

Document title

REQUEST FOR CROSS COMMODITY, EQUITY AND INDEX OPTIONS

Conformance Script

Version number

1.3

Date

23 Jan 2017

Number of pages

6

Author

CTSG

This document is for information purposes only. The information and materials contained in this document are provided 'as is' and Euronext does not warrant the accuracy, adequacy or completeness and expressly disclaims liability for any errors or omissions. This document is not intended to be, and shall not constitute in any way a binding or legal agreement, or impose any legal obligation on Euronext. This document and any contents thereof, as well as any prior or subsequent information exchanged with Euronext in relation to the subject matter of this presentation, are confidential and are for the sole attention of the intended recipient. Except as described below, all proprietary rights and interest in or connected with this publication shall vest in Euronext. No part of it may be redistributed or reproduced without the prior written permission of Euronext. Portions of this presentation may contain materials or information copyrighted, trademarked or otherwise owned by a third party. No permission to use these third party materials should be inferred from this presentation.

Euronext refers to Euronext N.V. and its affiliates. Information regarding trademarks and intellectual property rights of Euronext is located at <https://www.euronext.com/terms-use>.

PREFACE

PURPOSE

This document details the test cases to be performed by the client in order to certify its trading software for the Request for Cross functionality implemented on the Euronext Derivatives markets .

TARGET AUDIENCE

The primary audience for this document is all ISV's or Member developers.

ASSOCIATED DOCUMENTS

The following lists the associated documents, which either should be read in conjunction with this document or which provide other relevant information to the user:

- [CCG Binary specifications](#)
- [CCG FIX specifications](#)
- [CCG error list](#)
- [XDP-D specifications](#)
- [XDP-D Standing Data specifications](#)
- [Request for Cross Functional Overview](#)

VERSION NO.	DATE	CHANGE DESCRIPTION
1.3	23 Jan 2017	Reference to Equity and Index Options added

CONTACTS

For further information about this document please contact:

- Customer Technical Support Group : ctsg@euronext.com or +33 1 8514 8588

TEST CASES

Client will be asked to perform below test cases with a CTSG Analyst.

Please liaise with CTSG@euronext.com in order to book a session.

Below test cases need to be performed on a commodity, equity or index instrument of choice during market open phase. Some tests are optional depending on the member application facilitating such functionality.

Part 1: Request for Cross (RFC)

1.1	Request for Cross	(mandatory) ¹
1.2	Request for Cross Response	(mandatory) ¹
1.3	Request for Cross Strategy	(optional)
1.4	Request for Cross Strategy Response	(optional)
1.5	Request for Cross Volatility/Delta Neutral Strategy	(optional)
1.6	Request for Cross Volatility/Delta Neutral Strategy Response	(optional)

¹ Depending on the customers use of the RFC functionality only one type may be mandatory, however, if both are used, both types are subject to a conformance test.

■ 1.1 Submission of a Request for Cross

Instructions :

- Submit a properly formatted RFC as Initiator in a commodity, equity or index option instrument of choice. Make sure to respect the minimum volume.
- CTSG will submit an RFC response in the improvement period to ensure an execution during the next step.
- Submit a properly formatted RFC as Initiator in a commodity, equity or index option instrument of choice, but with a quantity below the set threshold.
- Submit an incorrect formatted RFC as Initiator in a commodity, equity or index option instrument of choice.
- Submit an RFC and a second one in the same instrument when the first RFC is still in the Improvement Period.
- Submit an RFC as Initiator, then attempt to cancel it.

Expected Result:

- The RFC is accepted and each side will be acknowledged. If the member is listening to the Market Data, he will see the 702 msg type with UpdateType = 41. If he's not listening to the Market Data, CTSG analyst will notify his action.
- No data should be published during the improvement period and UpdateType =43 must be followed after this period (final execution).
- The RFC is rejected with error message "RFC Volume below restrictions".
- RFC is rejected. Error message depends on incorrect value.
- Second RFC is queued, CTSG to confirm.
- The RFC is accepted, then the cancelation is rejected with error code 4194308.

