Program 1 "Futures contracts on USD/RUB, EU/RUB, EU/USD"

1. The table below shows instruments and their designations for which the Contractors must maintain quotes and/or trading volume during the trading sessions on the Moscow Exchange Derivatives Market in accordance with this Program:

Instrument designation	Instrument name
k=1	Futures contract on USD/RUB
k=2	Futures contract on EUR/RUB
k=3	Futures contract on EUR/USD

- 2. Conditions for the Contractors' obligations to be fulfilled
- 2.1. The following definitions are used to set the Contractors' obligations parameters:

Bid/ask quote spread	The maximum difference between the best bid and the best ask on the orders submitted by the Market Maker with respect to the Instrument. The value of the Spread of two-sided quotes is determined by the formula: SpreadMM = a * SPi, where: a - a constant determined for the Instrument in paragraph 2.2.1. of this Program and expressed in%; SPi - The settlement price of the Instrument with the i-th contract month, determined on the basis of the Daily clearing session (intermediate clearing). The spread is determined by the value used for determination of the Instrument's price as set out in the Specifications.
Best bid	The price of an order to buy entered by Contractor 1 with respect to the Instrument, which volume (considering the volume of all Contractor 1's orders to buy at the same price or higher) is no less than the minimum required order volume.
Best ask	The price of an order to sell entered by Contractor 1 with respect to the Instrument, which volume (considering the volume of all Contractor 1's orders to sell at the same price or lower) is no less than the minimum required order volume.
Quantum	The period of the Trading Session during which the Contractor 1 must enter orders. Quanta are designated as q= 1, 2, (where 1, 2, – the Quantum sequence number). The Quantum duration (Ts) is in seconds.
Nearest contract month for	The contract month of the Instrument that is as close as
the Instrument	possible to the Trading Day on which quotes are maintained
	for such Instrument. Such contract month is designated as i=n
	(where $n=1, 2,$ – the sequence number of the expiration
	date of the Instrument).
Next contract month for the Instrument	The contract month determined as $i=n+1$.
Reporting Period	A calendar month.
Historical Volatility Value	The value determined at the end of the main clearing session:
	$\sigma_T = \sqrt{\frac{\sum_{j=T-2}^T (R_j - \bar{R})^2}{2}}$, where $R_j = \frac{P_j - P_{j-1}}{ P_{j-1} }$, P – Settlement
	Price for the Instrument determined at the end of the evening
	clearing session (main clearing), T – the sequence number of

	the Trading Day for calculating Historical Volatility Value, j
	- the Trading Day sequence number. When the Historical
	Volatility Value equals to or greater than the Volatility
	Threshold Value for the Instrument as indicated in clause
	2.2.1. of this Program, the Trading Day T+1 shall mean the
	start of the Period of Heightened Volatility.
Period of Increased Volatility	The period during which multiplying factors s and n indicated in clause 2.2.1 below shall apply to the Bid/ask quote spread and Minimum quoted size values. The Period of Increased Volatility starts on the Trading Day when the Historical Volatility Value reaches or exceeds Volatility Threshold Value for the Instrument as indicated in clause 2.2.1. of this Program and designated as σ_{high} .
	The period of Increased Volatility ends on the Trading Day when the Historical Volatility Value becomes less or equal to the value calculated according to the following formula: $\sigma_{average} = \frac{\sum_{j=J-1}^{J-31} \sigma_j}{30}, \text{ where J-Trading Day on which the Period of Increased Volatility starts.}$

Terms that are not specified in this Program are used in the values, the land of internal documents of the Public Joint-Stock Company "Moscow Exchange MICEX-RTS" (hereinafter - the Exchange) and the National Settlement Depository, and in the absence of such terms - in accordance with the current legislation of the Russian Federation.

