Нацбанк Украины в декабре сохранил учетную ставку в ... [reutcy]
04Dec03 Суммарная прибыль банков Украины выросла до 789,3 млн ... [reutcy]
04Dec03 Brazil's Cenbank's Meirelles sees sustained growth. [lba]
04Dec03 ANALYSIS-Funds ready to come back in for cheap C.Europe bonds. [lba]
04Dec03 New Polish MPC seen moderately dovish, hazy on euro. [lba]
04Dec03 Нефтяной фонд Азербайджана по итогам 03г может ... [reutcy]
04Dec03 Аукцион обратного РЕПО не состоялся - нет заявок - ЦБ. [reutcy]
04Dec03 UPDATE 1-Hungary to take out EUR 500 mln standby credit. [lba]
04Dec03 UPDATE 2-Brazil in "no rush" to issue new sovereign debt. [lba]
04Dec03 S.Africa Q3 daily fx turnover at 5-yr peak-cbank. [lba]
04Dec03 Bank of Slovenia cuts Lombard rate to 7.25 percent. [lba]
```

CHAPTER 12

NEWS

NEWS TOPIC CODES

REUTERS NEWS ALERTS

AA

REUTERS TOP NEWS STORIES

| | |
|-------------------------------|-----------------|
| Reuters top news | TOP |
| Top world and political news | TOP/G |
| Top forex news | TOP/FRX |
| Top equity news (Europe) | TOP/EQE |
| Top equity news (Asia) | TOP/EQA |
| Top equity news (USA) | TOP/USA |
| Top emerging markets | TOP/EMRG |
| Top fixed income | TOP/DBT |
| Guide to all Reuters top news | TOP/ |

NEWS BY KEYWORD

| | |
|--|------------------|
| Reuters diaries | DIARY |
| News in detail | UPDATE |
| Instant market reaction and analysis | INSTANT |
| What the papers say | PRESS |
| Who is Reuters talking to | INTERVIEW |
| Reuters news advisories | ADVISORY |
| Or use any four-letter (or longer) word of your choice | |

NEWS BY REGION

| | |
|------------------|---------------|
| European news | EUROPE |
| Western Europe | WEU |
| European Union | EU |
| Asian news | ASIA |
| United States | US |
| Nordic Countries | NORD |
| Eastern Europe | EEU |
| Emerging Markets | EMRG |
| Latin America | LATAM |

EQUITY NEWS

| | |
|--|-------------------|
| Top company news in Europe | TOP/EQE |
| Top company news in the US | TOP/EQU |
| Top company news in Asia | TOP/EQA |
| World stock markets snapshot | SNAP/STX |
| Company results | RES |
| Results forecasts | RESF |
| Mergers and acquisitions | MRG |
| Active shares | HOT |
| New equity issues | ISU-E |
| Initial public offering | IPO |
| Corporate interviews | INTERVIEW |
| Investment/mutual funds | FUND |
| Dividends | DIV |
| Broker research alerts | RCH |
| Credit ratings | AAA |
| Derivatives | DRV |
| Stock market reports | STX |
| Emerging markets equity news | EMRG-E |
| Top banking and financial news | TOP/FIN |
| Top technology news | TOP/TECH |
| Top media news | TOP/MEDIA |
| Top telecommunications news | TOP/TELCO |
| Top healthcare news | TOP/HEALTH |
| Top consumer and retailing news | TOP/RETAIL |
| Top capital goods, transportation and manufacturing news | TOP/BASIC |
| Top natural resources news | TOP/NATRES |
| Top real estate, restaurants and hotels news | TOP/REALTY |
| Top mutual fund industry news | TOP/FUND |
| Top corporate finance news | TOP/DEALS |
| Top political news | TOP/G |

| | |
|-------------------------|-------------|
| US stocks | .N |
| London stocks | .L |
| Tokyo stocks | .T |
| Pan-European stocks | .EU |
| Weekly Wall St. outlook | .N/O |

MONEY NEWS

| | |
|--------------------------------|------------------|
| All money news | M |
| Top Foreign exchange news | TOP/FRX |
| FX news page | FXNEWS |
| Foreign exchange news | FRX |
| Economic indicators | ECI |
| Market reaction and analysis | INSTANT |
| Interest rates | INT |
| Central Banks | CEN |
| European Central Bank | ECB |
| Federal Reserve | FED |
| International Monetary Fund | IMF |
| Money Market | MMT |
| Technical analysis | INSI-FRX |
| Derivatives | DRV |
| Gold and precious metals | GOL |
| Euro currency | EUR |
| European Union | EU |
| Monetary union news | EMU |
| Reuters trade strategy reports | IDEA/ |
| Latest major currency update | USD/ |
| Major currency full report | FRX/ |
| Emerging market FX report | EMRG/FRX |