■ 1.2 Submission of a Request for Cross ResponseInstructions :

- a. CTSG will submit an RFC in a given commodity, equity or index option instrument. Member to respond using a correctly formatted RFC response within the Improvement period respecting the minimum volume threshold. Price and volume enclosed for this test.
- b. (Only applicable if test a did not result in a trade between Initiator and Reactor) CTSG will submit an RFC in a given commodity, equity or index option instrument for 1000 lots at a price of 1.00. Member to submit an RFC response to buy 500 lots at a price of 1.10.
- c. Submit an RFC response in an instrument that has no active RFC.
- d. Submit an RFC response, and then cancel it before the end of improvement period.
- e. Submit an RFC response, and then attempt to amend it before the end of improvement period.

Expected Result:

- a. If the price of the RFC Response is equal to the RFC price or an improvement, it will trade after the improvement period. In case of partially filled with an equal price, the remaining quantity of response must be cancelled automatically. If worse it will be rejected only after the improvement period and only if not possible to match with its counterparty (another RFC response).
- b. Member trades 500 lots at 1.00 after Improvement Period, then one cross trade of 500@1.00 must be followed.
- c. RFC will be rejected with error message "No RFC in progress"
- d. Get an ack for the valid RFC response then get a cancellation ack.
- e. Get an ack for the valid RFC response then get a reject with error code 4194306.

■ 1.3 Submission of a Request for Cross StrategyInstructions :

- a. Submit a properly formatted RFC as Initiator in a commodity, equity or index option strategy of choice. Make sure to respect the minimum volume.
- b. CTSG will submit an RFC response with an improving price.

Expected Result:

- a. The RFC is accepted and each side will be acknowledged. If the member is listening to the Market Data, he will see the 702 msg type with UpdateType = 41. If he's not listening to the Market Data, CTSG analyst will notify his action.
- b. No data should be published during the improvement period and UpdateType =44 must be followed after this period (final execution).

■ 1.4 Submission of a Request for Cross Strategy Response

Instructions :

- a. CTSG will submit an RFC in a given commodity, equity or index option strategy. Member to respond using a correctly formatted RFC response within the Improvement period respecting the minimum volume threshold. CTSG will disclose the volume and price for this test.

Expected Result:

- a. If the price of the RFC Response is an improvement or equal to the Initiator's price, it will be matched after the improvement period (depending on volume and pick up percentage), if worse it will be rejected after the Improvement Period.

■ 1.5 Submission of a Request for Cross Volatility/Delta Neutral Strategy

Instructions :

- a. Submit a properly formatted RFC as Initiator in a commodity, equity or index option Volatility or Delta Neutral strategy of choice. Make sure to respect the minimum volume.
- b. CTSG will submit an RFC response with an improving price.

Expected Result:

- a. The RFC is accepted and each side will be acknowledged. If the member is listening to the Market Data, he will see the 702 msg type with UpdateType = 41. If he's not listening to the Market Data, CTSG analyst will notify his action.
- b. No data is published during the improvement period and UpdateType =44 will be disseminated after this period (final execution).

■ 1.6 Submission of a Request for Cross Volatility/Delta Neutral Strategy response

Instructions :

- a. CTSG will submit an RFC in a given commodity, equity or index option Volatility or Delta Neutral strategy. Member to respond using a correctly formatted RFC response within the Improvement period respecting the minimum volume threshold. CTSG will disclose the volume and price for this test.

Expected Result:

- a. If the price of the RFC Response is an improvement or equal to the Initiator's price, it will be matched after the improvement period (depending on volume and pick up percentage), if worse it will be rejected after the Improvement Period.

Appendix:

- For testing purposes some of the RFC parameters in the UAT environment may differ from the settings found in the Production environment.
- Trading applications that are not conformed for strategies including volatility and delta neutral strategies shall have to pass a separate conformance test first before the RFC conformance test.
- ITMs belonging to the same membership (MNE) as the one that initiated the RFC may respond, but this is not in scope of the conformance test.
- The price submitted by the RFC Initiator is checked against the Best Bid/Offer. Prices lower than the Best Bid or Higher than the Best offer will be rejected. An additional check is performed if the price is on or within the prevailing price limits. Both checks are not in scope of the conformance test.