

Document title

EURONEXT RISKGUARD – CONFORMANCE SCRIPT

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PREFACE

PURPOSE

This document details the test cases to be performed by the client in order to certify its trading software following the RISKGUARD implementation on the EURONEXT Cash and Derivatives markets.

TARGET AUDIENCE

The primary audience for this document is all ISV's or Member developers from customers that will make use of RISKGUARD.

ASSOCIATED DOCUMENTS

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

[CCG Euronext RiskGuard FIX 5.0 API, v4.0](#)

[CCG Error List, v1.9.0](#)

[CCG Binary Client Specification - v2.2.2](#)

TEST CASES

The customer is advised to perform the test cases described in this document with a CTSG Analyst. Please liaise with CTSG in order to book a Conformance session.

CTSG contact details:

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AVAILABILITY OF THE TEST PLATFORMS

EUA platforms availability

Cash EUA platform	Equities + Structured Products	7:15 a.m. to 7:30 / 8:00 p.m. CET
	SmartPool	9:00 a.m. to 5:30 p.m. CET
	BondMatch	7:30 a.m. to 6:00 p.m. CET
Derivatives EUA platforms (Current + Next)	Index Futures	6:00 a.m. to 9:00 p.m. CET
	All other Futures	6:00 a.m. to 4:30 / 4:40 p.m. CET
	All Options	6:00 a.m. to 4:30 p.m. CET
	Commodities Futures	6:00 a.m. to 5:30 p.m. CET

EUA platforms downtime

Cash EUA platform	Every Wednesday morning	Reopening time : 1:00 pm CET
Derivatives EUA platforms (Current + Next)	Every Wednesday morning	Reopening time : 1:00 pm CET

CUSTOMER TECHNICAL SUPPORT GROUP (CTSG)

The Customer Technical Support Group (part of the Euronext Market Services), is responsible for the day to-day oversight and control of Euronext Cash & Derivatives End User Acceptance (EUA) platforms, which are the environments available for customers (members, Independent Software Vendors (ISV), Data Vendors (DV)) in order to test their applications before they are approved to go live in Production.

This team, based in Amsterdam and Paris, has a deep understanding of all Euronext products, market behaviours, kinematics and interactions of members' applications on Euronext trading platforms. The team is also fully knowledgeable on functional specifications and is able to manage trading test scenarios in all the EUA environments on either order entry or market data. They should now be the first point of contact for any functional queries, help on specifications, performance analysis, technical or trading-related information on the EUA platforms, conformance tests scheduling and support. The team also ensures customers' readiness on any technical and functional impact change.

1.1 TEST CYCLE RISKGUARD_01: PRE TRADE RISK MANAGEMENT

Test cycle objectives:

FIX 5.0 API

- This cycle tests the customer's ability to enter a RISKGUARD FIX 5.0 MESSAGE with the following intentions:
 - Suspend (PA) at Member (MNE) level
 - Suspend (PA) at ITM(s) level
 - Unsuspend (PB) at Member (MNE) level
 - Unsuspend (PB) at ITM(s) level
 - Order Size Limit (PE) at Member (MNE) level
 - Order Size Limit (PE) at ITM(s) level
 - Block (PG) at Member (MNE) level
 - Block (PH) at ITM(s) level
 - Set MEP (PJ)

Euronext RiskGuard Web GUI

- This cycle tests the customer's ability to use the RISKGUARD Facility by means of a dedicated Web GUI with the following intentions:
 - Suspend on Member (MNE) level
 - Suspend on ITM(s) level
 - Unsuspend on Member (MNE) level
 - Unsuspend on ITM(s) level
 - Order Size Limit (OSL) at Member (MNE) level
 - Order Size Limit (OSL) at ITM(s) level
 - Block at Member (MNE) level
 - Block at ITM(s) level
 - Set MEP

This cycle tests the Customer's ability to check if the PTRM message is accepted as well as the correct interpretation of the acknowledgement received.

Test cycle preparation:

Authorizations for the RISKGUARD Risk Manager and its Risk Participants need to be well defined on our test platform. Close communications with MEMBERSHIP and CUSTOMER ACCESS SERVICES are imperative for this not to become an issue.

