



Bclear Member Testing Guidelines

Euronext.liffe's Cleared Service for Wholesale Equity Derivatives

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Preface

Members wishing to register trades using Euronext.liffe's new administration and clearing service for wholesale equity derivatives, Bclear, will be able to participate in a supported testing period prior to Bclear being implemented in the live market.

This document provides details of the events leading up to, during and after the Member Testing period as follows:

1. Pre-requisite Member Testing Criteria.
2. Dates and times of the Member Testing period.
3. Member Testing participation.
4. Recommended Test scenarios using Bclear.
5. Communication between Euronext.liffe and Member Testing participants. This includes how to contact the support team during the member testing phase.
6. Technical information about the Bclear test environment and other systems supporting the Member Testing period.

Associated Documents

Below is a list of associated documents, which either should be read in conjunction with this document or which provide other relevant information for the user:

Bclear User Guide
Bclear – How the Service Works (presentation)

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1. Introduction

The Member Testing period for Bclear is available to all members from 19 September 2005.

Prior to this Member Testing period, a pilot Member Testing period is available to a selection of members to provide initial feedback on the service.

The Bclear Test market will be available for **trade submission** between 08:00 and 17:00 (London time). The test environment will remain available after the market closes for viewing of trade histories and other audit activities until 22:00 (London time).

Note that this document provides guidelines for using Bclear **test**. It does not contain any requirements for Bclear **live**.

Specific requirements regarding Bclear **live** will be communicated in due course.

2. Pre-requisite steps for Member Testing participation

To use the Bclear test environment, members, both new and existing, should follow the steps summarised in the table below:

NO.	STEP	ACTION REQUIRED BY MEMBERS
1	Indicate intention to use the Bclear Member Test period	Complete and return the access request form to bcleartest@liffe.com . (A copy is provided in Appendix A).
2	Request security certificates	Request security certificates by email from bcleartest@liffe.com and provide an email address (if different from the requesting email address) for the certificates and passwords to be sent to. In addition to this each Bclear user will require a username and password to access the service. The email request should also specify the number of Bclear usernames that are required.
3	Verify the technical and security requirements are met	Ensure the Operating System and Internet browser requirements are met. (See section 4.2). Ensure that the PC that is to be used for testing can connect to www.euronext.com .
4	Install Security Certificates	Ensure that the security certificates have been installed according to the procedure specified in section 4.

3. Member Testing Participation

The following members are recommended to participate in Member Testing:

- Existing Members who intend to enter trades via Bclear including those who use the existing Flex® Service
- New Members intending to join specifically to use Bclear.

Participation in the Member Testing period is optional, but recommended.

3.1 Bclear Demonstration

Please contact your Account Manager if you would like to see a demonstration of Bclear.

4. Technical Requirements and Security

4.1 Setup

Access to the Bclear Test environment requires the member to install a digital certificate into a web browser. Note that the certificate required to access Bclear is different to those used to access LIFFE CONNECT®.

Certificates should be requested from the support team by emailing bcleartest@liffe.com. Members should also provide an email address that the certificate(s) can be sent to. For the test service, the password(s) for the certificate(s) will also be sent.

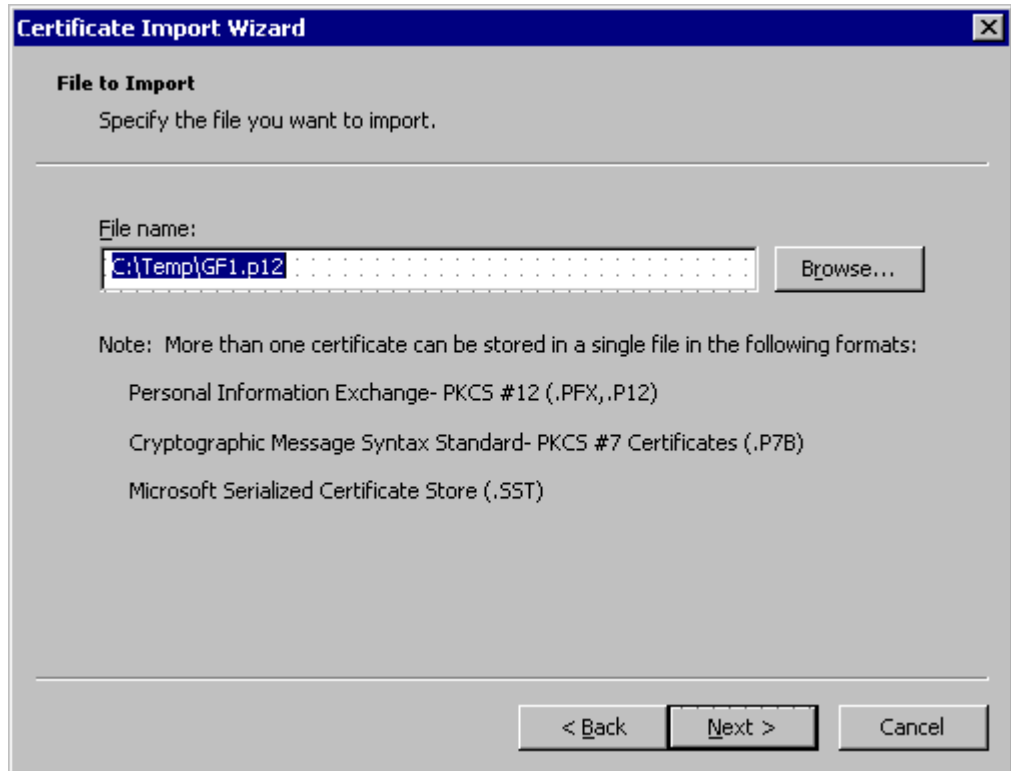
The request should also indicate how many usernames and passwords are required for testing.

