



Risk Control Gateway

V1.4

Risk Filters Validation & Functionality

RCG	Version: 1.4
Risk Filter validation & Functionality	Date: November, 2016
	Author: HJGE

Revisions

Date	Version	Description	Author
Sept 29th, 2014	1.0	Initial version.	Héctor Javier García Encinas
July, 2015	1.1	Functionality for RCG Phase 3 risk filters were added (3.8.3, 3.9.3, 3.10.3), LALA Futures/Options added to the "Class" section, Position Limit risk formula updated for SWAPs per symbol.	Héctor Javier García Encinas
March, 2016	1.2	Amends in section 2.1 Class <ul style="list-style-type: none"> • Deleted the BRTRAC, ILCTRAC, LALA, MEXTRAC and 3 years interest rate swap futures, BRTRAC and MEXTRAC options. • Added NV42, DC18 bond future, ALFA, ICA, MEXICHEM, PEÑOLES, PINFRA Options, it was added the definition of "xx" in the interest rate SWAP futures. 	Héctor Javier García Encinas
Sept 2 nd 2016	1.3	Section 5 (Block Trades) updated. Block Trades will be evaluated by the risk filters: Blocked Orders, Daily Quantity, Daily Quantity per class and side, Daily Credit Limit and Position Limit. Amends in section 2.1 Class <ul style="list-style-type: none"> • Added the MEXTRAC Futures, M210610 Bond Futures and Cemex Adjusted Options. 	Héctor Javier García Encinas
November 7 th , 2016	1.4	Amends in section 2.1 Class <ul style="list-style-type: none"> • Added MR26 Bond Futures. 	Héctor Javier García Encinas

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Risk Control Gateway

Risk Filters Validation & Functionalities

1. Introduction

MexDer, Mercado Mexicano de Derivados S.A. de C.V. is the Mexican Derivatives Exchange. It began operations on December 15th, 1998. MexDer offers SWAPS, Futures and Option Contracts on financial underlying assets (US Dollar, Euros, Bonds, individual stocks, index, interest rates and Swaps, commodities).

Since 2006, MexDer offers to all its members an interface in FIX protocol that enables them to connect their platforms directly to the derivatives market.

In May 2012, MexDer introduced a Risk Management Gateway based on FIX Protocol 4.4 for order routing that allowed to Clearing Members to establish risk parameters for orders in a GUI.

In June 2014, MexDer deployed a new Risk Control Gateway preserving the same risk filters than the Risk Management Gateway but adding new risk filters and functionalities.

1.1 Purpose

This document describes the new risk filters and functionalities supported by the MexDer's Risk Control Gateway.

1.2 References

Reference documents:

Layout MexFix (EIS) Version 2.3

- http://www.mexder.com.mx/wb3/wb/MEX/MEX_Repositorio/_vtp/MEX/1f3a_mexfix/_rid/21/_mto/3/Layout_MexFix_EIS_English_version_2_3.pdf

Internal Regulations –MexDer, Mexican Derivatives Exchange-

- http://www.mexder.com.mx/wb3/wb/MEX/MEX_Repositorio/_vtp/MEX/1ea7_reglamento_interior_mexder/_rid/21/_mto/3/MexDer_Internal_Regulations_Jan_21_2013.pdf?

Glossary

- http://www.mexder.com.mx/wb3/wb/MEX/glosario/_rid/5?lng_act=lng_step2&language=en

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2. Definitions

2.1 Class

All Futures Contracts which are based on or refer to the same Underlying Asset; or
All Call Options based on or referenced to the same Underlying Asset; or
All Put Options based on or referenced to the same Underlying Asset

The following classes are defined in the Risk Control Gateway for the MexDer's products:

Futures

Product	Underlying
América Móvil Futures	AXL
91-day CETES Futures	CE91
Cemex Futures	CXC
U.S. Dollar Futures	DEUA
M181213 Bond Futures	DC18
M241205 Bond Futures	DC24
Euro Futures	EURO
FEMSA Futures	FEM
GCARSO Futures	GCA
GMEXICO Futures	GMEX
IPC Futures	IPC
M210610 Bond Futures	JN21
10-year bond (M10) Futures	M10
20-year bond(M20) Futures	M20
3-year bond (M3) Futures	M3
30-year bond (M30) Futures	M30
Corn Futures	MAIZ
MEXTRAC Futures	MEXT
Mini-IPC Futures	MIP
M260305 Bond Futures	MR26
M310529 bond Futures	MY31
M421113 Bond Futures	NV42
2 years interest rate swap futures**	02xx
10 years interest rate swap futures**	10xx
SWAP	X1
28-day TIIE Futures	TE28
WALMEX Futures	WAL
Strategies	X-Underlying

** For Interest Rate SWAP "xx" is the maturity day of the future.

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Options

Product	Underlying
ALFA Options	AL
AMX L Options	AX
CEMEX Adjusted Options	CA
CEMEX CPO Options	CX
MXP-US Dollar Options	DA
FEMSA UBD Options	FE
GMEXICO B Options	GM
ICA Options	IC
IPC Options	IP
IVV Options	IV
LALA Options	LL
MEXICHEM Options	MC
IPC Index Tracking Stock (Naftac 02) Options	NA
PEÑOLES Options	PE
PINFRA Options	PI
TELEVISA CPO Options	TV
WALMEX V Options	WA

2.2 Trade Cancellation (Bust) (35=8, 150=H)

The Exchange will cancel a trade in cases where the making of a mistake by the Clearing Member, Broker or Participant of a Recognized Foreign Market at the conclusion of a transaction is reflected in the price, quantity or object of the transaction. When the cancellation of a trade is because of an error committed by the staff in the Exchange's trading area, the staff must make the correction.

When a trade bust is performed by the exchange, the RCG will rest the position in the member/account involved on the trade.

2.3 Trade Modification (Amend) (35=8, 150=G)

The Exchange will modify a transaction and enter the trade with the modified data in the Electronic Trading System. Transactions on the Exchange will be modified when the trading personnel of the Exchange has made an error in entering a Bid or Offer requested by a Clearing Member or Broker.

- Only the account number (tag 1) and the text field (tag 58) can be modified on a trade.
- A Trade Correction that changes the Account will result in the corrected value / shares being reallocated to the new Account and de-allocated from the old Account.
- A single Trade Correction will only affect the referenced Execution Report. It will not affect other fills / outstanding orders in the same order chain. In other words, MexDer will have to correct each distinct Execution Report in the order chain to re-allocate all the executed value/shares in an order.

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3. Risk Filters supported

3.1 Quantity

This filter can be defined for Futures, Options or SWAPS

This filter rejects orders which quantity (tag 38) is greater than the parameter established by clearing member.

When a "Quantity" Filter is exceeded, the Risk Control Gateway rejects the order with the following FIX message:

```
Msg Type: 35=8 (Execution Report)
ExecType: 150=8 (Rejected)
Order Status: 39=8 (Rejected)
OrdRejReason: 103=3 (Order exceeds limit (price or volume filters))
Text: 58=RMG Reject: Failed Risk Filter: Qty
```

Example:

```
Risk Filter: Quantity
Asset Class Type: Future
Maximum Value: 3000
PartyID: CICB
Account: 00101
```

New Buy Order, 3001 lots

```
8=FIX.4.4|9=182|35=D|49=CICB|56=MEXFIX|34=4|50=801|57=DV|52=20150713-
12:48:20|11=C000000004|453=1|448=CICB|447=D|452=13|1=00101|21=1|55=IPC
SP15|54=1|60=20150713-07:48:20|38=3001|40=2|59=0|44=44750|10=049|
```

```
8=FIX.4.4|9=302|35=8|49=MEXFIX|56=CICB|34=4|50=DV|57=801|52=20150713-
12:48:21.000|6=0|103=3|59=0|60=20150713-
12:48:21.118|39=8|1=00101|54=1|151=0|150=8|37=NONE|40=2|58=RMG Reject: Failed Risk Filter:
Qty|55=IPC
SP15|11=150711CICB801CICB801C000000004|14=0|17=RMG00000000001|38=3001|44=44750|453=1|
448=CICB|447=D|452=13|10=188|
```

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3.2 Quantity per Class and Side

This filter can be defined for Futures, Options or SWAPS

This filter rejects orders that fit Class and Side parameters and exceeds the quantity limit established.

When a "Quantity per Class and Side" Filter is exceeded, the Risk Control Gateway rejects the order with the following FIX message:

Msg Type: 35=8 (Execution Report)
 ExecType: 150=8 (Rejected)
 Order Status: 39=8 (Rejected)
 OrdRejReason: 103=3 (Order exceeds limit (price or volume filters))
 Text: 58=RMG Reject: Failed Risk Filter: QtySymSide

Example:

Risk Filter: Quantity per Class and Side
 Asset Class Type: Future
 Class: TE28
 Maximum Quantity for Buy: 1000
 PartyID: CICB
 Account: 00101

New Buy Order, 1001 lots

```
8=FIX.4.4|9=180|35=D|49=CICB|56=MEXFIX|34=8|50=801|57=DV|52=20150713-
12:51:36|11=C000000008|453=1|448=CICB|447=D|452=13|1=00101|21=1|55=TE28DC16|54=1|60=2015
0713-07:51:36|38=1001|40=2|59=0|44=4.5|10=182|
```

```
8=FIX.4.4|9=307|35=8|49=MEXFIX|56=CICB|34=8|50=DV|57=801|52=20150713-
12:51:36.000|6=0|103=3|59=0|60=20150713-
12:51:36.273|39=8|1=00101|54=1|151=0|150=8|37=NONE|40=2|58=RMG Reject: Failed Risk Filter:
QtySymSide|55=TE28DC16|11=150711CICB801CICB801C000000008|14=0|17=RMG00000000002|38=
1001|44=4.5|453=1|448=CICB|447=D|452=13|10=007|
```


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3.3 Filter for Class, Side, order type, time in force and gap of time (Blocked Orders)

This filter can be defined for Futures, Options or SWAPS

This filter rejects orders that fit the established combination of asset class type (future, option or SWAP) class, gap of time (between a start and end Mexico's time), side (none, buy or sell), order type (none, limit or market), time in force (none, day, immediate or cancel, at the close).

