X-pand into the Future

eurex circular 045/16

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Market-Making quote parameters on the Common Report Engine

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Content may be most important for:	**Attachment:**
➲ All departments	XML file description

This circular is to inform you that a new XML file is now available on the Common Report Engine. This XML file contains the quotation parameters for Market-Making at Eurex Exchange.

The XML file description will also be available for download on the Eurex website www.eurexchange.com under the following link:

Trading > Market-Making Options > Market-Making quote parameters

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Attachment to Eurex circular 045/16

Eurex MMPM

XML File with Parameters for MMPM

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1 Introduction

The parameters XML file contains the parameters for MMPM, which are used to calculate the performance of market makers. The file contains the snapshot of parameters. That means this is a whole extract from the parameter set.

The file name of parameters has the following format: **NN**FILMMPARPUBLI**YYYYMMDD**.XML, for example: 90FILMMPARPUBLI20160302.XML, where NN has value 90 for production environment. YYYYMMDD is the business date of the extract.

The content of XML has the following structure. XML file contains one root element: REPORT. Under root element there are 9 elements, which represent the tables for different parameter sets. They are displayed in table below.

Table 1: Sets of Parameters

Name	**Description**
exSwMmProductScope	The scope for strategies
exSwMmStrtgParam	The definition of strategies
mmprmPckgCalSprdMtrx	The definition of Matrix for Calendar Spreads
mmprmPckgPrdParam	The definition of packages
mmprmPckgPrdQIntv	The description of quotation intervals for Program, Package, and Product
mmprmSizeClass	Size Class
mmprmSizeClassDt	Details for Size Class
mmprmSpreadClass	Spread Class
mmprmSpreadClassDt	Details for Spread Class

```
<?xml version="1.0" encoding="ISO-8859-1" standalone="no"?>
<REPORT xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <exSwMmProductScope>
  <exSwMmStrtgParam>
  <mmprmPckgCalSprdMtrx>
  <mmprmPckgPrdParam>
  <mmprmPckgPrdQIntv>
  <mmprmSizeClass>
  <mmprmSizeClassDt>
  <mmprmSpreadClass>
  <mmprmSpreadClassDt>
</REPORT>
```

Figure 1: Sets of Parameters in XML file

Every element from Table 1 contains the records with the parameters. The name of records is generates as Name of Element + “Rec”. Below we describe the parameters from different tables.

All elements in XML file contain common fields: its, businessValidFrom, and businessValidTo.

Field ITS contains the date, when the parameter was added. Fields businessValidFrom and businessValidTo contain the validity of parameters. These two fields give the possibility to show parameters, which will be applied in the **near** future. For example, we would like to select a set of parameters, which are valid for 02.03.2016. We need to open last xml file and select all parameters, where businessValidFrom <= 02.03.2016 and 02.03.2016 <= businessValidTo, or in other words 02.03.2016 between businessValidFrom and businessValidTo. The businessValidTo field can contain the artificial date 31.12.9999. This date means that the parameter is valid and the to date is not defined yet.

2 XML Elements

2.1 mmprmPckgPrdParam

Name	Description
mmProgram	Market Maker program
mmProgPackage	Market Maker package for MM program AMM. Not defined (NA) for PMM or RMM
productBusinessId	Business product ID (e.g. OGBL = Opt. on Euro-Bund Futures, DB1 = Option on Deutsche Börse)
mmQuotType	Quotation type. Possible values are PQ for permanent quotation, QR for quotation on request
applyDaysToExpSpread	Apply day to spread
expSelectionRule	Expiration selection rule
scopeExpCycleNoFrom	Expiration cycle interval start number
scopeExpCycleNoTo	Expiration cycle interval end number
requiredCoverage	Required coverage of quote obligation (answers to quote requests or daily quotation time), e.g. 0.65 for 65%
toleratedViolationDays	Maximum number of tolerated days with violation per month, e.g. 4
requiredMthlyVolumne	Required minimum monthly volume under the members M-accounts. Not in use
timeValueFactor	Time value factor. Series in the strike price window which have settled with a time value (difference between settlement price and the intrinsic value) lower than TVF times the minimum tick size will not be used for the evaluation. Not in use
aqNbrOfRelvAuct	Number of auction. Not in use
aqRequiredAuctCoverage	Required auction coverage. Not in use
requiredAvgSpread	Required average spread. Not in use
settlementPriceFactor	Settlement price factor. Series which have settled with a settlement price lower than or equal to the minimum tick size times the settlement price factor