The certificates will then be emailed to the member and should be installed into the web browser by following the procedure below. Note that the password for the certificate must be entered when the certificate is installed:

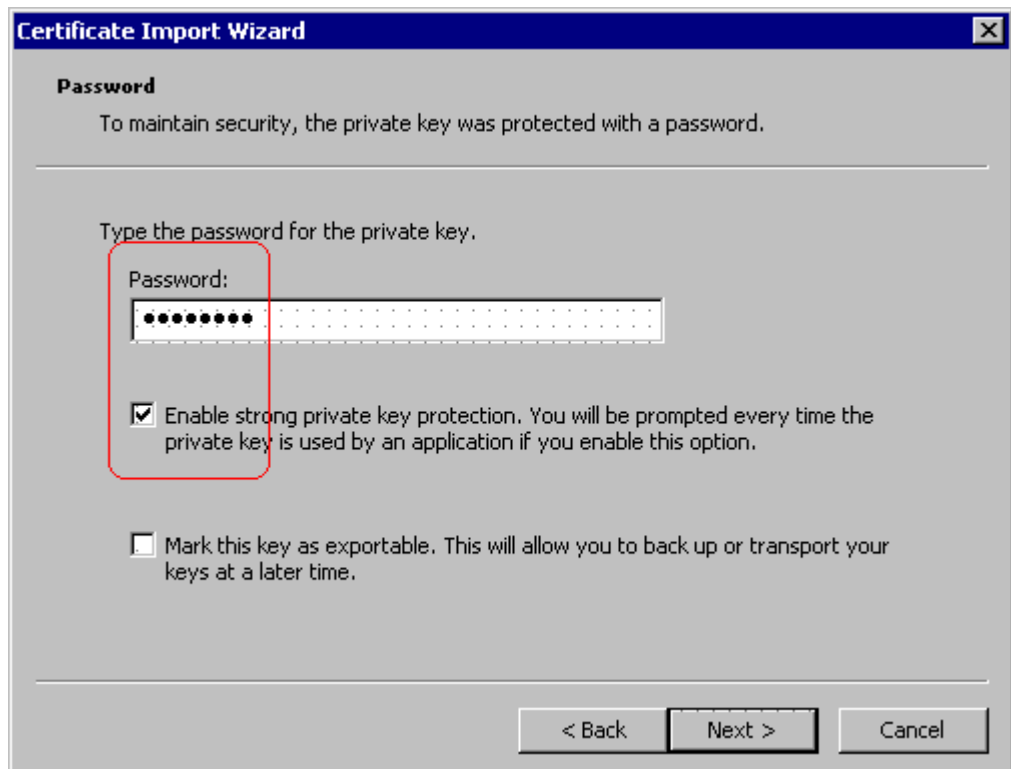
1. The certificate and password will be provided by email. The certificate itself is a single file with a three character filename and a file extension of .p12. e.g. GF1.p12
2. This file should be saved locally on the PC that is to be used for testing.
3. The user should then locate the file using Windows Explorer and double-click the file. This will launch the 'Certificate Install Wizard'.