When a filter for "Class, Side, order type, time in force and gap of time" is exceeded, the Risk Control Gateway rejects the order with the following FIX message:

```
Msg Type: 35=8 (Execution Report)
ExecType: 150=8 (Rejected)
Order Status: 39=8 (Rejected)
OrdRejReason: 103=3 (Order exceeds limit (price or volume filters))
Text: 58=Blocked Order: Side,TimeInForce,OrdType
```

Example:

```
Risk Filter: Blocked Orders
Asset Class Type: SWAP
Class: 27X1
Gap of Time: Start 10:00 End 10:35
Blocked Side: Sell
Blocked Order Type: Limit
Blocked Time in Force: Day
PartyID: CICB
Account: 00101
```

New Sell Order

```
8=FIX.4.4|9=174|35=D|49=CICB|56=MEXFIX|34=13|50=801|57=DV|52=20150713-
12:55:24|11=V000000013|453=1|448=CICB|447=D|452=13|1=00101|21=1|55=27X1|54=2|60=20150713-
07:55:24|38=1|40=2|59=0|44=4.5|10=103|
```

```
8=FIX.4.4|9=315|35=8|49=MEXFIX|56=CICB|34=12|50=DV|57=801|52=20150713-
12:55:24.000|6=0|103=3|59=0|60=20150713-
12:55:24.941|39=8|1=00101|54=2|151=0|150=8|37=NONE|40=2|58=RMG Reject: Failed Risk Filter:
Side,TimeInForce,OrdType|55=27X1|11=150711CICB801CICB801V000000013|14=0|17=RMG00000000
003|38=1|44=4.5|453=1|448=CICB|447=D|452=13|10=147|
```

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3.4 Daily Quantity

This filter can be defined for Futures or Options

The filter rejects orders that exceed the limit for daily quantity.

The formula to accumulate quantity in futures and options is:

$$\left(\sum Long Trades - \sum Cancelled Long Trades \right) + \left(\sum Short Trades - \sum Cancelled Short Trades \right) + \left(\sum Long Orders - \sum Cancelled Long Orders \right) + \left(\sum Short orders - \sum Cancelled Short orders \right)$$

Notes:

In the understanding that the cancelled orders include the modified (35=8, 150=5), executed (35=8, 150=F) and cancelled (35=8, 150=4) orders, cancelled trades include the modified (35=8, 150=G) and cancelled (35=8, 150=H) trades.

When a "Daily Quantity" Filter is exceeded, the Risk Control Gateway rejects the order with the following FIX message:

Msg Type: 35=8 (Execution Report)
ExecType: 150=8 (Rejected)
Order Status: 39=8 (Rejected)
OrdRejReason: 103=3 (Order exceeds limit (price or volume filters))
Text: 58=RMG Reject: Failed Risk Filter: DailyQty

Example:

Risk Filter: Daily Quantity
Asset Class Type: Future
Maximum Quantity: 10,000
PartyID: CICB
Account: 00101

New Sell Order, 10001 lots

```
8=FIX.4.4|9=184|35=D|49=CICB|56=MEXFIX|34=19|50=801|57=DV|52=20150713-12:58:47|11=C000000019|453=1|448=CICB|447=D|452=13|1=00101|21=1|55=IPC SP15|54=1|60=20150713-07:58:47|38=10001|40=2|59=0|44=44750|10=177|
```

```
8=FIX.4.4|9=309|35=8|49=MEXFIX|56=CICB|34=16|50=DV|57=801|52=20150713-12:58:47.000|6=0|103=3|59=0|60=20150713-12:58:47.415|39=8|1=00101|54=1|151=0|150=8|37=NONE|40=2|58=RMG Reject: Failed Risk Filter: DailyQty|55=IPC SP15|11=150711CICB801CICB801C000000019|14=0|17=RMG00000000005|38=10001|44=44750|453=1|448=CICB|447=D|452=13|10=051|
```

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3.5 Daily SWAPS Coupon Quantity

This filter can be defined for SWAPS.

The filter rejects orders that exceed the limit for daily quantity.

To accumulate quantity in SWAPS the formula is:

$$= \sum_i \left[\left(\sum Long Trades i - \sum Cancelled Long Trades i \right) + \left(\sum Short Trades i - \sum Cancelled Short Trades i \right) + \left(\sum Long Orders i - \sum Cancelled Long Orders i \right) + \left(\sum Short orders i - \sum Cancelled Short orders i \right) \right] * Coupons i$$

Where:

$$i = SWAPS [2,390]$$

Notes:

In the understanding that the cancelled orders include the modified (35=8, 150=5), executed (35=8, 150=F) and cancelled (35=8, 150=4) orders, cancelled trades include the modified (35=8, 150=G) and cancelled (35=8, 150=H) trades.

Unwinds (tag 5681=BU in the execution report message, 35=8, 150=F) will not be considered in the trade sum.

When a "Daily SWAPS Coupon Quantity" Filter is exceeded, the Risk Control Gateway rejects the order with the following FIX message:

Msg Type: 35=8 (Execution Report)
 ExecType: 150=8 (Rejected)
 Order Status: 39=8 (Rejected)
 OrdRejReason: 103=3 (Order exceeds limit (price or volume filters))
 Text: 58=RMG Reject: Failed Risk Filter: DailyQty

Example:

Risk Filter: Daily Quantity (SWAPS)
 Asset Class Type: SWAP
 Maximum Quantity: 600
 PartyID: CICB
 Account: 00101

SWAPS:
 27X1 (27 coupons)
 2X1 (2 Coupons)

New Buy Order, Symbol: 27X1, Order Quantity: 21
 Consumption: 27*21=567
 Order Status: New (Accepted)

8=FIX.4.4|9=175|35=D|49=CICB|56=MEXFIX|34=51|50=801|57=DV|52=20150713-13:27:01|11=C000000051|453=1|448=CICB|447=D|452=13|1=00101|21=1|55=27X1|54=1|60=20150713-08:27:01|38=21|40=2|59=0|44=4.5|10=128|

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8=FIX.4.4|9=228|35=8|49=MEXFIX|56=CICB|34=46|50=DV|57=801|52=20150713-13:27:02.000|151=21|150=A|6=0|59=0|37=1|40=2|18=H|55=27X1|11=150713CICB801CICB801C00000051|14=0|39=A|17=00000010|1=00101|198=1|54=1|38=21|44=4.5|453=1|448=CICB|447=D|452=13|10=142|

8=FIX.4.4|9=253|35=8|49=MEXFIX|56=CICB|34=47|50=DV|57=801|52=20150713-13:27:02.000|151=21|150=0|6=0|59=0|37=1|40=2|18=H|55=27X1|11=150713CICB801CICB801C00000051|14=0|39=0|17=00000011|1=00101|198=1|54=1|60=20150713-13:27:02.810|38=21|44=4.5|453=1|448=CICB|447=D|452=13|10=058|

New Sell Order, Symbol: 2X1, Order Quantity: 16
Consumption: 2*16=32
Accumulated Consumption: 567+32=599
Order Status: New (Accepted)

8=FIX.4.4|9=174|35=D|49=CICB|56=MEXFIX|34=53|50=801|57=DV|52=20150713-13:28:17|11=V000000053|453=1|448=CICB|447=D|452=13|1=00101|21=1|55=2X1|54=2|60=20150713-08:28:17|38=16|40=2|59=0|44=4.5|10=116|

8=FIX.4.4|9=227|35=8|49=MEXFIX|56=CICB|34=49|50=DV|57=801|52=20150713-13:28:17.000|151=16|150=A|6=0|59=0|37=2|40=2|18=H|55=2X1|11=150713CICB801CICB801V000000053|14=0|39=A|17=00000020|1=00101|198=2|54=2|38=16|44=4.5|453=1|448=CICB|447=D|452=13|10=129|

8=FIX.4.4|9=252|35=8|49=MEXFIX|56=CICB|34=50|50=DV|57=801|52=20150713-13:28:17.000|151=16|150=0|6=0|59=0|37=2|40=2|18=H|55=2X1|11=150713CICB801CICB801V000000053|14=0|39=0|17=00000021|1=00101|198=2|54=2|60=20150713-13:28:17.670|38=16|44=4.5|453=1|448=CICB|447=D|452=13|10=047|

New Buy Order, Symbol: 2X1, Order Quantity: 1
Consumption: 2*1=2
Accumulated Consumption: 599+2=601
Order Status: Rejected

8=FIX.4.4|9=173|35=D|49=CICB|56=MEXFIX|34=55|50=801|57=DV|52=20150713-13:29:34|11=C000000055|453=1|448=CICB|447=D|452=13|1=00101|21=1|55=2X1|54=1|60=20150713-08:29:34|38=1|40=2|59=0|44=4.5|10=045|

8=FIX.4.4|9=298|35=8|49=MEXFIX|56=CICB|34=52|50=DV|57=801|52=20150713-13:29:34.000|6=0|103=3|59=0|60=20150713-13:29:34.531|39=8|1=00101|54=1|151=0|150=8|37=NONE|40=2|58=RMG Reject: Failed Risk Filter: DailyQty|55=2X1|11=150711CICB801CICB801C000000055|14=0|17=RMG00000000008|38=1|44=4.5|453=1|448=CICB|447=D|452=13|10=186|

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3.6 Daily Quantity per class and side

This filter can be defined for Futures or Options.