2.2. Contractors' obligations parameters

2.2.1. The Contractors shall perform only with regard to contract months specified in Tables 1-9 below:

Table 1

Conditions for maintaining two-sided quotes for the futures contract on USD/RUB k=1 during			
Quantum q=1			
Market making obligations	The first contract month (i=1)	Quantum start-	
parameters	Whole period	Quantum end (q=1)	
1. Performance option, m	1		
2. Bid/ask quote spread ($Spread_{MM}$, in the Instrument price unit as per the Specification)	$a*SP_i$, where $a = 0.09\%$		
3. Minimum quoted size (in contracts)	1000	10:00 MSK	
4. Minimum length of time to maintain two-sided quotes (in per cent of the Quantum)	80	(UTC+3) – 18:45 MSK (UTC+3)	
5. Volatility threshold value σ_{high} (in %)	3	(010+3)	
6. Multiplying factor s for a Bid/ask quote spread	2		
7. Multiplying factor v for a Minimum quoted size	0.5		

Table 2

Conditions for maintaining two-sided quotes for the futures contract on USD/RUB k=1 during Quantum q=1

Market making obligations parameters	The second contract month (i=2) Whole period	The third contract month (i=3) Whole period	The forth contract month (i=4) Whole period	Quantum start- Quantum end (q=1)
Performance option, m	·	2	·	
2. Bid/ask quote spread ($Spread_{MM}$, in the Instrument price unit as per the Specification)	$a*SP_i$, where $a = 0.135\%$	a*SP _i , where a = 0.29%	$a*SP_i,$ where $a=0.58\%$	
3. Minimum quoted size (in contracts)	1000	1000	1000	10:00
4. Minimum length of time to maintain two-sided quotes (in per cent of the Quantum)	60	60	60	MSK (UTC+3) - 18:45 MSK
5. Volatility threshold value σ_{high} (in %)	3	3	3	(UTC+3)
6. Multiplying factor s for a Bid/ask quote spread	2	2	2	
7. Multiplying factor v for a Minimum quoted size	0.5	0.5	0.5	

Table 3

Conditions for maintaining two-sided quotes for the futures contract on USD/RUB k=1 during			
Quantum q=2			
Market making obligations	The first contract month (i=1)	Quantum start-	
parameters	Whole period	Quantum end (q=2)	
1. Performance option, m	3		
2. Bid/ask quote spread			
$(Spread_{MM})$, in the Instrument price	$a*SP_i$, where $a = 0.112\%$		
unit as per the Specification)			
3. Minimum quoted size (in	1000	19:00 MSK	
contracts)	1000		
4. Minimum length of time to		(UTC+3)	
maintain two-sided quotes (in per	60	_	
cent of the Quantum)		23:50 MSK	
5. Volatility threshold value σ_{high}	3	(UTC+3)	
(in %)	3		
6. Multiplying factor s for a Bid/ask	2		
quote spread	<u> </u>		
7. Multiplying factor v for a	0.5		
Minimum quoted size	0.3		

Table 4

Conditions for maintaining two-sided quotes for the futures contract on EUR/RUB k=2 during			
Quantum q=1			
Market making obligations	The first contract month (i=1)	Quantum start-	
parameters	Whole period	Quantum end (q=1)	
1. Performance option, m	1		

2. Bid/ask quote spread (<i>Spread_{MM}</i> ,in the Instrument price unit as per the Specification)	$a*SP_i$, where $a = 0.10\%$	
3. Minimum quoted size (in contracts)	500	
4.Minimum length of time to maintain two-sided quotes (in per cent of the Quantum)	80	10:00 MSK (UTC+3) – 18:45 MSK
5. Volatility threshold value σ_{high} (in %)	3	(UTC+3)
6.Multiplying factor s for a Bid/ask quote spread	2	
7.Multiplying factor v for a Minimum quoted size	0.5	

Table 5

Conditions for maintaining two-sided quotes for the futures contract on EUR/RUB k=2 during Ouantum q=1			
Market making obligations	The second contract month (i=2)	Quantum start-	
parameters	Whole period	Quantum end (q=1)	
1. Performance option, m	2		
2. Bid/ask quote spread ($Spread_{MM}$, in the Instrument price unit as per the	$a*SP_{i}$, where $a = 0.165\%$		
Specification)	$a^{+}SF_{1}$, where $a = 0.10370$		
3.Minimum quoted size (in	500		
contracts)		10:00 MSK	
4.Minimum length of time to maintain two-sided quotes (in per cent of the Quantum)	60	(UTC+3) – 18:45 MSK	
5. Volatility threshold value σ_{high} (in %)	3	(UTC+3)	
6.Multiplying factor s for a Bid/ask quote spread	2	-	
7.Multiplying factor v for a Minimum quoted size	0.5		