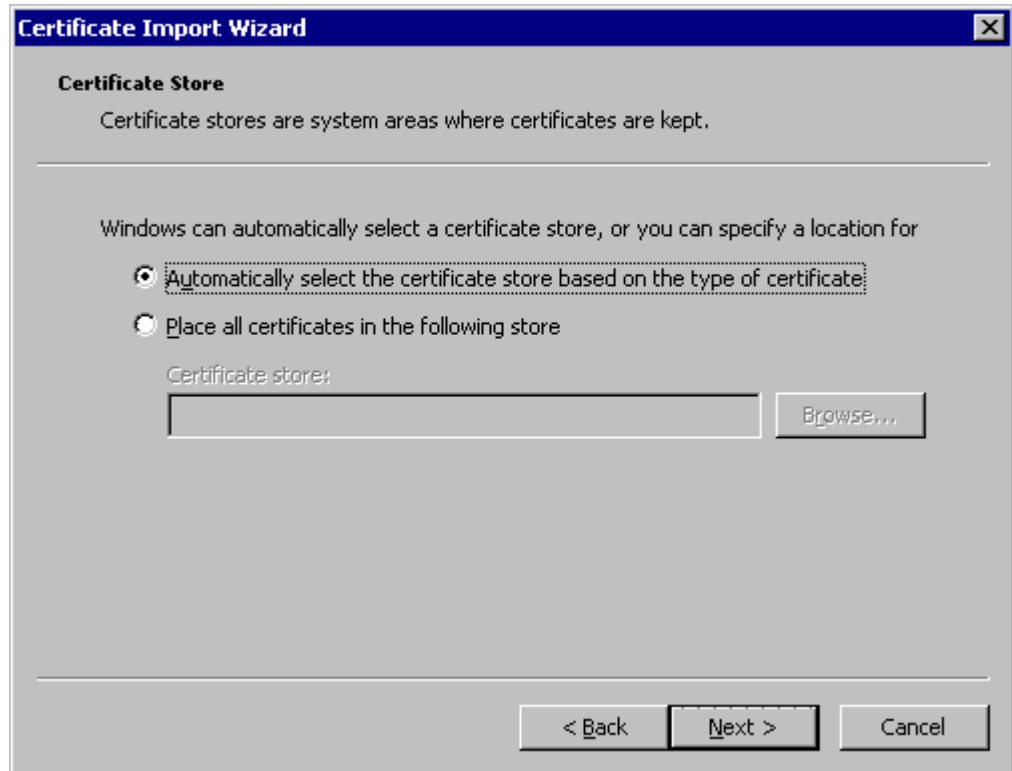
4. Click the **Next** button to continue.



5. Enter the path of the certificate in the File name field and click the **Next** button.



6. Enter the password that was provided by email with the certificate and click the **Next** button.



7. Ensure the box shown above is checked and click the **Next** button.



8. Click the **Finish** button. The following dialogue box is displayed:

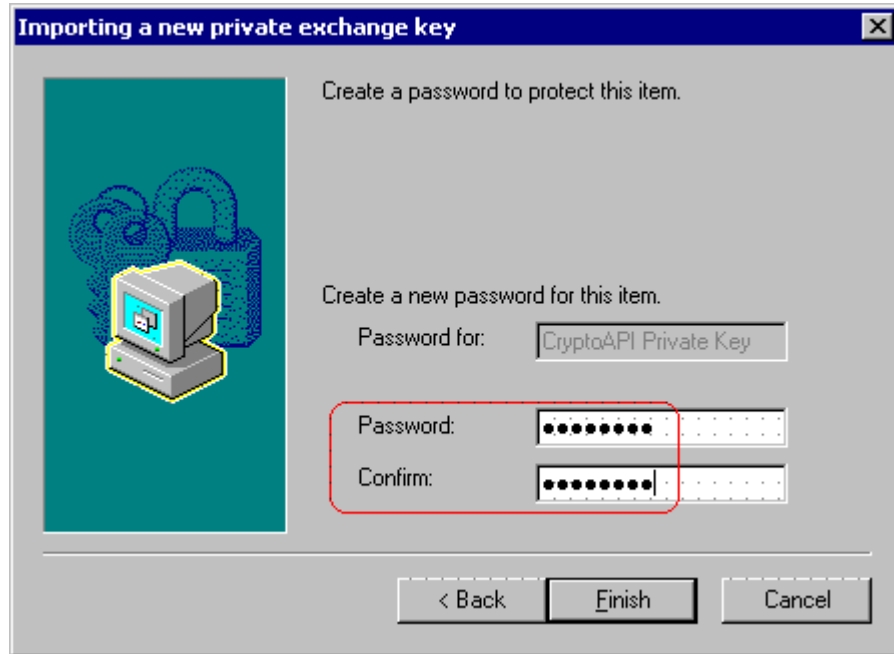


9. Click the **Set Security Level** button. This gives the user the option of being prompted for the key that should be used when connecting to a web site. **The security level can be set at the user's discretion.** High security level is recommended if more than one user has their key installed in the browser (e.g. users hot-desking the same machine). Please note that this requires the user to enter a password every time the certificate is used.