This filter rejects orders that exceed the limit for daily quantity per class and side.

The formula to accumulate quantity in futures and options is:

For Sells

$$\left(\sum \text{Short Trades } i - \sum \text{Cancelled Short Trades } i \right) + \left(\sum \text{Short Orders } i - \sum \text{Cancelled Short Orders } i \right)$$

For Buys

$$\left(\sum \text{Long Trades } i - \sum \text{Cancelled Long Trades } i \right) + \left(\sum \text{Long Orders } i - \sum \text{Cancelled Long Orders } i \right)$$

Where:

$$i = \text{Class/Symbol}$$

Notes:

In the understanding that the cancelled orders include the modified (35=8, 150=5), executed (35=8, 150=F) and cancelled (35=8, 150=4) orders, cancelled trades include the modified (35=8, 150=G) and cancelled (35=8, 150=H) trades.

When a “Daily Quantity per class and side” Filter is exceeded, the Risk Control Gateway rejects the order with the following FIX message:

Msg Type: 35=8 (Execution Report)
 ExecType: 150=8 (Rejected)
 Order Status: 39=8 (Rejected)
 OrdRejReason: 103=3 (Order exceeds limit (price or volume filters))
 Text: 58=RMG Reject: Failed Risk Filter: DailyQtySymSide

Example:

Risk Filter: Daily Quantity (Class/Side)
 Asset Class Type: Option
 Class: AX
 Quantity Bought Reject: 100
 Quantity Sold Reject: No Limit
 PartyID: CICB
 Account: 00101

New Buy Order, Symbol: AX 1250X, Order Quantity: 50
 Consumption: 50
 Accumulated Consumption: 0
 Order Status: New (Accepted)

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8=FIX.4.4|9=180|35=D|49=CICB|56=MEXFIX|34=63|50=801|57=DV|52=20150713-13:36:38|11=C000000063|453=1|448=CICB|447=D|452=13|1=00101|21=1|55=AX 1250X|54=1|60=20150713-08:36:38|38=50|40=2|59=0|44=0.25|10=173|

8=FIX.4.4|9=235|35=8|49=MEXFIX|56=CICB|34=60|50=DV|57=801|52=20150713-13:36:38.000|151=50|150=A|6=0|59=0|37=4|40=2|18=H|55=AX 1250X|11=150713CICB801CICB801C000000063|14=0|39=A|17=MX00000000|1=00101|198=4|54=1|38=50|44=0.25|453=1|448=CICB|447=D|452=13|10=087|

8=FIX.4.4|9=260|35=8|49=MEXFIX|56=CICB|34=61|50=DV|57=801|52=20150713-13:36:38.000|151=50|150=0|6=0|59=0|37=4|40=2|18=H|55=AX 1250X|11=150713CICB801CICB801C000000063|14=0|39=0|17=MX00000001|1=00101|198=4|54=1|60=20150713-13:36:38.422|38=50|44=0.25|453=1|448=CICB|447=D|452=13|10=011|

New Buy Order, Symbol: AX 1250X, Order Quantity: 51
Consumption: 51
Accumulated Consumption: 101
Order Status: Rejected

8=FIX.4.4|9=180|35=D|49=CICB|56=MEXFIX|34=69|50=801|57=DV|52=20150713-13:41:17|11=C000000069|453=1|448=CICB|447=D|452=13|1=00101|21=1|55=AX 1250X|54=1|60=20150713-08:41:17|38=51|40=2|59=0|44=0.25|10=172|

8=FIX.4.4|9=312|35=8|49=MEXFIX|56=CICB|34=66|50=DV|57=801|52=20150713-13:41:17.000|6=0|103=3|59=0|60=20150713-13:41:17.610|39=8|1=00101|54=1|151=0|150=8|37=NONE|40=2|58=RMG Reject: Failed Risk Filter: DailyQtySymSide|55=AX 1250X|11=150711CICB801CICB801C000000069|14=0|17=RMG00000000009|38=51|44=0.25|453=1|448=CICB|447=D|452=13|10=235|

RCG	Version: 1.4
Risk Filter validation & Functionality	Date: November, 2016
	Author: HJGE

3.7 Daily SWAPS Coupon Quantity per Class and Side

This filter can be defined for SWAPS.

This filter rejects orders that exceed the limit for daily quantity per class and side.

To accumulate quantity in SWAPS the formula is:

For Sells

$$\sum_i \left[\left(\sum \text{Short Trades } i - \sum \text{Cancelled Short Trades } i \right) + \left(\sum \text{Short Orders } i - \sum \text{Cancelled Short Orders } i \right) * \text{Coupons } i \right]$$

Where:

$$i = \text{SWAPS } [2,390]$$

For Buys

$$\sum_i \left[\left(\sum \text{Long Trades } i - \sum \text{Cancelled Long Trades } i \right) + \left(\sum \text{Long Orders } i - \sum \text{Cancelled Long Orders } i \right) * \text{Coupons } i \right]$$

Where:

$$i = \text{SWAPS } [2,390]$$

Notes:

In the understanding that the cancelled orders include the modified (35=8, 150=5), executed (35=8, 150=F) and cancelled (35=8, 150=4) orders, cancelled trades include the modified (35=8, 150=G) and cancelled (35=8, 150=H) trades.

When a "Daily SWAPS Coupon Quantity per class and side" Filter is exceeded, the Risk Control Gateway rejects the order with the following FIX message:

Msg Type: 35=8 (Execution Report)
 ExecType: 150=8 (Rejected)
 Order Status: 39=8 (Rejected)
 OrdRejReason: 103=3 (Order exceeds limit (price or volume filters))
 Text: 58=RMG Reject: Failed Risk Filter: DailyQtySymSide

Example:

Risk Filter: Daily SWAPS Coupon Quantity per class and side
 Asset Class Type: SWAP
 Class: 130X1
 Quantity Bought Reject: No Limit
 Quantity Sold Reject: 1000
 PartyID: CICB
 Account: 00101

SWAPS:
 130X1 (130 coupons)

RCG	Version: 1.4
Risk Filter validation & Functionality	Date: November, 2016
	Author: HJGE

New Sell Order, Symbol: 130X1, Order Quantity: 8
Consumption: 130*8=1040
Accumulated Consumption: 0
Order Status: Rejected

8=FIX.4.4|9=175|35=D|49=CICB|56=MEXFIX|34=88|50=801|57=DV|52=20150713-
13:57:04|11=V000000088|453=1|448=CICB|447=D|452=13|1=00101|21=1|55=130X1|54=2|60=2015071
3-08:57:04|38=8|40=2|59=0|44=4.5|10=180|

8=FIX.4.4|9=307|35=8|49=MEXFIX|56=CICB|34=83|50=DV|57=801|52=20150713-
13:57:05.000|6=0|103=3|59=0|60=20150713-
13:57:05.116|39=8|1=00101|54=2|151=0|150=8|37=NONE|40=2|58=RMG Reject: Failed Risk Filter:
DailyQtySymSide|55=130X1|11=150711CICB801CICB801V000000088|14=0|17=RMG00000000012|38=
8|44=4.5|453=1|448=CICB|447=D|452=13|10=238|

New Sell Order, Symbol: 130X1, Order Quantity: 7
Consumption: 130*7=910
Accumulated Consumption: 910
Order Status: New (Accepted)

8=FIX.4.4|9=175|35=D|49=CICB|56=MEXFIX|34=90|50=801|57=DV|52=20150713-
13:58:12|11=V000000090|453=1|448=CICB|447=D|452=13|1=00101|21=1|55=130X1|54=2|60=2015071
3-08:58:12|38=7|40=2|59=0|44=4.5|10=165|

8=FIX.4.4|9=227|35=8|49=MEXFIX|56=CICB|34=85|50=DV|57=801|52=20150713-
13:58:13.000|151=7|150=A|6=0|59=0|37=7|40=2|18=H|55=130X1|11=150713CICB801CICB801V000000
090|14=0|39=A|17=00000100|1=00101|198=7|54=2|38=7|44=4.5|453=1|448=CICB|447=D|452=13|10=14
0|

8=FIX.4.4|9=252|35=8|49=MEXFIX|56=CICB|34=86|50=DV|57=801|52=20150713-
13:58:13.000|151=7|150=0|6=0|59=0|37=7|40=2|18=H|55=130X1|11=150713CICB801CICB801V000000
090|14=0|39=0|17=00000101|1=00101|198=7|54=2|60=20150713-
13:58:13.100|38=7|44=4.5|453=1|448=CICB|447=D|452=13|10=054|

RCG	Version: 1.4
Risk Filter validation & Functionality	Date: November, 2016
	Author: HJGE

3.8 Credit Limit Controls for Long Margin

An order is rejected when an incoming order exceeds the maximum initial margin amount that an account/member can have per class. The Risk Control Gateway will accumulate the long total margin per day.

3.8.1 *Futures and Options Long*

The formula to accumulate quantity in futures and options is:

$$\text{Long margin} = [(Long\ Orders + Long\ Fills - Cancelled\ Long\ Orders - Cancelled\ Long\ Fills) - (Short\ Fills - Cancelled\ Short\ Fills)] * IM$$

Notes:

- In the understanding that a fill is equal to trade (35=8, 150=F)
- In the understanding that the cancelled orders include the modified (35=8, 150=5), executed (35=8, 150=F) and cancelled (35=8, 150=4) orders, cancelled trades include the modified (35=8, 150=G) and cancelled (35=8, 150=H) trades.
- It is important to consider the nature of buying or selling orders, for that reason, in the case of long put options, this will be treated as short positions, also short put options will be treated as large positions.