Table 6

Conditions for maintaining two-sided quotes for the futures contract on EUR/RUB k=2 during Quantum q=2			
Market making obligations	The first contract month (i=1)	Quantum start-	
parameters	Whole period	Quantum end (q=2)	
1. Performance option, m	3		
2. Bid/ask quote spread ($Spread_{MM}$, in the Instrument price unit as per the Specification)	$a*SP_i$, where $a = 0.13\%$		
3. Minimum quoted size (in contracts)	500	19:00 MSK	
4. Minimum length of time to maintain two-sided quotes (in per cent of the Quantum)	60	(UTC+3) - 23:50 MSK	
5. Volatility threshold value σ_{high} (in %)	3	(UTC+3)	
6. Multiplying factor s for a Bid/ask quote spread	2		
7. Multiplying factor v for a Minimum quoted size	0.5		

Table 7

Conditions for maintaining two-sided quotes for the futures contract on EUR/USD k=3 during		
	Quantum q=1	
Market making obligations	The first contract month (i=1)	Quantum start-
parameters	Whole period	Quantum end (q=1)
1. Performance option, m	1	
2. Bid/ask quote spread		
$(Spread_{MM})$, in the Instrument price	a*SPi, where $a = 0.05%$	
unit as per the Specification)		
3. Minimum quoted size (in	500	
contracts)	500	10:00 MSK
4. Minimum length of time to		(UTC+3) –
maintain two-sided quotes (in per	80	18:45 MSK
cent of the Quantum)		(UTC+3)
5. Volatility threshold value σ_{high}	1	(010+3)
(in %)	1	
6. Multiplying factor s for a Bid/ask	2	
quote spread	2	
7. Multiplying factor v for a	0.5	
Minimum quoted size	0.5	

Table 8

Conditions for maintaining two-sided quotes for the futures contract on EUR/USD k=3 during Ouantum q=1			
Market making obligations	The second contract month (i=2)	Quantum start-	
parameters	Whole period	Quantum end (q=1)	
1. Performance option, m	2		
2. Bid/ask quote spread ($Spread_{MM}$, in the Instrument price unit as per the Specification)	a*SPi, where $a = 0.085%$		
3. Minimum quoted size (in contracts)	500	10:00 MSK	
4. Minimum length of time to maintain two-sided quotes (in per cent of the Quantum)	60	(UTC+3) – 18:45 MSK (UTC+3)	
5. Volatility threshold value σ_{high} (in %)	1	(010+3)	
6. Multiplying factor s for a Bid/ask quote spread	2		
7. Multiplying factor v for a Minimum quoted size	0.5		

Table 9

Conditions for maintaining two-sided quotes for the futures contract on EUR/USD k=3 during				
Quantum q=2				
Market making obligations	The first contract month (i=1)	Quantum start-		
parameters	Whole period	Quantum end (q=2)		
1. Performance option, m	3			
2. Bid/ask quote spread				
($Spread_{MM}$, in the Instrument price	a*SPi, where $a = 0.06%$	19:00 MSK		
unit as per the Specification)		(UTC+3)		
3. Minimum quoted size (in	500	_		
contracts)	300	23:50 MSK		
4. Minimum length of time to		(UTC+3)		
maintain two-sided quotes (in per	60			
cent of the Quantum)				

5. Volatility threshold value σ_{high}	1	
(in %)	1	
6. Multiplying factor s for a Bid/ask	2	
quote spread	2	
7. Multiplying factor v for a	0.5	
Minimum quoted size	0.5	

- 2.2.2. The nearest and the next contract month of the Instrument are the nearest and the next dates of the expiration of the relevant Instrument, attributable to March, June, September and December, respectively.
- 2.3. In the Reporting Period of each the qth Quantum on the Trading Day, the Market Maker may seven (7) times a maximum not meet a parameter of market maker obligations for each of the performance option m=1, m=2, and m=3 provided for in paragraph 2.2. hereof in respect of the kth Instrument with the ith settlement period. If during the Reporting Period the Market Maker breaches these conditions in respect of any kth Instrument within the mth performance option, such services shall be considered not to have been rendered for all Instruments listed in Clause 1 above.