10. Selecting 'Medium' will just prompt for the user's permission, but a password does not have to be entered each time the certificate is used. This should only be used if the user does not share the PC with anyone else, and it is physically secure from other users.
11. Select 'High' security if desired. This will prompt the user for a password (defined in the following screen). This password must then be entered each time the certificate is used.
12. Click the **Next** button to continue.

13. If High Security Level is selected, the following window is displayed.



14. Enter and confirm a password.

15. Click the **Next** button to continue.



16. Click the **OK** button.



17. On the confirmation message, click the **OK** button to finish.

4.2 Internet Browser and Operating System Requirements

Bclear will be supported for the following operating systems and internet browser versions:

- Microsoft™ Windows 2000, Microsoft™ Windows Server 2003, Microsoft™ Windows XP
- Microsoft Internet Explorer V6.0.

The following Internet Explorer settings are necessary for the Bclear application:

- Pop-ups must be allowed for the Bclear site
- Privacy internet options: Cookies must be allowed for the Bclear site
- Advanced internet options: Use SSL (this is the IE default setting)
- Security internet options: Scripting must be enabled (this is the IE default setting)

4.3 Recommended PC Specification

The recommended minimum PC specification to run the internet browser for Bclear is:

Processor speed: 1GHz

Memory: 512Mb

4.4 Access

The certificated browser should be directed to the Bclear URL:

<https://www.bcleartest.com/flex/page/TX>

Enter the designated username and password on the login page.

When logging on for the first time users will be prompted to change their password.

4.5 Back Office System Specification

A TRS test system will be accessible during the Member Test Period.

Note that from 3 October 2005, the Current Release instances of TRS (EACT for Equities and CFCT for Financials) will be used for Bclear Member Testing.

Members wishing to perform end to end testing will be able to view trades on the existing TRS test system or via the test TSCS feed, using existing test TRS/TSCS connections. All TRS functionality that is available for LIFFE CONNECT® traded products will also be available for products traded on Bclear.

Members that do not currently have access to TRS that wish to perform end to end testing should contact bcleartest@liffe.com.

TRS will run in parallel with the Bclear Test environment and will be available from 12:00 until 00:00 (London time). At this point TRS will be closed and will enter End of Day mode at which point no further trade modifications will be possible. Trades entered on a business day will be cleared in the morning of the following business day.

5. Recommended Testing Scenarios

Although participation in the Member Testing period is non-mandatory, it is highly recommended that members fully utilise the Bclear test system.

Members should become familiar with all aspects of the system as described in the “Bclear User Guide” and “How the Service Works” (presentation).

The functionality available in the Bclear Test environment will ‘mirror’ the functionality that will be available in the live environment. Members are therefore encouraged to test all functionality that is likely to be used once the service is live.

Examples of contracts available for trading via Bclear include:

- Flexible Stock Option – Cash Settled American Style
- Flexible Stock Option – Cash Settled European Style
- Flexible Stock Option – Physically Settled American Style
- Flexible Stock Option – Physically Settled European Style
- Flexible Index Option – Cash Settled American Style
- Flexible Index Option – Cash Settled European Style
- Standard LIFFE CONNECT® Stock Options – Physically Settled American Style
- Standard LIFFE CONNECT® Index Futures – Cash Settled

Trades can be submitted as outright or strategies. The majority of strategies recognised by LIFFE CONNECT® will be supported as well as delta neutral strategies/stock contingent trades and custom strategies.

5.1 BClear Price Limit Validation

Option contract Volatilities are current live volatilities.