When a "Credit Limit Controls for Long Margin" Filter is exceeded, the Risk Control Gateway rejects the order with the following FIX message:

Msg Type: 35=8 (Execution Report)

ExecType: 150=8 (Rejected)

Order Status: 39=8 (Rejected)

OrdRejReason: 103=3 (Order exceeds limit (price or volume filters))

Text: 58=Daily Credit Limit Sym/Side: Additional Long "Order Quantity" "Symbol" ("Future/Option" "Class") exceeds Net Long reject limit of "Credit Limit Long"

Example:

Risk Filter: Credit Limit Controls for Long Margin

Asset Class Type: Future

Class: IPC

Credit Limit Long: 100,000

PartyID: CICB

Account: 00101

IM: 27,000

New Buy Order, Symbol: IPC DC15, Order Quantity: 2

Consumption: 27000*2=54000

Accumulated Consumption: 54000

Order Status: New (Accepted)

8=FIX.4.4|9=181|35=D|49=CICB|56=MEXFIX|34=112|50=801|57=DV|52=20150713-14:15:16|11=C000000112|453=1|448=CICB|447=D|452=13|1=00101|21=1|55=IPC DC15|54=1|60=20150713-09:15:16|38=2|40=2|59=0|44=44750|10=228|

RCG	Version: 1.4
Risk Filter validation & Functionality	Date: November, 2016
	Author: HJGE

8=FIX.4.4|9=237|35=8|49=MEXFIX|56=CICB|34=110|50=DV|57=801|52=20150713-14:15:16.000|151=2|150=A|6=0|59=0|37=10|40=2|18=H|55=IPC
DC15|11=150713CICB801CICB801C000000112|14=0|39=A|17=MX00000010|1=00101|198=10|54=1|38=2|44=44750|453=1|448=CICB|447=D|452=13|10=190|

8=FIX.4.4|9=262|35=8|49=MEXFIX|56=CICB|34=111|50=DV|57=801|52=20150713-14:15:16.000|151=2|150=0|6=0|59=0|37=10|40=2|18=H|55=IPC
DC15|11=150713CICB801CICB801C000000112|14=0|39=0|17=MX00000011|1=00101|198=10|54=1|60=20150713-14:15:16.432|38=2|44=44750|453=1|448=CICB|447=D|452=13|10=109|

New Buy Order, Symbol: IPC DC15, Order Quantity: 2
Consumption: 27000*2=54000
Accumulated Consumption: 108000
Order Status: Rejected

8=FIX.4.4|9=181|35=D|49=CICB|56=MEXFIX|34=113|50=801|57=DV|52=20150713-14:15:27|11=C000000113|453=1|448=CICB|447=D|452=13|1=00101|21=1|55=IPC
DC15|54=1|60=20150713-09:15:27|38=2|40=2|59=0|44=44750|10=234|

8=FIX.4.4|9=376|35=8|49=MEXFIX|56=CICB|34=112|50=DV|57=801|52=20150713-14:15:28.000|6=0|103=3|59=0|60=20150713-14:15:28.048|39=8|1=00101|54=1|151=0|150=8|37=NONE|40=2|58=Daily Credit Limit Sym/Side: Additional Long 2 IPC DC15 (Future/IPC) exceeds Net Long reject limit of 100,000|55=IPC
DC15|11=150711CICB801CICB801C000000113|14=0|17=RMG00000000013|38=2|44=44750|453=1|448=CICB|447=D|452=13|10=241|

3.8.2 SWAPS per class Long

The formula to accumulate long margin in SWAPS per class is:

$$\begin{aligned} \text{Long margin} = & [(Long\ Orders + Long\ Trades - Cancelled\ Long\ Orders) \\ & - (Short\ Trades - Cancelled\ Short\ Trades)] * IM \\ & + Min(Long\ Orders + Long\ Trades; Short\ Trades) * Opposite \end{aligned}$$

Where

$$Long\ margin \geq 0$$

Notes:

In the understanding that the cancelled orders include the modified (35=8, 150=5), executed (35=8, 150=F) and cancelled (35=8, 150=4) orders, cancelled trades include the modified (35=8, 150=G) and cancelled (35=8, 150=H) trades.

When a "Credit Limit Controls for Long Margin (SWAPS per class)" Filter is exceeded, the Risk Control Gateway rejects the order with the following FIX message:

Msg Type: 35=8 (Execution Report)
ExecType: 150=8 (Rejected)
Order Status: 39=8 (Rejected)
OrdRejReason: 103=3 (Order exceeds limit (price or volume filters))
Text: 58=Daily Credit Limit Sym/Side: Additional Long "**Order Quantity**" "**Symbol**" ("**Swap**"/"**Class**") exceeds Net Long reject limit of "**Credit Limit Long**"

RCG	Version: 1.4
Risk Filter validation & Functionality	Date: November, 2016
	Author: HJGE

Example:

Risk Filter: Credit Limit Controls for Long Margin (SWAPS per Class)

Asset Class Type: SWAP

Class: 3X1

Net Long: 100,000

PartyID: CICB

Account: 00101

IM: 410

Opposite: 160

New Buy Order, Symbol: 3X1, Order Quantity: 244

Consumption: 244*410=100,040

Accumulated Consumption: 100,040

Order Status: Rejected

8=FIX.4.4|9=176|35=D|49=CICB|56=MEXFIX|34=125|50=801|57=DV|52=20150713-14:25:04|11=C000000125|453=1|448=CICB|447=D|452=13|1=00101|21=1|55=3X1|54=1|60=20150713-09:25:04|38=244|40=2|59=0|44=4.5|10=186|

8=FIX.4.4|9=366|35=8|49=MEXFIX|56=CICB|34=123|50=DV|57=801|52=20150713-14:25:05.000|6=0|103=3|59=0|60=20150713-14:25:05.157|39=8|1=00101|54=1|151=0|150=8|37=NONE|40=2|58=Daily Credit Limit Sym/Side: Additional Long 732 3X1 (Swap/3X1) exceeds Net Long reject limit of 100,000|55=3X1|11=150711CICB801CICB801C000000125|14=0|17=RMG00000000015|38=244|44=4.5|453=1|448=CICB|447=D|452=13|10=251|

3.8.3 SWAPS for all classes Long

The formula to accumulate long margin in SWAPS for all the classes is:

$$\begin{aligned}
 \text{Long margin} = & \sum_i [(Long Orders_i + Long Trades_i - Cancelled Long Orders_i) \\
 & - (Short Trades_i - Cancelled Short Trades_i)] * IM \\
 & + \text{Min} \left(\sum_i (Long Orders_i + Long Trades_i); \sum_i Short Orders_i \right) * Opposite
 \end{aligned}$$

Where

$Long\ margin \geq 0$

$i = SWAPS [2,390]$

Notes:

In the understanding that the cancelled orders include the modified (35=8, 150=5), executed (35=8, 150=F) and cancelled (35=8, 150=4) orders, cancelled trades include the modified (35=8, 150=G) and cancelled (35=8, 150=H) trades.

When a "Credit Limit Controls for Long Margin (SWAPS for all classes)" Filter is exceeded, the Risk Control Gateway rejects the order with the following FIX message:

RCG	Version: 1.4
Risk Filter validation & Functionality	Date: November, 2016
	Author: HJGE

Msg Type: 35=8 (Execution Report)
ExecType: 150=8 (Rejected)
Order Status: 39=8 (Rejected)
OrdRejReason: 103=3 (Order exceeds limit (price or volume filters))
Text: 58=Daily Credit Limit Sym/Side: Additional Long "**Order Quantity**" "**Symbol**" ("**Swap**"/"**Class**") exceeds Net Long reject limit of "**Credit Limit Long**"

Example:

Risk Filter: Credit Limit Controls for Long Margin (SWAPS for all Classes)
Asset Class Type: Swap
Class: 10X1
Net Long: 100,000
PartyID: CICB
Account: 00101
IM: 1440
Opposite: 160

New Buy Order, Symbol: 10X1, Order Quantity: 70
Consumption: 70*1440=100,800
Accumulated Consumption: 0
Order Status: Rejected

8=FIX.4.4|9=176|35=D|49=CICB|56=MEXFIX|34=423|50=801|57=DV|52=20150713-18:42:11|11=C000000423|453=1|448=CICB|447=D|452=13|1=00101|21=1|55=10X1|54=1|60=20150713-13:42:11|38=70|40=2|59=0|44=4.5|10=176|

8=FIX.4.4|9=368|35=8|49=MEXFIX|56=CICB|34=421|50=DV|57=801|52=20150713-18:42:11.909|151=0|150=8|6=0|59=0|37=NONE|40=2|55=10X1|58=Daily Credit Limit Sym/Side: Additional Long 700 10X1 (Swap/10X1) exceeds Net Long reject limit of 100,000|11=150711CICB801CICB801C000000423|14=0|39=8|17=RMG00000000043|1=00101|103=3|54=1|60=20150713-18:42:11.908|38=70|44=4.5|453=1|448=CICB|447=D|452=13|10=104|

3.9 Credit Limit Controls for Short Margin

An order is rejected when an incoming order exceeds the maximum initial margin amount that an account/member can have per class. The Risk Control Gateway will accumulate the long total margin per day.

3.9.1 *Futures and Options Short*

The formula to accumulate quantity in futures and options is:

$$\text{Short margin} = [(Short Orders + Short Fills - Cancelled Short Orders - Cancelled Short Fills) - (Long Fills - Cancelled Long Fills)] * IM$$

Notes:

- In the understanding that a fill is equal to trade (35=8, 150=F)
- In the understanding that the cancelled orders include the modified (35=8, 150=5), executed (35=8, 150=F) and cancelled (35=8, 150=4) orders, cancelled trades include the modified (35=8, 150=G) and cancelled (35=8, 150=H) trades.