	will not be used for the quotation on request evaluation
qrDailyCutLimit	Daily cut limit for quotation on request
qrMonthlyFloorLimit	Monthly floor limit for quotation on request
qrMaxTransactTimeDiff	Maximum time difference between two valid quotes to be concatenated to one valid quote request response
qrCloseTimeDiff	Close time difference
maxUnlInsideMktSpread	Maximum inside market spread. Not in use
minUnlInsideMktSize	Minimum inside market size. Not in use
spreadUnit	Unit of the preceding spread field. Possible values: TICK = the spread is given as a multiple of the minimum tick size, PCT = the spread is given as a percentage of the midpoint
quoteSizeQltyTrgtFct	Quote size quality target. Not in use

Example:

```
<mmprmPckgPrdParamRec>
      <mmProgram>PMM</mmProgram>
      <mmProgPackage>NA</mmProgPackage>
      <productBusinessId>DWNI</productBusinessId>
      <mmQuotType>QR</mmQuotType>
      <scopeExpCycleNoFrom>1</scopeExpCycleNoFrom>
      <scopeExpCycleNoTo>8</scopeExpCycleNoTo>
      <settlementPriceFactor>3</settlementPriceFactor>
      <qrDailyCutLimit>150</qrDailyCutLimit>
      <qrMaxTransactTimeDiff>500</qrMaxTransactTimeDiff>
      <qrCloseTimeDiff>6000</qrCloseTimeDiff>
      <its>2015-09-07</its>
      <businessValidFrom>2000-01-01</businessValidFrom>
      <businessValidTo>9999-12-31</businessValidTo>
  </mmprmPckgPrdParamRec>
```

2.2 mmprmPckgPrdQIntv

Name	Description
mmProgram	Market Maker program
mmProgPackage	Market Maker package for MM program AMM. Not defined (NA) for PMM or RMM
productBusinessId	Business product ID
mmQuotType	Quotation type. Possible values are PQ for permanent quotation, QR for quotation on request
quotationIntvNo	Serial number of quotation interval
spwCode	Reference to Strike Price Window
spreadClassCode	Reference to spread class
sizeClassCode	Reference to size class
quotationStartTime	Quotation start time. Limited by trading hours
quotationEndTime	Quotation end time. Limited by trading hours

Example:

```
<mmprmPckgPrdQIntvRec>
      <mmProgram>DMM</mmProgram>
      <mmProgPackage>NA</mmProgPackage>
      <productBusinessId>FCCO</productBusinessId>
      <mmQuotType>PQ</mmQuotType>
      <quotationIntvNo>1</quotationIntvNo>
      <spreadClassCode>DMM-FCCO  [FCCO , PQ]</spreadClassCode>
      <sizeClassCode>DMM-FCCO  [FCCO , PQ]</sizeClassCode>
      <quotationStartTime>09:00:00</quotationStartTime>
      <quotationEndTime>18:00:00</quotationEndTime>
      <its>2015-09-07</its>
      <businessValidFrom>2000-01-01</businessValidFrom>
      <businessValidTo>9999-12-31</businessValidTo>
</mmprmPckgPrdQIntvRec>
```

2.3 mmprmSizeClass

Name	Description
sizeClassCode	Size Class Code
sizeClassName	Name of size class
sizeClassDescr	Description of size class