Test cycle description:FIX 5.0 API

UNIT NUMBER	ACTIONS REQUIRED	UNIT COMPLETION CRITERIA	MESSAGE(S) INVOLVED
1. Suspend (PA) at Member (MNE) level	Client sends a Suspend message to Suspend a MNE.	Client confirms receipt of the RISKGUARD Status Response per trading unit to summarize the successful suspensions.	- Suspend (PA) -Status Response (PD)
2. Suspend (PA) at ITM(s) level	Client sends a Suspend message to Suspend one or more ITMs	Client confirms receipt of the RISKGUARD Status Response per trading unit to summarize the successful suspensions.	- Suspend (PA) -Status Response (PD)
3. Unsuspend (PB) at Member (MNE) level	Client sends an Unsuspend message to Unsuspend a MNE.	Client confirms receipt of the RISKGUARD Status Response per trading unit.	-Unsuspend (PB) -Status Response (PD)
4. Unsuspend (PB) at ITM(s) level	Client sends an Unsuspend message to Unsuspend an ITM.	Client confirms receipt of the RISKGUARD Status Response per trading unit.	-Unsuspend (PB) -Status Response (PD)
5. OSL (PE) at Member (MNE) level	Client sends an OSL message to Limit a MNE in its total executable volume	Client confirms receipt of the RISKGUARD Status Response per trading unit.	-OSL (PE) -OSL Status Response (PF)
6. OSL (PE) at ITM(s) level	Client sends an OSL message to Limit an ITMs in its total executable volume	Client confirms receipt of the RISKGUARD Status Response per trading unit.	-OSL (PE) -OSL Status Response (PF)
7. Block (PG) at Member (MNE) level	Risk Manager sends a Block (PG) message to prevent a MNE to enter orders in an Instrument	Client confirms the receipt of the RISKGUARD response	-REG Block (PG) -ERG Block Response (PI)
8. Block (PG) at ITM(s) level	Risk Manager sends a Block (PG) message to prevent an ITM to enter orders in an Instrument	Client confirms the receipt of the RISKGUARD response	-REG Block (PG) -ERG Block Response (PI)
9. Unblock (PH) at Member (MNE) level	Risk Manager sends a Unblock (PH) message to enable a MNE to enter orders in an Instrument	Client confirms the receipt of the RISKGUARD response	-REG Block (PH) -ERG Block Response (PI)
10. Unblock (PH) at ITM(s) level	Risk Manager sends a Unblock (PH) message to enable an ITM to enter orders in an Instrument	Client confirms the receipt of the RISKGUARD response	-ERG Block (PH) -ERG Block Response (PI)
11. ERG Set MEP (PJ) at MNE level	Risk Manager sends a Set MEP (PJ) message with appropriate Thresholds and ActionCodes for a MNE	Client confirms the receipt of the RISKGUARD response	-ERG Set MEP (PJ) -ERG Set MEP Response (PK) -ERG MEP Breach Alert (PL)
11. ERG Set MEP (PJ)	Risk Manager sends a Set	Client confirms the receipt of	-ERG Set MEP

at ITM level	MEP (PJ) message with appropriate Thresholds and ActionCodes for an ITM	the RISKGUARD response	(PJ) -ERG Set MEP Response (PK) -ERG MEP Breach Alert (PL)
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Euronext RiskGuard Web GUI

UNIT NUMBER	ACTIONS REQUIRED	UNIT COMPLETION CRITERIA	MESSAGE(S) INVOLVED
1. Suspend on Member (MNE) level	Customer Suspends a MNE in the Web GUI.	Customer confirms the update in the GUI to the required state.	n/a
2. Suspend on ITM(s) level	Customer Suspends one or more ITMs in the Web GUI.	Customer confirms the update in the GUI to the required state.	n/a
3. Unsuspend on Member (MNE) level	Customer Unsuspends a MNE in the Web GUI.	Customer confirms the update in the GUI to the required state.	n/a
4. Unsuspend on ITM(s) level	Customer Unsuspends one or more ITMs in the Web GUI.	Customer confirms the update in the GUI to the required state.	n/a
5. OSL at Member (MNE) level	Client sets an OSL for a MNE	Customer confirms the update in the GUI to the required state.	n/a
6. OSL at ITM(s) level	Client sets an OSL for an ITM	Customer confirms the update in the GUI to the required state.	n/a
7. Block at Member (MNE) level	Risk Manager sends a Block message	Client confirms the receipt of the RISKGUARD response	n/a
8. Block at ITM(s) level	Risk Manager sends a Block message	Client confirms the receipt of the RISKGUARD response	n/a
9. Unblock at Member (MNE) level	Risk Manager sends a Unblock message	Client confirms the receipt of the RISKGUARD response	n/a
11. Set MEP at MNE level	<i>Risk Manager sets the MEP for a MNE with appropriate Thresholds and ActionCodes</i>	<i>Client confirms the receipt of the RISKGUARD response</i>	n/a
11. Set MEP at ITM level	<i>Risk Manager sets the MEP for an ITM with appropriate Thresholds and ActionCodes</i>	<i>Client confirms the receipt of the RISKGUARD response</i>	n/a