RCG	Version: 1.4
Risk Filter validation & Functionality	Date: November, 2016
	Author: HJGE

- It is important to consider the nature of buying or selling orders, for that reason, in the case of long put options, this will be treated as short positions, also short put options will be treated as large positions.

When a "Credit Limit Controls for Short Margin" Filter is exceeded, the Risk Control Gateway rejects the order with the following FIX message:

Msg Type: 35=8 (Execution Report)
 ExecType: 150=8 (Rejected)
 Order Status: 39=8 (Rejected)
 OrdRejReason: 103=3 (Order exceeds limit (price or volume filters))
 Text: 58=Daily Credit Limit Sym/Side: Additional Short "**Order Quantity**" "**Symbol**" ("**Future/Option**" "**Class**") exceeds Net Short reject limit of "**Credit Limit Short**"

Example:

Risk Filter: Credit Limit Controls for Short Margin
 Asset Class Type: Future
 Class: TE28
 Credit Limit Short: 1200
 PartyID: CICB
 Account: 00101
IM: 120

New Sell Order, Symbol: TE28DC16, Order Quantity: 9
 Consumption: 9*120=1080
 Accumulated Consumption: 0
 Order Status: New (Accepted)

8=FIX.4.4|9=179|35=D|49=CICB|56=MEXFIX|34=153|50=801|57=DV|52=20150713-14:51:57|11=V000000153|453=1|448=CICB|447=D|452=13|1=00101|21=1|55=TE28DC16|54=2|60=20150713-09:51:57|38=9|40=2|59=0|44=4.5|10=181|

8=FIX.4.4|9=233|35=8|49=MEXFIX|56=CICB|34=150|50=DV|57=801|52=20150713-14:51:57.000|151=9|150=A|6=0|59=0|37=11|40=2|18=H|55=TE28DC16|11=150713CICB801CICB801V00000153|14=0|39=A|17=00000110|1=00101|198=11|54=2|38=9|44=4.5|453=1|448=CICB|447=D|452=13|10=227|

8=FIX.4.4|9=258|35=8|49=MEXFIX|56=CICB|34=151|50=DV|57=801|52=20150713-14:51:57.000|151=9|150=0|6=0|59=0|37=11|40=2|18=H|55=TE28DC16|11=150713CICB801CICB801V0000153|14=0|39=0|17=00000111|1=00101|198=11|54=2|60=20150713-14:51:57.570|38=9|44=4.5|453=1|448=CICB|447=D|452=13|10=163|

New Sell Order, Symbol: TE28DC16, Order Quantity: 2
 Consumption: 2*120=240
 Accumulated Consumption: 1320
 Order Status: Rejected

8=FIX.4.4|9=179|35=D|49=CICB|56=MEXFIX|34=155|50=801|57=DV|52=20150713-14:53:06|11=V000000155|453=1|448=CICB|447=D|452=13|1=00101|21=1|55=TE28DC16|54=2|60=20150713-09:53:06|38=2|40=2|59=0|44=4.5|10=170|

RCG	Version: 1.4
Risk Filter validation & Functionality	Date: November, 2016
	Author: HJGE

8=FIX.4.4|9=375|35=8|49=MEXFIX|56=CICB|34=153|50=DV|57=801|52=20150713-14:53:06.000|6=0|103=3|59=0|60=20150713-14:53:06.979|39=8|1=00101|54=2|151=0|150=8|37=NONE|40=2|58=Daily Credit Limit Sym/Side: Additional Short 2 TE28DC16 (Future/TE28) exceeds Net Short reject limit of 1,200|55=TE28DC16|11=150711CICB801CICB801V000000155|14=0|17=RMG00000000016|38=2|44=4.5|453=1|448=CICB|447=D|452=13|10=135|

3.9.2 SWAPS per class Short

The formula to accumulate short margin in SWAPS per class is:

$$\begin{aligned} \text{Short margin} = & [(Short\ Orders + Short\ Trades - Cancelled\ Short\ Orders) \\ & - (Long\ Trades - Cancelled\ Long\ Trades)] * IM \\ & + Min(Short\ Orders + Short\ Trades; Long\ Trades) * Opposite \end{aligned}$$

Where

$$\text{Short margin} \geq 0$$

Notes:

- In the understanding that the cancelled orders include the modified (35=8, 150=5), executed (35=8, 150=F) and cancelled (35=8, 150=4) orders, cancelled trades include the modified (35=8, 150=G) and cancelled (35=8, 150=H) trades.

When a “Credit Limit Controls for Short Margin (SWAPS per class)” Filter is exceeded, the Risk Control Gateway rejects the order with the following FIX message:

Msg Type: 35=8 (Execution Report)
ExecType: 150=8 (Rejected)
Order Status: 39=8 (Rejected)
OrdRejReason: 103=3 (Order exceeds limit (price or volume filters))
Text: 58=Daily Credit Limit Sym/Side: Additional Long “**Order Quantity**” “**Symbol**” (“**Swap**”/“**Class**”) exceeds Net Long reject limit of “**Credit Limit Long**”

Example:

Risk Filter: Credit Limit Controls for Short Margin (SWAPS per Class)
Asset Class Type: Swap
Class: 150X1
Net Long: 100,000
PartyID: CICB
Account: 00101
IM: 34900
Opposite: 160

New Buy Order, Symbol: 150X1, Order Quantity: 3
Consumption: 3*34900=100,040
Accumulated Consumption: 104,700
Order Status: Rejected

RCG	Version: 1.4
Risk Filter validation & Functionality	Date: November, 2016
	Author: HJGE

8=FIX.4.4|9=176|35=D|49=CICB|56=MEXFIX|34=162|50=801|57=DV|52=20150713-14:59:31|11=C000000162|453=1|448=CICB|447=D|452=13|1=00101|21=1|55=150X1|54=1|60=20150713-09:59:31|38=3|40=2|59=0|44=4.5|10=198|

8=FIX.4.4|9=370|35=8|49=MEXFIX|56=CICB|34=160|50=DV|57=801|52=20150713-14:59:31.492|6=0|103=3|59=0|60=20150713-14:59:31.492|39=8|1=00101|54=1|151=0|150=8|37=NONE|40=2|58=Daily Credit Limit Sym/Side: Additional Long 450 150X1 (Swap/150X1) exceeds Net Long reject limit of 100,000|55=150X1|11=150711CICB801CICB801C000000162|14=0|17=RMG00000000017|38=3|44=4.5|453=1|448=CICB|447=D|452=13|10=214|

3.9.3 SWAPS for all classes Short

The formula to accumulate short margin in SWAPS for all classes is:

$$\begin{aligned} \text{Short margin} = & \sum_i [(Short Orders_i + Short Trades_i - Cancelled Short Orders_i) \\ & - (Long Trades_i - Cancelled Long Trades_i)] * IM \\ & + \text{Min} \left(\sum_i (Short Orders_i + Short Trades_i); \sum_i Long Orders_i \right) * \text{Opposite} \end{aligned}$$

Where

$\text{Short margin} \geq 0$

$i = \text{SWAPS [2,390]}$

Notes:

- In the understanding that the cancelled orders include the modified (35=8, 150=5), executed (35=8, 150=F) and cancelled (35=8, 150=4) orders, cancelled trades include the modified (35=8, 150=G) and cancelled (35=8, 150=H) trades.

When a "Credit Limit Controls for Short Margin (SWAPS for all classes)" Filter is exceeded, the Risk Control Gateway rejects the order with the following FIX message:

Msg Type: 35=8 (Execution Report)
 ExecType: 150=8 (Rejected)
 Order Status: 39=8 (Rejected)
 OrdRejReason: 103=3 (Order exceeds limit (price or volume filters))
 Text: 58=Daily Credit Limit Sym/Side: Additional Short "**Order Quantity**" "**Symbol**" ("**Swap**") "**Class**") exceeds Net Short reject limit of "**Credit Limit Short**"

Example:

Risk Filter: Credit Limit Controls for Short Margin (SWAPS for all Classes)
 Asset Class Type: Swap
 Class: 10X1
 Net Short: 100,000
 PartyID: CICB
 Account: 00101
IM: 1440

RCG	Version: 1.4
Risk Filter validation & Functionality	Date: November, 2016
	Author: HJGE

Opposite: 160

New Sell Order, Symbol: 10X1, Order Quantity: 70
Consumption: 70*1440=100,800
Accumulated Consumption: 0
Order Status: Rejected

8=FIX.4.4|9=176|35=D|49=CICB|56=MEXFIX|34=461|50=801|57=DV|52=20150713-19:18:58|11=V000000461|453=1|448=CICB|447=D|452=13|1=00101|21=1|55=10X1|54=2|60=20150713-14:18:58|38=70|40=2|59=0|44=4.5|10=230|

8=FIX.4.4|9=370|35=8|49=MEXFIX|56=CICB|34=458|50=DV|57=801|52=20150713-19:18:58.000|151=0|150=8|6=0|59=0|37=NONE|40=2|55=10X1|58=Daily Credit Limit Sym/Side: Additional Short 700 10X1 (Swap/10X1) exceeds Net Short reject limit of 100,000|11=150711CICB801CICB801V000000461|14=0|39=8|17=RMG0000000044|1=00101|103=3|54=2|60=20150713-19:18:58.411|38=70|44=4.5|453=1|448=CICB|447=D|452=13|10=131|

3.10 Position Limit Control Net Margin Filter

Alert will be a position limit control net margin filter where the position limit will be created on both shorts and long positions per Class/Symbol.

