

# Eurex MMPM

## XML File with Parameters for MMPM

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## Abstract

This document describes the parameters and structure of the daily XML file  
NNFILMMPARPUBLIYYYYMMDDXEUR.

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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 name of the parameter file is standardized and has the form of a string with the following characters: **NNFILMMPARPUBLIYYYYMMDDXEUR.XML**, as an example for one given day: **90FILMMPARPUBLI20230402XEUR.XML**, where NN has value 90 for production environment. YYYYYMMDD is the business date of the extract and XEUR signifies it is the Eurex Exchange.

The content of XML has the following structure. XML file contains one root element: “mmpar”. Under root element there are 12 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                                                                                                           |
| mmprmProductClass            | Product Class                                                                                                                      |
| mmprmRmmSpreadClass          | Spread Class for RMM                                                                                                               |
| mmprmPckgComp                | Provides a link between Product ID, Package Name and Primary flag (that separates monthly and sub-monthly expirations)             |
| <u>mmprmAdvBuildingBlock</u> | <u>Provides details on available Advanced Building Block Equations, as well as all the individual parameters connected to them</u> |

Figure 1: Sets of Parameters in XML file

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

All elements in XML file contain common fields: businessValidFrom, and businessValidTo except element 'mmprmRmmSpreadClass'

```
<xsd:complexType name="mmparType">
  <xsd:sequence>
    <xsd:element name="exSwMmProductScope" type="exSwMmProductScopeType" />
    <xsd:element name="exSwMmStrtgParam" type="exSwMmStrtgParamType" />
    <xsd:element name="mmprmPckgCalSprdMtrx" type="mmprmPckgCalSprdMtrxType" />
    <xsd:element name="mmprmPckgPrdParam" type="mmprmPckgPrdParamType" />
    <xsd:element name="mmprmPckgPrdQIntv" type="mmprmPckgPrdQIntvType" />
    <xsd:element name="mmprmSizeClass" type="mmprmSizeClassType" />
    <xsd:element name="mmprmSizeClassDt" type="mmprmSizeClassDtType" />
    <xsd:element name="mmprmSpreadClass" type="mmprmSpreadClassType" />
    <xsd:element name="mmprmSpreadClassDt" type="mmprmSpreadClassDtType" />
    <xsd:element name="mmprmProductClass" type="mmprmProductClassType" />
    <xsd:element name="mmprmRmmSpreadClass" type="mmprmRmmSpreadClassType" />
    <xsd:element name="mmprmPckgComp" type="mmprmPckgCompType" />
  </xsd:sequence>
</xsd:complexType>
```

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 02.04.2023. We need to open last xml file and select all parameters, where businessValidFrom <= 02.04.2023 and 02.04.2023 <= businessValidTo, or in other words 02.04.2023 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.

```
<xsd:element name="businessValidFrom" type="businessValidFromType" minOccurs="0" maxOccurs="1" />
<xsd:element name="businessValidTo" type="businessValidToType" minOccurs="0" maxOccurs="1" />
```

## 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.                                                                                                                                                                          |
| 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 |
| aqNbrOfRelvAuct        | Number of auction                                                                                                                                                                                                                      |
| aqRequiredAuctCoverage | Required auction coverage                                                                                                                                                                                                              |
| requiredAvgSpread      | Required average spread                                                                                                                                                                                                                |

|                       |                                                                                                                                                                                                                     |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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                                                                                                                                                                                        |
| minUnlInsideMktSize   | Minimum inside market size                                                                                                                                                                                          |
| 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.                                  |
| quoteSizeQtyTrgtFct   | Quote size quality target                                                                                                                                                                                           |
| primaryFlag           | <u>Primary Flag as defined at the end of the document</u>                                                                                                                                                           |