1.2 TEST CYCLE RISKGUARD_02: PRE TRADE RISK MANAGEMENT PHASE 1

Test cycle objectives:

This cycle tests the customer's ability to cope with consequences forced upon him by PTRM messages submitted by the Risk Manager.

- Suspend (PA) on Member (MNE) level
- Suspend (PA) on ITM(s) level
- Unsuspend (PB) on Member (MNE) level
- Unsuspend (PB) on ITM(s) level
- Order Size Limit (PE) at Member (MNE) level
- Order Size Limit (PE) at ITM(s) level
- Block (PG) at Member (MNE) level
- Block (PH) at ITM(s) level
- Set MEP (PJ) ant MNE level
- Set MEP (PJ) at ITM level

Test cycle preparation:

Authorizations for the RISKGUARD Risk Manager and its Risk Participants need to be well defined on our test platform. Close communications with MEMBERSHIP and CUSTOMER ACCESS SERVICES are imperative for this not to become an issue.

Test cycle description:

FIX 5.0 API

UNIT NUMBER	ACTIONS REQUIRED	UNIT CRITERIA	COMPLETION	MESSAGE(S) INVOLVED
1. Suspend (PA) on Member (MNE) level	Risk Manager sends a Suspend message to Suspend a MNE or a CTSG Analyst sends a Suspend message to Suspend a MNE.	Client confirms the Suspension of its MNE on the corresponding subscription and the cancellation of his active orders. Client submits an order in RISKGUARD instrument and confirms rejection.		-ERG Suspend (PA) message -ERG Status Response (PD)
2. Suspend (PA) on ITM(s) level	Risk Manager sends a Suspend message to Suspend one or more ITMs or a CTSG Analyst sends a Suspend message to Suspend one or more ITM(s).	Client confirms the Suspension of its ITM(s) on the corresponding subscription and the cancellation of his active orders. Client submits an order in RISKGUARD instrument and confirms		-ERG Suspend (PA) message -ERG Status Response (PD)

		rejection.	
3. Unsuspend (PB) on Member (MNE) level	Risk Manager sends an Unsuspend message to Unsuspend a MNE or a CTSG Analyst sends an Unsuspend message to Unsuspend a MNE.	Client confirms the Unsuspension of its MNE on the corresponding subscription and confirms being able to submit orders again.	-ERG Unsuspend (PB) message -ERG Status Response (PD)
4. Unsuspend (PB) on ITM(s) level	Risk Manager sends an Unsuspend message to Unsuspend one or more ITM(s) or a CTSG Analyst sends a Unsuspend message to Unsuspend one or more ITM(s)	Client confirms the Unsuspension of its ITM's on the corresponding subscription and confirms being able to submit orders again.	-ERG Unsuspend (PB) message -ERG Status Response (PD)
5. OSL (PE) at Member (MNE) level	Risk Manager an OSL message to Limit a MNE in its total executable volume	Client confirms the volume threshold	-OSL (PE) -ERG OSL Response (PF)
6. OSL (PE) at ITM(s) level	Risk Manager sends an OSL message to Limit an ITMs in its total executable volume	Client confirms the volume threshold	-OSL (PE) -ERG OSL Response (PF)
7. Block (PG) at Member (MNE) level	Risk Manager sends a Block (PG) message to prevent a MNE to enter orders in an Instrument	Client confirms the Block	-REG Block (PG) -ERG Block Response (PI)
8. Block (PG) at ITM(s) level	Risk Manager sends a Block (PG) message to prevent an ITM to enter orders in an Instrument	Client confirms the Block	-REG Block (PG) -ERG Block Response (PI)
9. Unblock (PH) at Member (MNE) level	Risk Manager sends a Block (PH) message to enable a MNE to enter orders in an Instrument	Client confirms the Unblock	-REG Block (PH) -ERG Block Response (PI)
10. Block (PH) at ITM(s) level	Risk Manager sends a Block (PH) message to enable an ITM to enter orders in an Instrument	Client confirms the Unblock	-REG Block (PH) -ERG Block Response (PI)
10. Set MEP (PJ) at MNE level	Risk Manager sends a Set MEP (PJ) with appropriate Thresholds and ActionCodes	Client confirms the Set MEP setting by breaching the threshold	-ERG MEP Breach Alert (PL)
10. Set MEP (PJ) at ITM level	Risk Manager sends a Set MEP (PJ) with appropriate Thresholds and ActionCodes	Client confirms the Set MEP setting by breaching the threshold	-ERG MEP Breach Alert (PL)