3.10.1 Futures and Options Long

The formula to accumulate position in futures and options is:

Long position Limit will be as follow:

$$Long\ Position\ Limit = \max \left\{ 0, \left(\sum Long\ Fills - \sum Long\ Fills\ Cancelled - \sum Short\ Fills + \sum Short\ Fills\ Cancelled + \sum Long\ Orders \right) / Configured\ Limit \right\} \geq 0$$

Notes:

- In the understanding that a fill is equal to trade (35=8, 150=F)
- In the understanding that the cancelled orders include the modified (35=8, 150=5), executed (35=8, 150=F) and cancelled (35=8, 150=4) orders, cancelled trades include the modified (35=8, 150=G) and cancelled (35=8, 150=H) trades.

When a "Position Long Limit Control Net Margin" Filter is exceeded, the Risk Control Gateway rejects the order with the following FIX message:

Msg Type: 35=8 (Execution Report)
ExecType: 150=8 (Rejected)
Order Status: 39=8 (Rejected)
OrdRejReason: 103=3 (Order exceeds limit (price or volume filters))
Text: 58=Position Limit Sym/Side: Additional Long "**Order Quantity**" "**Symbol**" ("**Future/Option**" "**Class**") exceeds Long Limit reject limit of "**Long Limit**"

Example:

Risk Filter: Position Limit
Asset Class Type: Future
Class: DEUA
Long Limit: 500
PartyID: CICB

RCG	Version: 1.4
Risk Filter validation & Functionality	Date: November, 2016
	Author: HJGE

Account: 00101

New Buy Order, Symbol: DA19DC16, Order Quantity: 501

Consumption: 501

Accumulated Consumption: 0

Order Status: Rejected

8=FIX.4.4|9=182|35=D|49=CICB|56=MEXFIX|34=172|50=801|57=DV|52=20150713-15:05:35|11=C000000172|453=1|448=CICB|447=D|452=13|1=00101|21=1|55=DA19DC16|54=1|60=20150713-10:05:35|38=501|40=2|59=0|44=15.9|10=011|

8=FIX.4.4|9=374|35=8|49=MEXFIX|56=CICB|34=170|50=DV|57=801|52=20150713-15:05:35.000|6=0|103=3|59=0|60=20150713-15:05:35.723|39=8|1=00101|54=1|151=0|150=8|37=NONE|40=2|58=Position Limit Sym/Side: Additional Long 501 DA19DC16 (Future/DEUA) exceeds Long Limit reject limit of 500|55=DA19DC16|11=150711CICB801CICB801C000000172|14=0|17=RMG00000000018|38=501|44=15.9|453=1|448=CICB|447=D|452=13|10=188|

3.10.2 Futures and Options Short

Short position Limit is as follow:

$$Short\ Position\ Limit = \max \left\{ 0, \left[\left(\sum Short\ Fills - \sum Short\ Fills\ Cancelled - \sum Long\ Fills + \sum Long\ Fills\ Cancelled + \sum Short\ Orders \right) / Configured\ Limit \right] \geq 0 \right\}$$

Notes:

- In the understanding that a fill is equal to trade (35=8, 150=F)
- In the understanding that the cancelled orders include the modified (35=8, 150=5), executed (35=8, 150=F) and cancelled (35=8, 150=4) orders, cancelled trades include the modified (35=8, 150=G) and cancelled (35=8, 150=H) trades.

When a "Position Short Limit Control Net Margin" Filter is exceeded, the Risk Control Gateway rejects the order with the following FIX message:

Msg Type: 35=8 (Execution Report)

ExecType: 150=8 (Rejected)

Order Status: 39=8 (Rejected)

OrdRejReason: 103=3 (Order exceeds limit (price or volume filters))

Text: 58=Position Limit Sym/Side: Additional Short "**Order Quantity**" "**Symbol**" ("**Future/Option**" / "**Class**") exceeds Short Limit reject limit of "**Short Limit**"

Example:

Risk Filter: Position Limit

Asset Class Type: Future

Class: DEUA

Short Limit: 500

PartyID: CICB

Account: 00101

RCG	Version: 1.4
Risk Filter validation & Functionality	Date: November, 2016
	Author: HJGE

New Sell Order, Symbol: DA19DC16, Order Quantity: 501
Consumption: 501
Accumulated Consumption: 0
Order Status: Rejected

8=FIX.4.4|9=182|35=D|49=CICB|56=MEXFIX|34=176|50=801|57=DV|52=20150713-
15:08:04|11=V000000176|453=1|448=CICB|447=D|452=13|1=00101|21=1|55=DA19DC16|54=2|60=2015
0713-10:08:04|38=501|40=2|59=0|44=15.9|10=037|

8=FIX.4.4|9=376|35=8|49=MEXFIX|56=CICB|34=173|50=DV|57=801|52=20150713-
15:08:04.000|6=0|103=3|59=0|60=20150713-
15:08:04.319|39=8|1=00101|54=2|151=0|150=8|37=NONE|40=2|58=Position Limit Sym/Side: Additional
Short 501 DA19DC16 (Future/DEUA) exceeds Short Limit reject limit of
500|55=DA19DC16|11=150711CICB801CICB801V000000176|14=0|17=RMG00000000019|38=501|44=
15.9|453=1|448=CICB|447=D|452=13|10=217|

3.10.3 SWAPS per Symbol Long/Short

The formula to accumulate position in SWAPS per symbol is:

Long Position Limit

$$= \max \left\{ 0, \left[\left(\left[\sum LongTrades - \sum Cancelled Long Trades \right] - \left[\sum Short Trades - \sum Cancelled Short Trades \right] + \sum LongOrders \right) * Cuopons i / ConfiguredLimit \right] \right\}$$

Short Position Limit

$$= \max \left\{ 0, \left[\left(\left[\sum Short Trades - \sum Cancelled Short Trades \right] - \left[\sum LongTrades - \sum Cancelled Long Trades \right] + \sum ShortOrders \right) * Coupons i / ConfiguredLimit \right] \right\}$$

i = SWAPS [2,390]

Notes:

- In the understanding that the cancelled orders include the modified (35=8, 150=5), executed (35=8, 150=F) and cancelled (35=8, 150=4) orders, cancelled trades include the modified (35=8, 150=G) and cancelled (35=8, 150=H) trades.
- Long / Short Orders means working orders (considers all the changes that modify the orders, including modifications and cancellations).

When a "Position Limit Control Net Margin (SWAPS per symbol)" Filter is exceeded, the Risk Control Gateway rejects the order with the following FIX message:

Msg Type: 35=8 (Execution Report)
ExecType: 150=8 (Rejected)
Order Status: 39=8 (Rejected)
OrdRejReason: 103=3 (Order exceeds limit (price or volume filters))

RCG	Version: 1.4
Risk Filter validation & Functionality	Date: November, 2016
	Author: HJGE

Text: 58=Position Limit Sym/Side: Additional Long "Order Quantity" "Symbol" (Swap/Symbol) exceeds Long Limit reject limit of "Long Limit"

Example:

Risk Filter: Position Limit
 Asset Class Type: SWAP
 Class: 27X1
 Long Limit: 1000
 PartyID: CICB
 Account: 00101

New Buy Order, Symbol: 27X1, Order Quantity: 38
 Consumption: 27*38=1026
 Accumulated Consumption: 0
 Order Status: Rejected

8=FIX.4.4|9=176|35=D|49=CICB|56=MEXFIX|34=545|50=801|57=DV|52=20150713-20:31:08|11=C000000545|453=1|448=CICB|447=D|452=13|1=00101|21=1|55=27X1|54=1|60=20150713-15:31:08|38=38|40=2|59=0|44=4.5|10=201|

8=FIX.4.4|9=366|35=8|49=MEXFIX|56=CICB|34=543|50=DV|57=801|52=20150713-20:31:08.000|151=0|150=8|6=0|59=0|37=NONE|40=2|55=27X1|58=Position Limit Sym/Side: Additional Long 1,026 27X1 (Swap/27X1) exceeds Long Limit reject limit of 1,000|11=150711CICB801CICB801C000000545|14=0|39=8|17=RMG00000000050|1=00101|103=3|54=1|60=20150713-20:31:08.603|38=38|44=4.5|453=1|448=CICB|447=D|452=13|10=039|

3.10.4 SWAPS for all classes Long

The formula to accumulate position in SWAPS for all classes is:

$$\begin{aligned}
 & \text{Long position limit} \\
 & = \sum_i [(\sum \text{Long Trades } i - \sum \text{Cancelled Long Trades } i) \\
 & \quad - (\sum \text{Short Trades } i - \sum \text{Cancelled Short Trades } i) + \sum \text{Long Orders } i] * \text{Cuopons } i
 \end{aligned}$$

Where

$$i = \text{SWAPS } [2,390]$$

Notes:

- In the understanding that the cancelled orders include the modified (35=8, 150=5), executed (35=8, 150=F) and cancelled (35=8, 150=4) orders, cancelled trades include the modified (35=8, 150=G) and cancelled (35=8, 150=H) trades.
- Long / Short Orders means working orders (considers all the changes that modify the orders, including modifications and cancellations).