Example:

```
<mmprmSizeClassRec>
      <sizeClassCode>ADM-SEN   [FSEN , PQ]</sizeClassCode>
      <sizeClassName>ADM-SEN   [FSEN , PQ]</sizeClassName>
      <its>2015-09-07</its>
      <businessValidFrom>2000-01-01</businessValidFrom>
      <businessValidTo>9999-12-31</businessValidTo>
</mmprmSizeClassRec>
```

2.4 mmprmSizeClassDt

Name	Description
sizeClassCode	Size Class Code
daysToExpiration	Number of trading days until expiration. 0 – the parameter is not active
expCycleNoFrom	Expiration cycle interval start number
expCycleNoTo	Expiration cycle interval end number
minQuoteSize	Minimum quote size to be compared with the order quantity of the respective quote leg
minQuoteSizeTotal	Minimum quote size total
minQuoteSizeFast	Minimum quote size in case of fast markets to be compared with the order quantity of the respective quote leg
minQuoteSizeTotalFast	Minimum quote size total in fast market
redMinQuoteSize	See above, but reduced. Not in use

redMinQuoteSizeTotal	See above, but reduced. Not in use
redMinQuoteSizeFast	See above, but reduced. Not in use
redMinQuoteSizeTotalFast	See above, but reduced. Not in use
qrHoldTime	Hold/ dwell time for quotation on request
qrResponseTime	Response time for quotation on request
maxSpreadFastIncrement	Increment factor to increase all maximum spreads in case of fast markets (e.g. 1.1)

Example:

```
<mmprmSizeClassDtRec>
      <sizeClassCode>ADM-SDFFR [P2PX , PQ]</sizeClassCode>
      <daysToExpiration>0</daysToExpiration>
      <expCycleNoFrom>1</expCycleNoFrom>
      <expCycleNoTo>1</expCycleNoTo>
      <minQuoteSize>30</minQuoteSize>
      <minQuoteSizeFast>15</minQuoteSizeFast>
      <maxSpreadFastIncrement>2</maxSpreadFastIncrement>
      <its>2015-09-07</its>
      <businessValidFrom>2000-01-01</businessValidFrom>
      <businessValidTo>9999-12-31</businessValidTo>
</mmprmSizeClassDtRec>
```

2.5 mmprmSpreadClass

Name	**Description**
spreadClassCode	Spread class code
spreadClassName	Name of spread class
spreadClassDescr	Description of spread class

Example:

```
<mmprmSpreadClassRec>
      <spreadClassCode>ADM-SDFDE [M2UV , PQ]</spreadClassCode>
      <spreadClassName>ADM-SDFDE [M2UV , PQ]</spreadClassName>
      <its>2015-09-07</its>
      <businessValidFrom>2000-01-01</businessValidFrom>
      <businessValidTo>9999-12-31</businessValidTo>
</mmprmSpreadClassRec>
```

2.6 mmprmSpreadClassDt

Name	Description
spreadClassCode	Spread class code
daysToExpiration	Number of trading days until expiration
expCycleNoFrom	Expiration cycle interval start number
expCycleNoTo	Expiration cycle interval end number
bidPriceIntervalNo	Serial number for bid price interval
bidPriceUpperBoundary	Upper bid price for this interval
maxSpread	Maximal spread of quotes with bid price in the range of minimum tick size and upper bid price for this interval
maxSpreadRed	See above, but reduced. Not in use
spreadUnit	Unit of the preceding spread field. Possible values: TICK = the spread is given as a multiple of the minimum tick size, PCT = the spread is given as a percentage of the midpoint

Example:

```
<mmprmSpreadClassDtRec>
      <spreadClassCode>PMM-OSTF  [OSTF , PQ]</spreadClassCode>
      <daysToExpiration>0</daysToExpiration>
      <expCycleNoFrom>1</expCycleNoFrom>
      <expCycleNoTo>5</expCycleNoTo>
      <bidPriceIntervalNo>1</bidPriceIntervalNo>
```

```
      <bidPriceUpperBoundary>5</bidPriceUpperBoundary>
      <maxSpread>1</maxSpread>
      <spreadUnit>TICK</spreadUnit>
      <its>2015-09-07</its>
      <businessValidFrom>2000-01-01</businessValidFrom>
      <businessValidTo>9999-12-31</businessValidTo>
</mmprmSpreadClassDtRec>
```