5.1.1 Validation of Underlying submitted with trade.

Different Daily High and Low	Trade must be within the daily High and Low
Daily High and Low are the same	Uses a percentage spread around the Daily High/low value
No Daily High or Low	Uses a percentage spread around the previous business days closing

	Price
Example: 10% spread Stock price 150	(150 – 15.0 = 135.0 lower) (150 + 15.0 = 165.0 Upper)

5.1.2 Validation of Underlying in a Delta Neutral trade.

Upon receiving a trade the Delta is calculated and	A percentage spread applied to the calculated Delta, this is added to the Delta creating an Upper and Lower limit, trade rejected if the volume ratio for underlying leg is not within these limits.
Example: Delta spread set 10%: Delta .48	Upper range: $.48 + 10\% = .528 \times 1000$ (contract lot size) $\times 100$ (trade volume) = 52800 Stock volume Lower range: $.48 - 10\% = .384 \times 1000$ (contract lot size) $\times 100$ (trade volume) = 43200 Stock volume

5.1.3 Validation of the Series range

Underlying stock price received	Separate percentages for the upper and lower series range applied to the received stock price.
Example Lower limit set 1% Upper set 1000%	Stock price 100 Lower series = 1 Upper series = 1000

5.1.4 Validation of Option Price

<p>Calculated Fair value for the trade entered, applies a set of parameters to produce a lower and upper price range. Which the trade is validated against.</p>	<p>Price limit spread; Percentage of fair value</p> <p>Configure Price range multiplier (different factoring values set over premium range)</p> <p>Configured Time to expiry multiplier (different factoring values set over time)</p> <p>Published trade yes/no (extra factoring value may be applied for non published)</p> <p>Maximum and Minimum price limit movement allowed. (compares the calculation range and will use maximum/minimum price if lesser or greater than these values)</p>	
<p>Example:</p> <p>Option under 1 year</p> <p>Price limit spread = 20%</p> <p>Price range multiplier = 4</p> <p>Time to expiry multiplier =1</p> <p>Maximum price = 50.00</p> <p>Minimum price = 0.25</p> <p>Non published = 3</p>	<p>Fair Value 10.0 Published</p> <p>Low limit= 6.0</p> <p>High limit = 14.0</p>	<p>Fair Value 50.0 Published</p> <p>Low limit = 40.0</p> <p>High limit = 60.0</p>
	<p>Non Published</p> <p>Low limit = 0.00</p> <p>Actual lower limit = 0.25</p> <p>High limit = 22.00</p>	<p>Non Published</p> <p>Low limit = 20.00</p> <p>High limit = 80.0</p>
<p>Example:</p> <p>Option over 1 year</p> <p>Price limit spread = 20%</p> <p>Price range multiplier = 4</p> <p>Time to expiry multiplier =1.5</p> <p>Maximum price = 50.00</p> <p>Minimum price = 0.25</p> <p>Non published = 3</p>	<p>Fair Value 10 Published</p> <p>Low limit= 4.0</p> <p>High limit = 16.0</p>	<p>Fair Value 50 Published</p> <p>Low limit = 20.0</p> <p>High limit = 80.0</p>
	<p>Non Published</p> <p>Low limit = 0.00</p> <p>Actual lower limit = 0.25</p> <p>High limit = 28.0</p>	<p>Non Published</p> <p>Low limit = 0.00</p> <p>Actual lower limit = 0.25</p> <p>High limit = 100.0</p>

5.2 Live Connectivity

During the week of **17 October 2005** 'live' connectivity sessions will facilitate member readiness when Bclear live is launched.

This will simply be a case of verifying that Members can correctly connect to Bclear **live** using **live** certificates and usernames/passwords.

Note that certificates used on Bclear test will **not** be able to be used on the live system. The procedures for obtaining live certificates will be communicated to Members in due course.

6. Product Availability

From **3 October 2005** ALL products that will be available for the Bclear live launch will be available in the Member Test environment. This includes all currently traded Flex® Service products.

For more details of the products that will be available on Bclear at the time of the launch see <http://www.euronext.com/bclear> or contact your Account Manager.

7. Points of Contact

Prior to, and during the Member Testing period, any queries should be directed to the support team either by telephone or email:

+44 (0)20 7379 2969

bclearatest@liffe.com

Appendix A. Bclear Access Request Form

Euronext.liffe's new Cleared Service for wholesale equity derivatives

Company name:

Contact 1	Business Manager
Name:	
Job title:	
Tel:	
Email:	

Contact 2	Trader / Broker
Name:	
Job title:	
Tel:	
Email:	

Contact 3	Clearing / Operations
Name:	
Job title:	
Tel:	
Email:	

Contact 4	IT
Name:	
Job title:	
Tel:	
Email:	

Please return to: bcleartest@liffe.com Tel: +44(0)20 7379 2969

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