| FX options report | FX/OPT |
| FX technicals | TECH/FRX |
| Today in FX and Debt markets | MI/DIARY |
| Economic events diary | M/DIARY |
| Key economic events | KEY/DIARY |

FIXED INCOME NEWS

| | |
|--------------------------------|------------------|
| All news for debt markets | D |
| All Treasury news | T |
| Top Debt news | TOP/DBT |
| All news about debt markets | DBT |
| Government debt news | GVD |
| Eurobond news | EUB |
| Ratings news | AAA |
| Derivatives | DRV-DBT |
| Mortgage-backed debt | MTG |
| Eurobonds | EUB |
| Loans | LOA |
| US Corporates | USC |
| Equity-linked bonds | EQB |
| New issues | ISU-DBT |
| Terms & Conditions | TNC |
| Municipals news | MUNI |
| Emerging Markets debt news | EMRG-DBT |
| Technical Analysis | INSI-DBT |
| Reuters trade strategy reports | IDEA/ |
| World Bond analysis report | G7/ |
| Emerging Markets debt report | EMRG/DBT |
| Euro debt report | GVD/EUR |
| US treasury report | US/ |
| US credit outlook | US/O |
| Japan debt report | JP/ |
| Eurobonds report | EUB/ |
| Mortgage debt report | MTG/ |
| Swaps report (daily) | SWP/ |
| Debt Diary | D/DIARY |
| Today in FX and Debt markets | MI/DIARY |
| Today in US treasuries | T/DIARY |
| Key world finance events | KEY/DIARY |

CHAPTER 12

NEWS

COMMODITIES NEWS

| | |
|--|------------------|
| Commodities news | C |
| Top Commodities news | TOP/C |
| Metals and related news | MTL |
| Top news – metals | TOP/MTL |
| Metals summary | SUM/MET |
| Base metals | MET |
| Gold/precious metals | GOL |
| Metals diary | MTL/DIARY |
| Softs and related news | SOF |
| Top news – Softs | TOP/SOF |
| Coffee | COF |
| Cocoa | COC |
| Rubber | RUB |
| Sugar | SUG |
| Tea | TEA |
| Fruit juices | ORJ |
| Softs Diary | SOF/DIARY |
| Grains/oilseeds/livestock and related news | GRO |
| Top news – grains/oilseeds/livestock | TOP/GRO |
| Grains/oilseeds/livestock summary | SUM/COM |
| Oilseeds and edible oils | OILS |
| Grains | GRA |
| Meals and feeds | MEAL |
| Cotton and fibres | COT |
| Timber, Pulp and Paper | TIM |
| Wool | WOO |
| Livestock | LIV |
| World weather report | WSC |

REUTERS POLLS AND FORECASTS

| | |
|----------------------------|-------------------|
| Top polls and surveys | POLL |
| Diary of forthcoming polls | POLL/DIARY |

ENERGY NEWS

| | |
|---------------------------------|--------------------------|
| All energy news | O |
| Top energy news | TOP/O |
| North American power | ELN |
| European power | ELE |
| OPEC news | OPEC |
| North Sea | NSEA |
| Iraq news | IQ-O |
| Saudi news | SA-O |
| Iran news | IR-O |
| All crude oil | CRU |
| All petroleum products | PROD |
| All natural gas | NGS |
| All shipping | SHP |
| Global oil price market comment | O/R |
| US NYMEX oil futures report | O/N |
| London IPE oil futures report | O/L |
| Asia oil futures report | O/S |
| Energy equities news | ENR or ELG |
| All energy alerts | AA-O |
| Energy Analysis | ANALYSIS-O |
| Energy diary | O/DIARY |
| World weather report | WSC |

GENERAL NEWS

| | |
|----------------------------|-------------|
| All general news | G |
| Domestic politics | POL |
| Diplomatic relations | DIP |
| Natural/man-made disasters | DIS |
| Elections | VOTE |
| Sports | SPO |
| Human interest | ODD |
| Weather | WEA |

OTHER USEFUL PAGES

The following pages are also useful (view these in a Quote object in Reuters 3000 Xtra):

| | |
|---|-----------------------------|
| G7 economic data diary | G7TODAY |
| Euroland economic data diary | EUROLAND01 |
| Emerging market economic data diary | EMRGDIARY01 |
| Reuters Purchasing Managers Indices | PMI/INDEX1 |
| Guide to Reuters polling information including asset allocation surveys and forex and interest rate forecasts | POLL1 |

LANGUAGE CODES

You can filter news so that you only see a specific language. For example, **ECI-LEN** displays economic indicator news in English. To see a full list of all available language codes, look at page [LANGUAGE/NEWS1](#).