When a "Position Limit Control Net Margin (SWAPS for all classes)" Filter is exceeded, the Risk Control Gateway rejects the order with the following FIX message:

Msg Type: 35=8 (Execution Report)
 ExecType: 150=8 (Rejected)

RCG	Version: 1.4
Risk Filter validation & Functionality	Date: November, 2016
	Author: HJGE

Order Status: 39=8 (Rejected)
 OrdRejReason: 103=3 (Order exceeds limit (price or volume filters))
 Text: 58=Position Limit Sym/Side: Additional Long "**Order Quantity**" "**Symbol**" (Swap/X1) exceeds Long Limit reject limit of "**Long Limit**"

Example:

Risk Filter: Position Limit
 Asset Class Type: SWAP
 Class: 27X1
 Long Limit: 1000
 PartyID: CICB
 Account: 00101

New Buy Order, Symbol: 27X1, Order Quantity: 38
 Consumption: 27*38=1026
 Accumulated Consumption: 0
 Order Status: Rejected

8=FIX.4.4|9=176|35=D|49=CICB|56=MEXFIX|34=180|50=801|57=DV|52=20150713-
 15:10:48|11=C000000180|453=1|448=CICB|447=D|452=13|1=00101|21=1|55=27X1|54=1|60=20150713-
 10:10:48|38=38|40=2|59=0|44=4.5|10=192|

8=FIX.4.4|9=366|35=8|49=MEXFIX|56=CICB|34=176|50=DV|57=801|52=20150713-
 15:10:48.000|6=0|103=3|59=0|60=20150713-
 15:10:48.778|39=8|1=00101|54=1|151=0|150=8|37=NONE|40=2|58=Position Limit Sym/Side: Additional
 Long 1,026 27X1 (Swap/27X1) exceeds Long Limit reject limit of
 1,000|55=27X1|11=150711CICB801CICB801C000000180|14=0|17=RMG00000000020|38=38|44=4.5|45
 3=1|448=CICB|447=D|452=13|10=056|

3.10.5 SWAPS for all classes Short

Short position limit

$$= \sum_i \left[\left(\sum \text{Short Trades } i - \sum \text{Cancelled Short Trades } i \right) - \left(\sum \text{Long Trades } i - \sum \text{Cancelled Long Trades } i \right) + \sum \text{Short Orders } i \right] * \text{Coupons } i$$

Where

$$i = \text{SWAPS } [2,390]$$

Notes:

- In the understanding that the cancelled orders include the modified (35=8, 150=5), executed (35=8, 150=F) and cancelled (35=8, 150=4) orders, cancelled trades include the modified (35=8, 150=G) and cancelled (35=8, 150=H) trades.
- Long / Short Orders means working orders (considers all the changes that modify the orders, including modifications and cancellations).

When a "Position Limit Control Net Margin (SWAPS for all classes)" Filter is exceeded, the Risk Control Gateway rejects the order with the following FIX message:

RCG	Version: 1.4
Risk Filter validation & Functionality	Date: November, 2016
	Author: HJGE

Msg Type: 35=8 (Execution Report)
ExecType: 150=8 (Rejected)
Order Status: 39=8 (Rejected)
OrdRejReason: 103=3 (Order exceeds limit (price or volume filters))
Text: 58=Position Limit Sym/Side: Additional Short "**Order Quantity**" "**Symbol**" (Swap/X1) exceeds Short Limit reject limit of "**Short Limit**"

Example:

Risk Filter: Position Limit
Asset Class Type: SWAP
Class: 27X1
Short Limit: 1000
PartyID: CICB
Account: 00101

New Sell Order, Symbol: 27X1, Order Quantity: 38
Consumption: 27*38=1026
Accumulated Consumption: 0
Order Status: Rejected

8=FIX.4.4|9=176|35=D|49=CICB|56=MEXFIX|34=186|50=801|57=DV|52=20150713-15:16:02|11=V000000186|453=1|448=CICB|447=D|452=13|1=00101|21=1|55=27X1|54=2|60=20150713-10:16:02|38=38|40=2|59=0|44=4.5|10=216|

8=FIX.4.4|9=368|35=8|49=MEXFIX|56=CICB|34=181|50=DV|57=801|52=20150713-15:16:02.000|6=0|103=3|59=0|60=20150713-15:16:02.218|39=8|1=00101|54=2|151=0|150=8|37=NONE|40=2|58=Position Limit Sym/Side: Additional Short 1,026 27X1 (Swap/27X1) exceeds Short Limit reject limit of 1,000|55=27X1|11=150711CICB801CICB801V000000186|14=0|17=RMG00000000021|38=38|44=4.5|453=1|448=CICB|447=D|452=13|10=062|

4. Cross Orders (35=s)

Cross trades are trades made between members outside the market order book. This functionality allows members to request the registration of these trades with MexFix.

4.1 Filter validations

- RCG will reject Cross Orders (35=s) that exceeds any of the RCG available risk filters.
- When a Cross Order is executed (35=8, 150=F), RCG applies the size and value of the fill to participant and clearing accounts.
- The RCG will reject any F message which attempts to cancel a leg of a cross order. The reject message will be:

35=9
[58]=Error order does not exist, [102]=99

- The RCG will reject any G message which attempts to cancel-replace a leg of a cross order. The reject message will be:

RCG	Version: 1.4
Risk Filter validation & Functionality	Date: November, 2016
	Author: HJGE

35=9

[58]=Leg **Prefix+ClientOrderID** of Cross order may not be modified

- RMG will reject the cross orders that violate the risk filters assigned to a member/account with two execution reports(35=8, 39=8, 150=8, 103=3), one for the buy side (54=1) and one for the sell side (54=2) showing the rejection message on tag 58 (text).

Example:

Risk Filter: Position Limit Long

Asset Class Type: Future

Class: DEUA

Long Limit: 0

PartyID: CICB

Account: 00101

8=FIX.4.4|9=268|35=s|49=CICB|56=MEXFIX|34=234|50=801|57=DV|52=20150713-15:58:04|548=X000000234|549=1|550=0|552=2|54=1|11=C000000234|453=1|448=CICB|447=D|452=13|1=00101|38=1|54=2|11=V000000234|453=1|448=CICB|447=D|452=13|1=00101|38=1|21=1|55=DA19DC16|60=20150713-10:58:04|40=2|44=15.9|10=052|

8=FIX.4.4|9=398|35=8|49=MEXFIX|56=CICB|34=231|50=DV|57=801|52=20150713-15:58:04.000|151=0|150=8|6=0|37=NONE|40=2|55=DA19DC16|58=Position Limit Sym/Side: Additional Long 1 DA19DC16 (Future/DEUA) exceeds Long Limit reject limit of 0|11=150711CICB801CICB801C000000234|14=0|39=8|17=RMG00000000022|1=00101|103=3|54=1|60=20150713-15:58:04.413|38=1|548=150711CICB801CICB801X000000234|44=15.9|453=1|448=CICB|447=D|452=13|10=038|

8=FIX.4.4|9=398|35=8|49=MEXFIX|56=CICB|34=232|50=DV|57=801|52=20150713-15:58:04.000|6=0|103=3|150=8|39=8|1=00101|54=2|151=0|60=20150713-15:58:04.414|548=150711CICB801CICB801X000000234|37=NONE|40=2|58=Position Limit Sym/Side: Additional Long 1 DA19DC16 (Future/DEUA) exceeds Long Limit reject limit of 0|55=DA19DC16|11=150711CICB801CICB801V000000234|14=0|17=RMG00000000023|38=1|44=15.9|453=1|448=CICB|447=D|452=13|10=061|

4.2 Cross Order Rejected: Symbol not recognized.

When a symbol is not listed in the exchange or the RCG does not recognize the symbol, an execution report (35=8, 150=8, 39=8) is sent to the customer informing that the symbol is not recognized.

8=FIX.4.4|9=277|35=s|49=CICB|56=MEXFIX|34=280|50=801|57=DV|52=20150713-16:35:24|548=X000000280|549=1|550=0|552=2|54=1|11=C000000280|453=1|448=CICB|447=D|452=13|1=00101|38=4000|54=2|11=V000000280|453=1|448=CICB|447=D|452=13|1=00101|38=4000|21=1|55=PC MY15|60=20150713-11:35:24|40=2|44=44750.0|10=026|

8=FIX.4.4|9=350|35=8|49=MEXFIX|56=CICB|34=275|50=DV|57=801|52=20150713-16:35:24.000|151=4000|150=8|6=0|37=0|55=IPC MY15|58=Invalid Symbol or Side|11=150713CICB801CICB801C000000280|14=0|39=8|17=00000184|527=000000000000|1=00101|103=99|54=1|60=20150713-

RCG	Version: 1.4
Risk Filter validation & Functionality	Date: November, 2016
	Author: HJGE

16:35:24.930|38=4000|548=150713CICB801CICB801X000000280|44=44750|453=2|448=CICB|447=D|452=13|448=801|447=D|452=11|10=181|

8=FIX.4.4|9=350|35=8|49=MEXFIX|56=CICB|34=276|50=DV|57=801|52=20150713-16:35:24.000|151=4000|150=8|6=0|37=0|55=IPC MY15|58=Invalid Symbol or Side|11=150713CICB801CICB801V000000280|14=0|39=8|17=00000185|527=000000000000|1=00101|103=99|54=2|60=20150713-16:35:24.930|38=4000|548=150713CICB801CICB801X000000280|44=44750|453=2|448=CICB|447=D|452=13|448=801|447=D|452=11|10=203|

4.3 Cross Order Rejected: Invalid Account or member.

If the account (tag 1) or member (tag 448) sent in the cross order message is not configured in the RCG, or they are missing from the cross order, the RCG will reject the cross order with two execution reports (35=8, 150=8, 39=8) one for the buy and one for the sell.

