## **RTS 28 Quality of Execution Annual Report**

Firm: PGGM Vermogensbeheer BV Calendar Year Disclosure Period: 1 January 2019 to 31 December 2019 Date: 20 April 2020

Summary of classes of instruments included in this report, and class of instruments not included in this report (because PGGM has not executed client orders in that class of instruments)<sup>1</sup>:

Classes of instruments included in this report

- Debt Instruments
- Equities
- Credit derivatives
- Futures

RTS 28 reporting requires firms to classify executed orders as "passive", "aggressive" or "directed", where these are defined as the following:

- "passive" order means an order entered into the order book that provided liquidity;
- "aggressive" order means an order entered into the order book that took liquidity;
- "directed" order means an order where a specific execution venue was specified by the client prior to the execution of the order.

Only orders executed directly on exchange would be eligible for this "passive" or "aggressive" classification. This not the case with PGGM. Trading volume identified as "passive" or "aggressive" in the following reporting is therefore not applicable.

PGGM does not have any client relationships where the client directs PGGM to use a specific venue. There are therefore no directed orders.

<sup>&</sup>lt;sup>1</sup> As defined in Annex 1 of <u>RTS 28</u>.

Class of instrument	Debt Instruments
General observations	Debt instruments include both bonds and money market instruments.
	Summary of analysis
Execution factors	PGGM defines the best possible result as a proper balance between cost, service and client added value within the existing risk and regulatory frameworks. PGGM takes into account the following factors:
	<ul> <li>Sustainability factors</li> <li>Relationship factors</li> <li>Service consistency</li> <li>Footprint</li> <li>Price</li> <li>Cost of execution</li> <li>Nature and size of the order</li> <li>Speed and likelihood of execution</li> <li>Settlement factors</li> <li>All other relevant factors</li> </ul> Cost is determined as total cost. This includes price, and all other costs of execution, such as venue rebates, clearing cost, settlement cost and/or third party execution
	cost. Best Execution is a process that cannot always be drilled down to a single execution. Elements such as sustainability factors, relationship factors and service consistency need to be monitored and valued over a longer period of time.
Close links, conflicts of interest and	Close links PGGM has no close links with execution venues/brokers that were used to execute orders
common ownership with respect	Conflicts of interest PGGM has no conflicts of interest to report.
to execution venues	Common ownerships PGGM has no common ownership to report.
Specific arrangements with execution venues regarding payments made or	PGGM has no specific arrangements to report.

received,	
discounts,	
rebates or	
non-monetary	
benefits	
received	
Factors	There were no changes to the list of execution venues/brokers in PGGM's Order Execution Policy.
leading to a	
change in the	
list of	
execution	
venues listed	
in the order	
execution	
policy	
Differentiation	N/A - all of PGGM's clients are classified as professional clients
across client	
categories	
Use of data /	PGGM has used the data and/or tools relating to quality of execution coming from:
tools relating	
to quality of	Order management System
execution	Trading venues
	In house TCA report
	In house Broker review
Use of	PGGM has not used output from consolidated tape providers, as no useful consolidated tape data was available in 2019 for this instrument type.
consolidated	
tape provider	
output	
Use of DEA	No direct electronic access to execution venues we used. The list of the top 5 venues:

	Class of Instrument	Debt Instruments N					
	Notification if <1 average trade per business day in the prvious year						
	Top 5 Venues in terms of volume (descending order)	•	Proportion of orders executed traded as a percentage of total in that class	Percentage of passive orders	Percentage of agressive orders	Percentage of directed orders	
	XFRA						
	Deutsche Boerse AG	27,92%	8,72%	na	na	na	
	XPAR Euronext Paris S.A	21,61%	4,10%	na	na	na	
	XAMS Euronext Amsterdam	17,53%	3,89%	na	na	na	
	XBRU Euronext Brussels	10,71%	2,52%	na	na	na	
	XHEL The Helsinki Stock Exchange	3,76%		na	na	na	
Conclusion	PGGM evaluates both the execution as well as its counterparties along the benchmark of its best execution definition. To evaluate brokers and counterparties a broker review is used. The 2019 broker review indicates that counterparties used acted in line with PGGM's best execution policy.					∕l's best executio	
	Evaluation of transactions is done via a Transaction transactions. The 2019 TCA report indicates that PC			footprint on a tra	ansaction basis	as well as over a	
	An exemption report is set up and is monitored by C	compliance. In 2019 no incide	nts were reported.				
		of functionality counternarties	connected, liquidity offered and us	ser-friendliness.	Periodically PG	GM evaluates th	
	Electronic trading platforms are selected on basis of offerings available in the market to see if the proper with PGGM's best execution policy.						