THIRD-PARTY NEWS SOURCES

Use the following news codes for third-party-news:

| | |
|-------------------------------------|------------|
| London stock exchange announcements | RNS |
| PR Newswire | PRN |
| Business wire | BSW |
| Euro top 300 press releases | CNR |

For access to stories from Dow Jones Newswires, view the page [DJN/NEWS1](#).

For a guide to all third-party news services, view the page [THIRDPARTY/NEWS1](#).

CHAPTER 13

ERROR MESSAGES/PERMISSIONING

Error messages/permissioning

Nobody has access to all the data supplied by Reuters. Sooner or later, you'll see one of these error messages when you try to find something.

Selective Access

This means the code you have entered exists, but that you are not permissioned to view or retrieve it.

Action:

If you have requested exchange information, data from a specialist data provider source, or a Restricted Data Set, you need to notify Reuters that you want to see this data. There may be an additional charge payable if you have to subscribe to an exchange. The data may be part of a Restricted Data Set, in which case either you are no longer part of the user group and need to re-apply, or you may not be permitted to view it. Alternatively, you might not have subscribed to the correct Reuters or specialist data service.

If you are trying to view a page belonging to a broker, it is most likely that the broker has set up a Restricted Data Set. Your Reuters representative will check if you are able to view the information, and will contact the broker on your behalf.

DATA NOT AVAILABLE

This can have two meanings:

- a) the code you entered does not exist
- b) you are not permissioned to see the data (for datafeed customers, **selective access** and **data not available** are synonymous)

Action:

Phone your local customer support or Reuters representative, who will be happy to give you the correct code or will find out why you cannot retrieve the data you requested.

Help desk numbers

Local and international codes are included where relevant. International codes are not included. These numbers are subject to change. Check the page **PHONE/HELP for latest details.**

AMERICAS

| | |
|---|----------------------------|
| US/Canada Customer Response Centre (e-mail: customer@reuters.com) | 1-800-435-0101 |
| Argentina | 0-800-288-9999 |
| Aruba and St Marteen | 5411-5554-7391 |
| Bolivia | 800-10-0277 |
| Brazil | 0800-891-7872 |
| Chile | 800-80-0058 |
| Colombia | 01800-944-2979 |
| Costa Rica | 0800-011-0849 |
| Ecuador – Quito | 1999-119-1866-222-0650 |
| Ecuador – Guayaquil | 1800-999-119-1866-222-0650 |
| El Salvador | 5411-5554-7316 |
| Guatemala | 5411-5554-7392 |
| Guyana | 5411-5554-7391 |
| Honduras | 5411-5554-7396 |
| Mexico | 01800-123-0162 |
| Neth. Antilles (Curacao) | 001-800-898-4679 |
| Nicaragua | 1800-044-0075 |
| Panama | 001-800-898-4679 |
| Paraguay | +54-11-5554-7398 |
| Peru | 0800-51-828 |
| Uruguay | 000-411-009-3079 |
| Venezuela | 0800-100-4242 |

ASIA

| | |
|--------------------------|-------------------------------------|
| Australia | 1800-630-128 |
| Bangladesh | +91-22-5656-3902 |
| China | 10-800-611-0050 |
| Hong Kong | (852) 2802 8288 |
| India (toll-free) | 1600-222-888 |
| India | +91-22-5656-3900 |
| Indonesia (toll-free) | 001-803-061-2124 |
| Japan – Tokyo (in Japan) | (0120) 161916 |
| Japan – Tokyo (overseas) | 81-3-3432-0537 |
| Korea | 00798-612-1086 |
| Macau | (853) 713863 and 713175 |
| Malaysia | 1-800-80-7143 |