3. Contractors' compensation

The amount of compensation that the Contractors receive for fulfilling their obligations for Instrument during the Reporting Period on the terms set out in Clauses 1-2 above, subject to paragraph 2.3. of this Program is:

- a. The amount of remuneration determined by Formulas 1 to 5 in relation to each group of the clearing registers section codes which are used to perform the Contractors' obligations under this Program based on the market making agreement with the Exchange provided by the Market Maker services full in accordance with the parameters of obligations provided for in Tables 1 to 9 of paragraph 2.2.2. of this Program in respect of the kth Instrument. The maximum remuneration receivable under this paragraph is RUB 3,000,000 (three million);
- b. For m=1: the amount of remuneration determined by Formulas 1 to 2 in relation to each group of the clearing registers section codes which are used to perform the Contractors' obligations under this Program based on the market making agreement with the Exchange provided by the Market Maker services full in accordance with the parameters of obligations provided for in Tables 1, 4, 7 of paragraph 2.2.1. of this Program in respect of the kth Instrument. The maximum remuneration receivable under this paragraph is RUB 1,000,000 (one million);
- c. For m=2: the amount of remuneration determined by Formulas 3 to 4 in relation to each group of the clearing registers section codes which are used to perform the Contractors' obligations under this Program based on the market making agreement with the Exchange provided by the Market Maker services full in accordance with the parameters of obligations provided for in Tables 2, 5, 8 of paragraph 2.2.1. of this Program in respect of the kth Instrument. The maximum remuneration receivable under this paragraph is RUB 1,000,000 (one million);
- d. For m=3: the amount of remuneration determined by Formulas 3 and 5 in relation to each group of the clearing registers section codes which are used to perform the Contractors' obligations under this Program based on the market making agreement with the Exchange provided by the Market Maker services full in accordance with the

parameters of obligations provided for in Tables 3, 6, 9 of paragraph 2.2.1. of this Program in respect of the kth Instrument The maximum remuneration receivable under this paragraph is RUB 1,000,000 (one million).

Formula 1:

$$\begin{split} Y \times \sum_{q,j,k,i} Fee_{passive}^{k,i,j,q} \times I_{q,i,}^{1}(Pcf_{j,q,}^{k,i}; Pcn_{j,q,}^{k,i}) \\ \text{If q=1} \\ Y \times \sum_{q,j,k,i} Fee_{passive}^{k,i,j,1} \times I_{1,i}^{1}(Pcf_{j,1}^{k,i}; Pcn_{j,1}^{k,i}) \text{, where} \end{split}$$

• $I_{1,i}^1$ may vary as follows:

$$I_{1,i}^{1}(Pcf_{j,1}^{k,i}; Pcn_{j,1}^{k,i}) = \begin{cases} 1, & \text{if } Pcf_{j,1}^{k,i} \ge 80\% \\ 0, & \text{otherwise} \end{cases}$$

$$Y-\text{ the coefficient that may vary as follows:}$$

Instrument designation	Instrument name	Y
k=1	Futures contracts on USD/RUB	0.25
k=2	Futures contracts on EUR/RUB	0.50
k=3	Futures contracts on EUR/USD	0.50

- $Fee \frac{k,i,j,q}{active}$ the amount of exchange fee and commission for clearing charged to Contractor 1 for market trades executed in the kth Instrument with the ith contract month similar to those specified in Clause 2.2 above, during the qth Quantum on the jth Trading Day based on unaddressed orders entered by such Contractor 1 as instructed by Contractor 2 and with the clearing registers section codes which are used to perform the Contractors' obligations under this Program based on the market making agreement with the Exchange, provided that these orders are registered in the Order Register with larger numbers than the relevant counter orders for the corresponding Paired Transactions¹;
- $Fee_{passive}^{k,i,j,q}$ the amount of exchange fee and commission for clearing charged to Contractor $\hat{1}$ for market trades executed in the k^{th} Instrument with the i^{th} contract month similar to those specified in Clause 2.2 above, during the qth Quantum on the jth Trading Day based on unaddressed orders entered by such Contractor 1 as instructed by Contractor 2 and with the clearing registers section codes which are used to perform the Contractors' obligations under this Program based on the market making agreement with the Exchange, provided that these orders are registered in the Order Register with lower numbers than the relevant counter orders for the corresponding Paired Transactions;

¹ As defined in the CCP NCC Clearing Rules for Moscow Exchange Derivatives Market