Missing account

8=FIX.4.4|9=261|35=s|49=CICB|56=MEXFIX|34=285|50=801|57=DV|52=20150713-16:38:50|548=X000000285|549=1|550=0|552=2|54=1|11=C000000285|453=1|448=CICB|447=D|452=13|38=1000|54=2|11=V000000285|453=1|448=CICB|447=D|452=13|38=1000|21=1|55=IPC SP15|60=20150713-11:38:50|40=2|44=44700.0|10=091|

8=FIX.4.4|9=322|35=8|49=MEXFIX|56=CICB|34=280|50=DV|57=801|52=20150713-16:38:50.000|151=0|150=8|6=0|37=NONE|40=2|55=IPC SP15|58=MEXFIX_ERROR_ACCOUNT_MISSING|11=150711CICB801CICB801C000000285|14=0|39=8|17=RMG0000000027|103=99|54=1|60=20150713-16:38:50.913|38=1000|548=150711CICB801CICB801X000000285|44=44700.0|453=1|448=CICB|447=D|452=13|10=219|

8=FIX.4.4|9=322|35=8|49=MEXFIX|56=CICB|34=281|50=DV|57=801|52=20150713-16:38:50.000|6=0|103=99|150=8|39=8|54=2|151=0|60=20150713-16:38:50.914|548=150711CICB801CICB801X000000285|37=NONE|40=2|58=MEXFIX_ERROR_ACCOUNT_MISSING|55=IPC SP15|11=150711CICB801CICB801V000000285|14=0|17=RMG0000000028|38=1000|44=44700.0|453=1|448=CICB|447=D|452=13|10=242|

Missing Member in the party block

8=FIX.4.4|9=233|35=s|49=CICB|56=MEXFIX|34=293|50=801|57=DV|52=20150713-16:44:49|548=X000000293|549=1|550=0|552=2|54=1|11=C000000293|453=0|1=00101|38=4000|54=2|11=V000000293|453=0|1=00101|38=4000|21=1|55=IPC SP15|60=20150713-11:44:49|40=2|44=44750.0|10=145|

8=FIX.4.4|9=318|35=8|49=MEXFIX|56=CICB|34=288|50=DV|57=801|52=20150713-16:44:50.000|151=0|150=8|6=0|37=NONE|40=2|55=IPC SP15|58=Unable to identify client CICB_801-QUALIFIED|11=150711CICB801CICB801C000000293|14=0|39=8|17=RMG00000000031|1=00101|103=99|54=1|60=20150713-16:44:50.000|38=4000|548=150711CICB801CICB801X000000293|44=44750.0|10=159|

8=FIX.4.4|9=318|35=8|49=MEXFIX|56=CICB|34=289|50=DV|57=801|52=20150713-

RCG	Version: 1.4
Risk Filter validation & Functionality	Date: November, 2016
	Author: HJGE

16:44:50.000|6=0|103=99|150=8|39=8|1=00101|54=2|151=0|60=20150713-
16:44:50.001|548=150711CICB801CICB801X000000293|37=NONE|40=2|58=Unable to identify client
CICB_801-QUALIFIED|55=IPC
SP15|11=150711CICB801CICB801V000000293|14=0|17=RMG00000000032|38=4000|44=44750.0|10=1
82|

Invalid account for a valid member

8=FIX.4.4|9=277|35=s|49=CICB|56=MEXFIX|34=289|50=801|57=DV|52=20150713-
16:41:51|548=X000000289|549=1|550=0|552=2|54=1|11=C000000289|453=1|448=CICB|447=D|452=13|
1=00109|38=1000|54=2|11=V000000289|453=1|448=CICB|447=D|452=13|1=00109|38=1000|21=1|55=l
PC SP15|60=20150713-11:41:51|40=2|44=44750.0|10=063|

8=FIX.4.4|9=354|35=8|49=MEXFIX|56=CICB|34=284|50=DV|57=801|52=20150713-
16:41:51.000|151=0|150=8|6=0|37=NONE|40=2|55=IPC SP15|58=Account 00109 is not valid for
Origination Firm
CICB|11=150711CICB801CICB801C000000289|14=0|39=8|17=RMG00000000029|1=00109|103=99|54=
1|60=20150713-
16:41:51.560|38=1000|548=150711CICB801CICB801X000000289|44=44750.0|453=1|448=CICB|447=D|
452=13|10=030|

8=FIX.4.4|9=354|35=8|49=MEXFIX|56=CICB|34=285|50=DV|57=801|52=20150713-
16:41:51.000|6=0|103=99|150=8|39=8|1=00109|54=2|151=0|60=20150713-
16:41:51.561|548=150711CICB801CICB801X000000289|37=NONE|40=2|58=Account 00109 is not valid
for Origination Firm CICB|55=IPC
SP15|11=150711CICB801CICB801V000000289|14=0|17=RMG00000000030|38=1000|44=44750.0|453=
1|448=CICB|447=D|452=13|10=044|

5. Block Trades (35=AE)

Clearing Members, Brokers or Participants of a Recognized Foreign Market may execute block trades consisting of presenting through the Electronic Trading System, a Bid or Offer on a certain minimum number of Contracts that the Exchange will establish, and with the characteristics that the Exchange will make known through its Bulletin.

- The following RCG risk filters will reject Block Trade messages (35=AE), If the risk filters are exceeded.
 - Blocked Orders
 - Daily Quantity
 - Daily Quantity per class and side.
 - Daily Credit Limit
 - Position Limit
- When a Block Trade is registered in MexDer, RCG applies the size and value of the fill (35=8 messages) to both firms participating in the trade, If the clearing member established one of the following risk filters to the firm:
 - Daily Quantity
 - Daily Quantity per class and side.
 - Daily Credit Limit
 - Position Limit

RCG	Version: 1.4
Risk Filter validation & Functionality	Date: November, 2016
	Author: HJGE

- Reject due to risk by sending an AR message with:

939(TrdRptStatus) = 1 (Rejected)
751(TradeReportRejectReason) = 99 (Other)
BuySideRepeatingGroup 58 = "The corresponding reject message for the risk filter exceeded"
SellSideRepeatingGroup 58 = "The corresponding reject message for the risk filter exceeded"

Example:

Sell Rejection

```
8=FIX.4.4|9=237|35=AE|49=CICB|56=MEXFIX|34=331|50=801|57=DV|52=20150713-
17:19:15|571=CICB331|856=0|570=N|55=IPC
SP15|32=3001|31=44700.0|552=2|54=2|37=NONE|453=2|448=CICB|447=D|452=13|448=801|447=D|452
=11|1=00101|54=1|37=NONE|453=1|448=BBVF|447=D|452=13|10=147|
```

```
8=FIX.4.4|9=287|35=AR|49=MEXFIX|56=CICB|34=330|50=DV|57=801|52=20150713-
17:19:15.000|31=44700.0|55=IPC
SP15|856=0|571=CICB331|32=3001|939=1|751=99|552=2|54=2|453=2|448=CICB|447=D|452=13|448=8
01|447=D|452=11|37=NONE|1=00101|58=RMG      Reject:      Failed      Risk      Filter:
Qty|54=1|453=1|448=BBVF|447=D|452=13|37=NONE|10=031|
```

Buy Rejection

```
8=FIX.4.4|9=237|35=AE|49=BBVF|56=MEXFIX|34=17|50=902|57=DV|52=20150713-
17:22:11|571=CICB335|856=2|570=Y|55=IPC
SP15|32=1500|31=44700.0|552=2|54=2|37=NONE|453=1|448=CICB|447=D|452=13|54=1|37=NONE|453
=2|448=BBVF|447=D|452=13|448=CICB|447=D|452=11|1=00101|10=246|
```

```
8=FIX.4.4|9=362|35=AR|49=MEXFIX|56=BBVF|34=18|50=DV|57=902|52=20150713-
17:22:11.000|55=IPC
SP15|31=44700.0|856=2|571=CICB335|939=1|751=99|32=1500|552=2|54=2|453=1|448=CICB|447=D|45
2=13|37=NONE|54=1|453=2|448=BBVF|447=D|452=13|448=CICB|447=D|452=11|37=NONE|1=00101|5
8=Position Limit Sym/Side: Additional Long 1,500 IPC SP15 (Future/IPC) exceeds Long Limit reject limit
of 1,000|10=026|
```

6. Functionality

6.1 Order Rejected due a Symbol not recognized.

When a symbol is not listed in the exchange or the RCG does not recognize the symbol, a reject (35=3) is sent to the customer informing that the symbol is not recognized.

```
8=FIX.4.4|9=181|35=D|49=CICB|56=MEXFIX|34=349|50=801|57=DV|52=20150713-
17:34:47|11=C000000349|453=1|448=CICB|447=D|452=13|1=00101|21=1|55=IPC
SP1|54=1|60=20150713-12:34:47|38=10|40=2|59=0|44=44700|10=020|
```

```
8=FIX.4.4|9=120|35=3|49=MEXFIX|56=CICB|34=347|50=DV|57=801|52=20150713-
17:34:47.000|58=Symbol does not exist in routing strategy|45=349|10=113|
```

RCG	Version: 1.4
Risk Filter validation & Functionality	Date: November, 2016
	Author: HJGE

6.2 Account/member not configured in the RCG.

The RCG will send a reject message on any new order that match with the following scenarios:

- When the account (tag 1) is not present in the new order.

```
8=FIX.4.4|9=174|35=D|49=CICB|56=MEXFIX|34=355|50=801|57=DV|52=20150713-
17:40:15|11=C000000355|453=1|448=CICB|447=D|452=13|21=1|55=IPC      SP15|54=1|60=20150713-
12:40:15|38=10|40=2|59=0|44=44700|10=212|
```

```
8=FIX.4.4|9=113|35=3|49=MEXFIX|56=CICB|34=353|50=DV|57=801|52=20150713-
17:40:15.000|58=MEXFIX_ERROR_ACCOUNT_MISSING|45=355|373=1|10=095|
```

- When the account sent in the new order does not match with a valid account or member configured in the RCG.

```
8=FIX.4.4|9=182|35=D|49=CICB|56=MEXFIX|34=359|50=801|57=DV|52=20150713-
17:43:03|11=C000000359|453=1|448=CICB|447=D|452=13|1=00109|21=1|55=IPC
SP15|54=1|60=20150713-12:43:03|38=10|40=2|59=0|44=44700|10=068|
```

```
8=FIX.4.4|9=137|35=3|49=MEXFIX|56=CICB|34=356|50=DV|57=801|52=20150713-
17:43:03.000|58=Account 00109 is not valid for Origination Firm CICB|45=359|373=1|10=058|
```

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