Example:

```
<mmpmPckgPrdParamRec>
  <mmProgram>AMM</mmProgram>
  <mmProgPackage>EFIO</mmProgPackage>
  <productBusinessId>OGBM</productBusinessId>
  <mmQuotType>PQ</mmQuotType>
  <scopeExpCycleNoFrom>1</scopeExpCycleNoFrom>
  <scopeExpCycleNoTo>3</scopeExpCycleNoTo>
  <requiredCoverage>0.9</requiredCoverage>
  <toleratedViolationDays>50</toleratedViolationDays>
  <maxUnlInsideMktSpread>0.03</maxUnlInsideMktSpread>
  <minUnlInsideMktSize>50</minUnlInsideMktSize>
  <spreadUnit>TICK</spreadUnit>
  <primaryFlag>Y</PrimaryFlag>
```

```
<businessValidFrom>27-12-2018</businessValidFrom>  
  
<businessValidTo>31-12-9999</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                                                                     |
| productClassCode   | Product Class Code                                                                          |
| quotationStartTime | Quotation start time.                                                                       |
| quotationEndTime   | Quotation end time.                                                                         |

Example:

```
<mmprmPckgPrdQIntvRec>  
  <mmProgram>AMM</mmProgram>  
  <mmProgPackage>OSTK-DE</mmProgPackage>  
  <productBusinessId>TKA</productBusinessId>  
  <mmQuotType>PQ</mmQuotType>  
  <quotationIntvNo>1</quotationIntvNo>  
  <spwCode>DR #SZ:15 #RQ07</spwCode>  
  <spreadClassCode>OSTK-2-8EXP</spreadClassCode>  
  <sizeClassCode>STD_20</sizeClassCode>
```



```
<productClassCode>EO-LC3</productClassCode>  
<quotationStartTime>09:00:00</quotationStartTime>  
<quotationEndTime>17:30:00</quotationEndTime>  
<businessValidFrom>02-07-2018</businessValidFrom>  
<businessValidTo>31-12-9999</businessValidTo>
```

```
</mmprmPckgPrdQIntvRec>
```

## 2.3 mmprmSizeClass

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

Example:

```
<mmprmSizeClassRec>  
  <sizeClassCode>EFIO</sizeClassCode>  
  <sizeClassName>EFIO</sizeClassName>  
  <businessValidFrom>01-03-2019</businessValidFrom>  
  <businessValidTo>31-12-9999</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.                                                                                        |
| redMinQuoteSizeTotal     | See above, but reduced.                                                                                        |
| redMinQuoteSizeFast      | See above, but reduced.                                                                                        |
| redMinQuoteSizeTotalFast | See above, but reduced.                                                                                        |
| 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:

```
<mmpmSizeClassDtRec>
  <sizeClassCode>STD_3_QR</sizeClassCode>
  <daysToExpiration>0</daysToExpiration>
  <expCycleNoFrom>1</expCycleNoFrom>
  <expCycleNoTo>50</expCycleNoTo>
  <minQuoteSize>3</minQuoteSize>
  <minQuoteSizeFast>1</minQuoteSizeFast>
  <qrHoldTime>1000</qrHoldTime>
  <qrResponseTime>6000</qrResponseTime>
  <maxSpreadFastIncrement>2</maxSpreadFastIncrement>
  <businessValidFrom>10-12-2018</businessValidFrom>
  <businessValidTo>31-12-9999</businessValidTo>
</mmpmSizeClassDtRec>
```

## 2.5 mmpmSpreadClass

| Name             | Description                 |
|------------------|-----------------------------|
| spreadClassCode  | Spread class code           |
| spreadClassName  | Name of spread class        |
| spreadClassDescr | Description of spread class |

Example:

```
<mmpmSpreadClassRec>
  <spreadClassCode>OVS</spreadClassCode>
  <spreadClassName>OVS</spreadClassName>
  <businessValidFrom>01-01-2020</businessValidFrom>
  <businessValidTo>31-12-2020</businessValidTo>
</mmpmSpreadClassRec>
```

## 2.6 mmpmSpreadClassDt

| 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                                                                                                                                                             |
| 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:

```
<mmpmSpreadClassDtRec>
  <spreadClassCode>FXFCM_8</spreadClassCode>
  <daysToExpiration>0</daysToExpiration>
  <expCycleNoFrom>0</expCycleNoFrom>
  <expCycleNoTo>0</expCycleNoTo>
  <bidPriceIntervalNo>1</bidPriceIntervalNo>
  <maxSpread>0.00008</maxSpread>
  <spreadUnit>TICK</spreadUnit>
  <businessValidFrom>01-06-2018</businessValidFrom>
  <businessValidTo>31-12-2027</businessValidTo>
</mmpmSpreadClassDtRec>
```