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- $Pcf_{j,q}^{k,i}$ the actual length of time during which the Contractors maintain Bid/Ask Quote Spread for the kth Instrument with the ith contract month during the qth Quantum on the jth Trading Day, on terms set out in Clause 2.2 above (per cent of the Quantum length);
- $Pcn_{j,q}^{k,i}$ the minimum length of time during which the Contractors shall maintain Bid/Ask Quote Spread for the kth Instrument with the ith contract month during the qth Quantum on the jth Trading Day, on terms set out in Clause 2.2 above (per cent of the Quantum length);
 - k = 1, 2, ... the sequence number of the relevant Instrument as specified in Clause 1 above;
 - i = 1, 2, ... the sequence number of the contract month as specified in Clause 1 above;
 - j = 1, 2, ... the sequence number of the Trading Day in the relevant month;
 - q = 1, 2, ... the sequence number of the Quantum as specified in Clause 2.2.1 above.

Formula 2:

$$F = \begin{cases} 0.50 \times \sum_{q,j,k,i} Fee \frac{k,i,j,q}{passive}, if N = 1\\ 0.45 \times \sum_{q,j,k,i} Fee \frac{k,i,j,q}{passive}, if N = 2\\ 0.40 \times \sum_{q,j,k,i} Fee \frac{k,i,j,q}{passive}, if N = 3\\ 0.35 \times \sum_{q,j,k,i} Fee \frac{k,i,j,q}{passive}, if N = 4\\ 0.30 \times \sum_{q,j,k,i} Fee \frac{k,i,j,q}{passive}, if N = 5\\ 0, otherwise \end{cases}$$

$$F = \begin{cases} 0.50 \times \sum_{q,j,k,i} Fee & \substack{k,i,j,1 \\ passive}, if \ N = 1 \\ 0.45 \times \sum_{q,j,k,i} Fee & \substack{k,i,j,1 \\ passive}, if \ N = 2 \\ 0.40 \times \sum_{q,j,k,i} Fee & \substack{k,i,j,1 \\ passive}, if \ N = 3 \\ 0.35 \times \sum_{q,j,k,i} Fee & \substack{k,i,j,1 \\ passive}, if \ N = 4 \\ 0.30 \times \sum_{q,j,k,i} Fee & \substack{k,i,j,1 \\ passive}, if \ N = 5 \\ 0, otherwise \end{cases}$$

Where:

N – the position of Contractor 1 in the rating by the end of the Reporting Period which is determined by the ranking (R) of Contractor 1 in the rating of all market makers assuming that N=1 for max R in the rating of all market makers. In this case, R is determined as follows:

$$R = \sum_{q,j,k,i} R_{j,q}^{k,i} = \sum_{q,j,k,i} \frac{VT_{j,q pasMM}^{k,i}}{VT_{j,qpasTotal}^{k,i}}$$

Where:

- $R_{j,q}^{k,i}$ the rating value of Contractor 1 on the jth Trading Day for the kth Instrument with the ith contract month;
- $VT_{j,q\;pasMM}^{k,i}$ the actual volume of the Derivatives transactions in contracts as executed during the qth Quantum on the jth Trading Day for the kth Instrument with the contract months specified in clause 2.2. above, based on unaddressed orders entered by Contractor 1 as instructed by Contractor 2 and containing the clearing registers section codes which are used to perform the Contractors' obligations under this Program based on the market making agreement with the Exchange (provided that these orders are registered in the Order Register with smaller numbers than the corresponding counterparty order numbers for the relevant Paired transactions that do not contain the clearing registers section codes which are used to perform the Contractors' obligations under this Program based on the market making agreement with the Exchange);
- $VT_{j,q\;pasTotal}^{k,i}$ the actual volume of the Derivatives transactions in contracts as executed during the qth Quantum on the jth Trading Day with respect to the kth Instrument with the contract months specified in clause 2.2. above, based on unaddressed orders entered by all market makers and containing the clearing registers section codes which are used to perform the Contractors' obligations under this Program based on the market making agreement with the Exchange (provided that these orders are registered in the Order Register with smaller numbers than the corresponding counterparty order numbers for the relevant Paired transactions that do not contain the clearing registers section codes which are used to perform all the Contractors' obligations under this Program based on the market making agreements with the Exchange).