| Nepal | +91-22-5656-3900 |
| New Zealand | 0800 738-837 |
| Pakistan | +91-22-5656-3901 |
| Philippines | 1800-1612-0124 |
| Singapore | (65) 6776-7188 |
| Sri Lanka | +91-22-5656-3903 |
| Taiwan | 0800-222-090 |
| Thailand | 1800-800-999 |
| Vietnam | (84) 4-826-6982 and (84) 8-821-8912 |

CHAPTER 14

HELP DESK NUMBERS

EUROPE

| | |
|------------------------------|--|
| Austria | (1) 531-12-345 |
| Belgium – French speakers | 0800-800-90 |
| Belgium – Dutch speakers | 0800-800-91 |
| Denmark | 803-09-696 |
| Finland | 0800-117-137 |
| France | (01) 4949-5455 |
| Germany | (0180) 324-2628 |
| Greece | (1) 33-11-822 and 33-11-823 and 33-11-824 |
| Italy – Data/Application | 199 117 700 |
| Ireland | (1)-800-709-199 |
| Luxembourg – French speakers | 800-239-89 |
| Luxembourg – German speakers | 800-239-90 |
| Netherlands | (020) 504-57-77 |
| Norway | 800-31-851 |
| Portugal | (351) 21-791-0444 |
| Spain | 902-300-088 |
| Sweden | (freephone) 020 87-87-87 |
| Switzerland – Basel | (061) 279-7166 |
| Switzerland – Geneva | (022) 718-2121 |
| Switzerland – Lugano | (091) 913-7144 |
| Switzerland – Zurich | (01) 631-7444 |

| | |
|---------------------------|----------------|
| Turkey – Ankara | (312) 459-9000 |
| Turkey – Istanbul | (212) 350-7000 |
| UK – Accounts/Permissions | 0800-169-7584 |
| UK – Data/Applications | 0800-44-2000 |
| UK – Transaction Products | 0800-88-2000 |

MIDDLE EAST AND AFRICA

| | |
|--------------------------|-------------------------|
| Abu Dhabi | 971-2-632-8000 |
| Bahrain | 973-538111 |
| Cyprus | 357-2-469617 and 665087 |
| Dubai | 971-800-4233 |
| Egypt | 202-5777187 and 5777186 |
| Iran | 973-524432 |
| Israel | 9723-537-6631 |
| Ivory Coast | 225-20219090 |
| Jordan | 962-6-4623776 |
| Kenya | 25420-240400 |
| Kuwait | 965-2431920 |
| Lebanon | 961-1-983839 |
| Lebanon (fax) | 961-1-983804 |
| Malta | 00356-21-250951 |
| Morocco | 212-2248-6648 |
| Nigeria | 234-1-263-1943 |
| Nigeria (fax) | 234-1-263-1772 |
| Oman | 968-701333 |
| Saudi Arabia – Riyadh | 966-1-464-1480 |
| South Africa – Toll Free | 0800-11-9191 |
| South Africa – Direct | 2711-7753000 |

| | |
|--------------|----------------|
| Tunisia | 216-71-786-770 |
| UAE and Gulf | 9714-3918300 |
| Yemen | 973-524432 |
| Zimbabwe | 263-4-369110 |

CHAPTER 14

HELP DESK NUMBERS

EASTERN EUROPEAN AND BALTIC COUNTRIES

| | |
|---------------------|--------------------------------------|
| Bulgaria | (359) 2-980-9438 |
| Croatia | (385) 1-4899900 |
| Czech Republic | (420) 2-24-19-0444 |
| Estonia | (372) 627-7272 |
| Hungary | (36) 1-327-4030 |
| Latvia | (371) 7-222-111 |
| Lithuania | (370) 5-266-13-70 |
| Poland | (0048) 22-653-9737 |
| Romania | (4021) 315-8772 |
| Russia | (7) 095-775-12-22 or 7-095-961-01-11 |
| Serbia & Montenegro | +381 (11)-311-4011 |
| Slovakia | +421 2-5341-84-00 |
| Slovenia | +386 1-4700-535 |
| Ukraine | (38) 044 2449156 |

EUROPEAN TECHNICAL HELP PHONE NUMBERS

| | |
|-------------------------------|--------------------|
| Austria | (01) 531-12-355 |
| Belgium | (02) 287-67-67 |
| France | (01) 49 49 50 00 |
| Germany – Frankfurt | (69) 75 65 31 71 |
| Italy | (1) 199-116-600 |
| Luxembourg | (352) 47-51-51-218 |
| Netherlands | (020) 504-58-88 |
| Portugal | (21) 79-104-45 |
| Spain – Barcelona | (93) 241-91-11 |
| Spain – Madrid | (91) 585-83-00 |
| Switzerland (French speakers) | (22) 718-23-65 |
| Switzerland (German speakers) | (01) 631-7333 |
| UK | 0800-44-3000 |

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