## 2.7 mmpmPckgCalSprdMtrx

| 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                                                                                                |
| leg01ExplegExp                    | <u>First Expiry Leg</u> Expiration index of the leg in <u>respective row</u>                                       |
| leg01ExpPrimaryFlalegPrimaryFlagg | Primary Flag value for first leg of the leg in <u>respective row</u> (Y or N)                                      |
| leg02Exp                          | Second Expiry Leg                                                                                                  |
| leg02ExpPrimaryFlag               | Primary Flag value for second leg (Y or N), a value of N here differentiates a basis spread from a calendar spread |
| spreadGroup                       | <u>Part of primary key for defining one particular Spread within package</u>                                       |

The spreadGroup addition makes the Calendar Spread matrix row-wise parametrizable and generalizes the possible instrument definitions for n legs ( n=4 in case of butterfly spreads). Each spread group value corresponds to 1 futures spread that can be defined with up to n-rows representing n legs. Each leg can have a separate primary flag definition.

Example:

```
<mmpmPckgCalSprdMtrxRec>
  <mmProgram>AMM</mmProgram>
  <mmProgPackage>FXFCM-WD</mmProgPackage>
  <productBusinessId>FCUY</productBusinessId>
  <leg01Exp<del>leg</del>Exp>1</leg01Exp<del>leg</del>Exp>
  <leg01ExpPrimaryFlag>Y</leg01ExpPrimaryFlag>
  <leg02Exp>3</leg02Exp>
  <leg02ExpPrimaryFlag>Y</leg02ExpPrimaryFlag>
  <legPrimaryFlag> Y </legPrimaryFlag>
  <spreadGroup> 1 </spreadGroup>
  <businessValidFrom>01-10-2019</businessValidFrom>
  <businessValidTo>31-12-9999</businessValidTo>
</mmpmPckgCalSprdMtrxRec>
```

## 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.                       |
| quotationEndTime   | Quotation end time.                         |
| requiredCoverage   | Required Coverage                           |

|             |                       |
|-------------|-----------------------|
| primaryFlag | Primary Flag (Y or N) |
|-------------|-----------------------|

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>0.5</requiredCoverage>
  <primaryFlag>Y</primaryFlag>
  <businessValidFrom>01-01-2000</businessValidFrom>
  <businessValidTo>31-12-9999</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                                                                                           |
| withUnderlyingInd       | 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>
  <withUnderlyingInd>N</withUnderlyingInd>

  <outrightMaxSpreadMultpl>1</outrightMaxSpreadMultpl>
  <outrightMinQSizeMultpl>3</outrightMinQSizeMultpl>
  <daysToExpFadeOut>5</daysToExpFadeOut>
  <qrMaxTransactTimeDiff>500</qrMaxTransactTimeDiff>
  <qrHoldTime>2000</qrHoldTime>
  <qrResponseTime>2000</qrResponseTime>
  <businessValidFrom>01-01-2000</businessValidFrom>
  <businessValidTo>31-12-9999</businessValidTo>
</exSwMmStrtgParamRec>
```

## 2.10 mmpmProductClass

| Name               | Description                                                                                                                                |
|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| productClassCode   | Product Class Code                                                                                                                         |
| factorBbSpread     | Multiplicator for tighter spread                                                                                                           |
| factorBbSize       | Multiplicator for larger size                                                                                                              |
| <u>classFactor</u> | <u>Used for adjusting Notional Values in Size Quality Aggregation. Specified in respective Product Specific Supplement, if applicable.</u> |

Example:

```
<mmpmProductClassRec>
  <productClassCode>test</productClassCode>
  <factorBbSpread>0.5</factorBbSpread>
  <factorBbSize>2</factorBbSize>
  <classFactor>0.1</ classFactor >
  <businessValidFrom>08-03-2019</businessValidFrom>
  <businessValidTo>31-12-9999</businessValidTo>
</mmpmProductClassRec>
```

## 2.11 mmpmRmmSpreadClass

| Name               | Description                                                                                                                                                                        |
|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| productBusinessId  | Business product ID                                                                                                                                                                |
| spreadClassCode    | Spread class code indication                                                                                                                                                       |
| 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                                                                                                                                               |
| maxSpread          | Maximal spread of quotes with bid price in the range of minimum tick size and upper bid price for this interval.                                                                   |
| 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. |
| quotationStartTime | Quotation start time.                                                                                                                                                              |
| quotationEndTime   | Quotation end time.                                                                                                                                                                |
| tradingHours       | Possible values: "Regular" for usual trading hours and "Extended" for extended trading hours.                                                                                      |

Example:



```
<mmpmRmmSpreadClassRec>

  <productBusinessId>TAMU</productBusinessId>

  <spreadClassCode>based_on_SMC-SSF 3</spreadClassCode>

  <daysToExpiration>0</daysToExpiration>

  <expCycleNoFrom>1</expCycleNoFrom>

  <expCycleNoTo>99</expCycleNoTo>

  <bidPriceIntervalNo>2</bidPriceIntervalNo>

  <maxSpread>0.004</maxSpread>

  <spreadUnit>PCT</spreadUnit>

  <quotationStartTime>00:00:00</quotationStartTime>

  <quotationEndTime>23:59:59</quotationEndTime>

  <tradingHours>Regular</tradingHours>

</mmpmRmmSpreadClassRec>
```

## 2.12 mmpmPckgComp

| Name                   | Description                                                                                  |
|------------------------|----------------------------------------------------------------------------------------------|
| mmProgram              | Market Maker Program                                                                         |
| mmProgPackage          | Market Maker package for MM program AMM.<br>Not defined (NA) for PMM or RMM.                 |
| productBusinessId      | Product ID                                                                                   |
| stdExpInclWeeklyQuoFrm | Is the standard expiration included in weekly requirement                                    |
| alternMandatoryInd     | Y/N Indicator for alternative mandatory product                                              |
| weeklyQuoFrmSize       | How many weeks need to be quoted                                                             |
| mandatoryFulfillInd    | Is this product mandatory to fulfil for the package (i.e. OESX Primary Flag Y for AMM-ESX50) |
| weeklyOptionInd        | Is this a weekly option (parameter redundant as of 01.04.2023 as primary flag is to be used) |
| primaryFlag            | Primary Flag (Y or N or W or E or D)                                                         |

|                    |                                                                                                                    |
|--------------------|--------------------------------------------------------------------------------------------------------------------|
| quarterlyExpInd    | As of 01.04.2023 this parameter is not in use                                                                      |
| underlyingIsinOvrd | If the underlying ISIN overridden from master data with another ISIN the overridden ISIN is provided in this field |

Example:

```
<mmpmPckgCompRec>
  <mmProgram>AMM</mmProgram>
  <mmProgPackage>ESX-WE</mmProgPackage>
  <productBusinessId>OESX</productBusinessId>
  <stdExpInclWeeklyQuoFrm>N</stdExpInclWeeklyQuoFrm>
  <alternMandatoryInd>N</alternMandatoryInd>
  <weeklyQuoFrmSize>4</weeklyQuoFrmSize>
  <mandatoryFulfillInd>N</mandatoryFulfillInd>
  <weeklyOptionInd>Y</weeklyOptionInd>
  <primaryFlag>N</primaryFlag>
  <businessValidFrom>01-04-2023</businessValidFrom>
  <businessValidTo>31-12-2023</businessValidTo>
</mmpmPckgCompRec>
```

**Primary Flag Value explanation:** The Primary Flag on mmpmPckgComp is used to define which instruments are in scope of the package based on Primary Flag / Contract Frequency ID. Each value corresponds to a packaging rule and only those instruments of the product will be considered in measurement as this flag dictates. As only AMM packages are defined on this table, only AMM packages are under scope. PMM packages are by default Primary Flag = Y.

Y -> All instruments with Primary Flag Y are under scope. E.G. AMM-OSTK-CH packages only primary expirations of the selected CH Equity Options, ignoring any non-Primary (sub monthly) expirations. If the package has first 10 expirations under scope, only 10 primary expirations are counted.

N -> All instruments with Primary Flag N are under scope. E.G. AMM-ESX-WE packages only non-primary expirations of OESX, ignoring any Primary (monthly or longer) expirations. All types of non-primary expirations are in scope ("W" + "E"). If the package has first 4 expirations under scope, only 4 non-primary expirations are counted.

W -> All instruments with Contract Frequency ID "W" are under scope. E.G. AMM-OEXP\_W only packages those instruments with a weekly contract frequency ID, ignoring any other non-primary expirations of that product. If the package has first 5 expirations under scope, only 5 weekly expirations are counted.

E -> All instruments with Contract Frequency ID "E" are under scope. E.G. AMM-OEXP\_E only packages those instruments with an end-of month contract frequency ID, ignoring any other non-primary

expirations of that product. If the package has 1 expiration under scope, only the first end of month expiration is counted.

D -> Only used for 0DTE as an alternative to usage of two packages (“E” + “W”). Both “E” and “W” are in scope. Furthermore all weekly expirations (“W”) are in scope which are tradable on a given trading day and only the first X end-of month as defined on mmprmPckgPrdParam (scopeExpCycleNoFrom : scopeExpCycleNoTo

C -> Combined. The expiry index is formed regardless of the value of the primary flag. First 10 expiries with package Primary Flag = “C” would mean that first 10 expiries of Primary and Non-Primary are in scope.

Addition of Primary Flag on mmprmPckgPrdParam serves the purpose of being able to define a row wise expiration scope for Primary Flag = “Y” and Primary Flag = “N” separately as in below example

| Product ID | mmProg | mmPackage | scopeExpCycleNoFrom | scopeExpCycleNoFTo | Other Parameters | Primary Flag |
|------------|--------|-----------|---------------------|--------------------|------------------|--------------|
| DBK        | AMM    | SSO       | 1                   | 4                  | ...              | Y            |
| DBK        | AMM    | SSO       | 1                   | 2                  |                  | N            |

In this example the product DBK will have in scope first 4 primary and first 2 non-primary expiries within package AMM-SSO

## 2.13 mmprmAdvBuildingBlock

| Name              | Description                                                                               |
|-------------------|-------------------------------------------------------------------------------------------|
| mmProgram         | Market Maker program.                                                                     |
| mmProgPackage     | Market Maker package for MM program AMM. Not defined (NA) for PMM or RMM.                 |
| productBusinessId | productBusinessId                                                                         |
| maxRebate         | 0%-100% maximum rebate achievable from the respective Sliding Scale equation              |
| maxSpreadRebate   | 0%-MAX_REBATE indicates whether there is a cap available for the Spread Quality Component |
| maxSizeRebate     | 0%-MAX_REBATE indicates whether there is a cap available for the Size Quality Component   |
| spreadFactor      | Fixed Weight that multiplies Spread Quality in the Rebate% Equation                       |
| sizeFactor        | Fixed Weight that multiplies Size Quality in the Rebate% Equation                         |

|                         |                                                                              |
|-------------------------|------------------------------------------------------------------------------|
| numberOfProductsFactor  | Fixed Weight that multiplies n in the Rebate% Equation                       |
| numberOfStrikeFactor    | Fixed Weight that multiplies m in the Rebate% Equation                       |
| strategyComponentFactor | Fixed Weight that multiplies s in the Rebate% Equation                       |
| maxNRebate              | 0%-MAX_REBATE indicates whether there is a cap available for the n Component |
| maxMRebate              | 0%-MAX_REBATE indicates whether there is a cap available for the m Component |
| maxSRebate              | 0%-MAX_REBATE indicates whether there is a cap available for the s Component |

**Example:**

```

<mmpmAdvBuildingBlock>
  <mmProgram>AMM</mmProgram>
  <mmProgPackage>ESX-WE</mmProgPackage>
  <productBusinessId>OESX</productBusinessId>
  <maxRebate>0.40</maxRebate>
  <maxSpreadRebate> 0.20 </maxSpreadRebate>
  <maxSizeRebate>0.354</maxSizeRebate>
  <spreadFactor>0.20</spreadFactor>
  <sizeFactor>0.20</sizeFactor>
  <numberOfProductsFactor>0.123</numberOfProductsFactor>
  <numberOfStrikeFactor>0.123</numberOfStrikeFactor>
  <strategyComponentFactor>0.123</strategyComponentFactor>
  <maxNRebate>0.123</maxNRebate>
  <maxMRebate>0.123</maxMRebate>
  <maxSRebate>0.123</maxSRebate>
  <businessValidFrom>01-04-2026</businessValidFrom>
  <businessValidTo>31-12-2026</businessValidTo>
</ mmpmAdvBuildingBlock >

```