Euronext RiskGuard Web GUI

UNIT NUMBER	ACTIONS REQUIRED	UNIT COMPLETION CRITERIA	MESSAGE(S) INVOLVED
1. Suspend on Member (MNE)	Risk Manager suspends a MNE or a CTSG Analyst	Client confirms the Suspension of its MNE on	-ERG Suspend (PA) message

level	suspends a MNE using the Web GUI.	the corresponding subscription and the cancellation of his active orders. Client submits an order in RISKGUARD instrument and confirms rejection.	-ERG Status Response (PD)
2. Suspend on ITM(s) level	Risk Manager suspends one or more ITMs or a CTSG Analyst suspends one or more ITMs using the Web GUI.	Client confirms the Suspension of its ITM(s) on the corresponding subscription and the cancellation of his active orders. Client submits an order in RISKGUARD instrument and confirms rejection.	-ERG Suspend (PA) message -ERG Status Response (PD)
3. Unsuspend on Member (MNE) level	Risk Manager unsuspends a MNE or a CTSG Analyst unsuspends a MNE using the Web GUI.	Client confirms the Unsuspension of its MNE on the corresponding subscription and confirms being able to submit orders again.	-ERG Unsuspend (PB) message -ERG Status Response (PD)
4. Unsuspend (PB) on ITM(s) level	Risk Manager unsuspends one or more ITMs or a CTSG Analyst unsuspends one or more ITMs using the Web GUI.	Client confirms the Unsuspension of its ITM's on the corresponding subscription and confirms being able to submit orders again.	-ERG Unsuspend (PB) message -ERG Status Response (PD)
5. OSL at Member (MNE) level	Risk Manager sets an OSL threshold at MNE level	Client confirms the volume threshold	-OSL (PE) -ERG OSL Response (PF)
6. OSL at ITM(s) level	Risk Manager sets an OSL threshold at ITM level	Client confirms the volume threshold	-OSL (PE) -ERG OSL Response (PF)
7. Block at Member (MNE) level	Risk Manager sends a Block message	Client confirms the receipt of the RISKGUARD response	-REG Block (PG) -ERG Block Response (PI)
8. Block at ITM(s) level	Risk Manager sends a Block message	Client confirms the receipt of the RISKGUARD response	-REG Block (PG) -ERG Block Response (PI)
9. Unblock at Member (MNE) level	Risk Manager sends a Unblock message	Client confirms the the receipt of the RISKGUARD response	-REG Block (PH) -ERG Block Response (PI)
11. Set MEP at MNE level	<i>Risk Manager sets the MEP for a MNE with appropriate Thresholds and ActionCodes</i>	<i>Client confirms the receipt of the RISKGUARD response</i>	-ERG MEP Breach Alert (PL)
11. Set MEP at ITM level	<i>Risk Manager sets the MEP for an ITM with appropriate Thresholds and ActionCodes</i>	<i>Client confirms the receipt of the RISKGUARD response</i>	-ERG MEP Breach Alert (PL)