Formula 3:

$$\begin{array}{l} 0.250\times\sum_{q,j,k,i}Fee_{active}^{k,i,j,q}\times\left(I_{q,i}^{2}\left(Pcf_{j,q}^{k,i};Pcn_{j,q}^{k,i}\right)+1\right)+\\ +0.375\times\sum_{q,j,k,i}Fee_{passive}^{k,i,j,q}\times\left(I_{q,i}^{2}\left(Pcf_{j,q}^{k,i};Pcn_{j,q}^{k,i}\right)+1\right)\\ \text{If q=1}\\ 0.250\times\sum_{q,j,k,i}Fee_{active}^{k,i,j,1}\times\left(I_{1,i}^{2}\left(Pcf_{j,1}^{k,i};Pcn_{j,1}^{k,i}\right)+1\right)+\\ +0.375\times\sum_{q,j,k,i}Fee_{passive}^{k,i,j,1}\times\left(I_{1,i}^{2}\left(Pcf_{j,1}^{k,i};Pcn_{j,1}^{k,i}\right)+1\right)\\ \text{If q=2}\\ 0.250\times\sum_{q,j,k,i}Fee_{active}^{k,i,j,2}\times\left(I_{2,i}^{2}\left(Pcf_{j,2}^{k,i};Pcn_{j,2}^{k,i}\right)+1\right)+\\ \end{array}$$

+ 0.375 ×
$$\sum_{q,j,k,i} Fee_{passive}^{k,i,j,2} \times (I_{2,i}^{2}(Pcf_{j,2}^{k,i};Pcn_{j,2}^{k,i}) + 1)$$

Where:

 $I_{q,i}^2$ is determined as follows:

$$I_{q,i}^{2}(Pcf_{j,q}^{k,i}; Pcn_{j,q}^{k,i}) = \begin{cases} 1, \text{if } Pcf_{j,q}^{k,i} \ge 80\% \\ \left(\frac{\left(Pcf_{j,q}^{k,i} - Pcn_{j,q}^{k,i}\right)}{\left(80\% - Pcn_{j,q}^{k,i}\right)}\right)^{5}, \text{if } Pcn_{j,q}^{k,i} \le Pcf_{j,q}^{k,i} < 80\% \\ -1, \text{otherwise} \end{cases}$$

Formula 4:

$$\frac{\sum_{q,j,k,i} \max(0; I_{q,i}^{2}(Pcf_{j,q}^{k,i}; Pcn_{j,q}^{k,i}) \times (S_{2} - S_{1}) + S_{1})}{\sum_{j,k,q} K_{j}^{k,q}}$$

$$\begin{aligned} &\text{If q=1} \\ &\frac{\sum_{q,j,k,i} \max{(0;I_{1,i}^2 \left(Pcf_{j,1}^{k,i};Pcn_{j,1}^{k,i}\right)} \times (S_2 - S_1) + S_1)}{\sum_{j,k,q} K_j^{k,1}} \end{aligned}$$

Where:

- $S_3 RUB 75 000$ (seventy-five thousand);
- S₄– RUB 150 000 (one hundred and fifty thousand);
- $K_{j,m}^{k,q}$ the number of maturities for the kth Instrument for which the Contractors must adhere to terms of maintain Bid/Ask Quote Spread as set out in Clause 2.2 above during the qth quant on the jth Trading Day.

Formula 5:

$$\frac{\sum_{q,j,k,i} \max(0; I_{q,i}^{2}(Pcf_{j,q}^{k,i}; Pcn_{j,q}^{k,i}) \times (S_{6} - S_{5}) + S_{5})}{\sum_{j,k,q} K_{j}^{k,q}}$$

If q=2

$$\frac{\sum_{q,j,k,i} \max(0; I_{2,i}^{2}(Pcf_{j,2}^{k,i}; Pcn_{j,2}^{k,i}) \times (S_{6} - S_{5}) + S_{5})}{\sum_{j,k,q} K_{j}^{k,2}}$$

Where:

• S_5 – RUB 45 000 (Fourty-five thousand);

- S_6 RUB 90 000 (Ninety thousand).
- 3.2. If the Exchange reasonably believes based on information in its possession that the Contractors have committed some form of misconduct, it is entitled to cancel the Contractor 1 rating for the Reporting Period or for a certain Trading Day(s) in such Reporting Period.