2.7 mmprmPckgCalSprdMtrx

Name	Description
mmProgram	Market Maker program
mmProgPackage	Market Maker package for MM program AMM. Not defined (NA) for PMM or RMM
productBusinessId	Business product ID
leg01Exp	First Expiry Leg
leg02Exp	Second Expiry Leg

Example:

```
<mmprmPckgCalSprdMtrxRec>
      <mmProgram>ADM</mmProgram>
      <mmProgPackage>F3CWR</mmProgPackage>
      <productBusinessId>FEU3</productBusinessId>
      <leg01Exp>1</leg01Exp>
      <leg02Exp>2</leg02Exp>
      <its>2015-09-07</its>
      <businessValidFrom>2000-01-01</businessValidFrom>
      <businessValidTo>9999-12-31</businessValidTo>
</mmprmPckgCalSprdMtrxRec>
```

2.8 exSwMmProductScope

Name	Description
productSetNo	Serial number of product set
productSetName	Name of product set
product	Business product ID
qrDailyCutLimit	Daily cut limit for quotation on request
qrDailyFloorLimit	Daily floor limit for quotation on request
quotationStartTime	Quotation start time. Limited by trading hours
quotationEndTime	Quotation end time. Limited by trading hours
requiredCoverage	Required Coverage

Example:

```
<exSwMmProductScopeRec>
      <productSetNo>1</productSetNo>
      <productSetName>Index Options</productSetName>
      <product>ODAX</product>
      <qrDailyCutLimit>200</qrDailyCutLimit>
      <qrDailyFloorLimit>100</qrDailyFloorLimit>
      <quotationStartTime>09:15:00</quotationStartTime>
      <quotationEndTime>17:25:00</quotationEndTime>
      <requiredCoverage>0</requiredCoverage>
      <businessValidFrom>2000-01-01</businessValidFrom>
      <businessValidTo>2015-12-31</businessValidTo>
</exSwMmProductScopeRec>
```

2.9 exSwMmStrtgParam

Name	Description
productSetNo	Serial number of product set
strategySymbol	Symbol for strategy
expCycleNFrom	Expiration cycle interval start number

expCycleNTo	Expiration cycle interval end number
strategyName	Strategy name
WITH_UNDERLYING_IND	With or without underling indicator
outrightMaxSpreadMultpl	Outright maximum spread multiplier
outrightMinQSizeMultpl	Outright minimum quote size multiplier
daysToExpFadeOut	Days to expirations
qrMaxTransactTimeDiff	Maximum time difference between two valid quotes to be concatenated to one valid quote request response
qrHoldTime	Hold time for quotation on request
qrResponseTime	Response time for quotation on request

Example:

```
<exSwMmStrtgParamRec>
      <productSetNo>1</productSetNo>
      <strategySymbol>BUL</strategySymbol>
      <expCycleNFrom>1</expCycleNFrom>
      <expCycleNTo>5</expCycleNTo>
      <strategyName>Call Spread</strategyName>
      <WITH_UNDERLYING_IND>N</WITH_UNDERLYING_IND>
      <outrightMaxSpreadMultpl>1</outrightMaxSpreadMultpl>
      <outrightMinQSizeMultpl>3</outrightMinQSizeMultpl>
      <daysToExpFadeOut>5</daysToExpFadeOut>
      <qrMaxTransactTimeDiff>500</qrMaxTransactTimeDiff>
      <qrHoldTime>2000</qrHoldTime>
      <qrResponseTime>2000</qrResponseTime>
      <businessValidFrom>2000-01-01</businessValidFrom>
      <businessValidTo>9999-12-31</businessValidTo>
</exSwMmStrtgParamRec>
```