Class of instrument	Equities
General observations	In 2019 Bloomberg has been the preferred execution venue. This venue is used to route 100% of the orders to brokers execution desks or broker algorithms. It supports an electronic order workflow, it facilitates the products PGGM uses and provides access to all our counterparties. The use of this venue aids to our commitment to realise best execution.
	Summary of analysis
Execution factors	PGGM defines the best possible result as a proper balance between cost, service and client added value within the existing risk and regulatory frameworks. PGGM takes into account the following factors:
	<ul> <li>Sustainability factors</li> <li>Relationship factors</li> <li>Service consistency</li> <li>Footprint</li> <li>Price</li> <li>Cost of execution</li> <li>Nature and size of the order</li> <li>Speed and likelihood of execution</li> <li>Settlement factors</li> <li>All other relevant factors</li> </ul> Best Execution is a process that cannot always be drilled down to a single execution. Elements such as sustainability factors, relationship factors and service consistency need to be monitored and valued over a longer period of time. Monitoring of transactions is done on a trade by trade base.
Close links, conflicts of interest and	Close links PGGM has no close links with execution venues/brokers that were used to execute orders
common	Conflicts of interest
ownership	PGGM has no conflicts of interest to report.
with respect to execution venues	Common ownerships PGGM has no common ownership to report.
Specific arrangements with execution venues regarding payments made or received, discounts, rebates or non-monetary	PGGM has no specific arrangements to report.

benefits received	
Factors leading to a change in the list of execution venues listed in the order execution policy	There were no changes to the list of execution venues/brokers in the PGGM's Order Execution Policy.
Differentiation across client categories	N/A - all of the PGGM's clients are classified as professional clients
Use of data / tools relating to quality of execution	<ul> <li>PGGM has used the data and/or tools relating to quality of execution coming from:</li> <li>Order management System</li> <li>Trading venues</li> <li>In house TCA report</li> <li>In house Broker review</li> </ul>
Use of consolidated tape provider output	The Firm has not used output from consolidated tape providers.
Use of DEA	<ul> <li>No direct electronic access to execution venues we used. The list of the top 5 venues:</li> <li>Tick size liquidity band 1 and 2 (from 0 to 79 trades per day) – Less liquid shares</li> <li>Tick size liquidity bands 3 and 4 (from 80 to 1999 trades per day) – Medium liquid shares</li> <li>Tick size liquidity bands 5 and 6 (from 2000 trades per day) – Highly liquid shares</li> </ul>

Class of Instrument Notification if <1 average trade per business day in the prvious year	Equities - Shares & Depositary Receipts tick size liquidity bands 1 and 2 N				
Top 5 Venues in terms of volume (descending	•	Proportion of orders executed traded as a percentage of total in that class	Percentage of passive orders	Percentage of agressive orders	Percentage directed orders
XNGS					
NASDAQ/NGS (GLOBAL SELECT MARKET)	49,49%	32,73%	na	na	na
ХНКС					
The Stock Exchange of Hong Kong	21,37%	38,18%	na	na	na
XNYS					
New York Stock Exchange	18,68%	9,09%	na	na	na
XAMS					
Euronext Amsterdam	10,25%	5,45%	na	na	na
хткѕ					
The Tokyo Stock Exchange	0,21%	14,55%	na	na	na

Class of Instrument	Equities - S	Shares & Depositary Receipts tic	k size liquidity	bands 3 and 4	
Notification if <1 average trade per business					
day in the prvious year		Ν			
Top 5 Venues in terms of volume (descending	Proportion of volume	Proportion of orders executed	Percentage	Percentage	Percer
order)	traded as a percentage of	traded as a percentage of total	of passive	of agressive	dire
	total in that class	in that class	orders	orders	ord
XMCE					
MERCATO CONTINUO ESPANOL	43,04%	48,21%	na	na	r
XLON					
London Stock Exchange	21,03%	14,29%	na	na	r
XWBO					
Wiener Boerse AG	19,32%	7,14%	na	na	n
XSWX					
Swiss Exchange	8,53%	8,93%	na	na	n
XOSL					
Oslo Bors	4,72%	10,71%	na	na	l n

	Class of Instrument	Equities - Shares & Depositary Receipts tick size liquidity bands 5 and 6 N					
	Notification if <1 average trade per business day in the prvious year						
	Top 5 Venues in terms of volume (descending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed traded as a percentage of total in that class	Percentage of passive orders	Percentage of agressive orders	Percentage of directed orders	
	XETR						
	Deutsche Kassenverein AG Deutsche Boerse XMCE	41,70%	36,63%	na	na	na	
	MERCATO CONTINUO ESPANOL	20,47%	8,42%	na	na	na	
	XNGS						
	NASDAQ/NGS (GLOBAL SELECT MARKET)	10,42%	8,91%	na	na	na	
	New York Stock Exchange	9,55%	17,82%	na	na	na	
	XPAR						
	Euronext Paris S.A	7,88%	9,41%	na	na	na	
Conclusion	PGGM evaluates both the execution as well as its c	ounterparties along the benc	hmark of its best execution definitio	n.			
	To evaluate brokers and counterparties a broker repolicy.	view is used. The 2019 broke	er review indicates that counterparti	es used acted ir	n line with PGG	M's best executio	
	Evaluation of transactions is done with Transaction best execution policy.	Cost Analysis (TCA). This re	port evaluates the costs on a transa	action basis. Fo	r 2019 PGGM a	cted in line with i	
	An exemption report is set up and is monitored by C	Compliance. In 2019 no incide	ents were reported.				
	Electronic trading platforms are selected on basis of offerings available in the market to see if the proper with PGGM's best execution policy.						
	The output of the used tools indicates that PGGM a	cted in line with its best exec	ution policy during 2019.				

Class of instrument	Credit Derivatives
General observations	In 2019 all CDS trades have been executed with HSBC plc. This counterparty best suited our requirements. Positions have been closed with the same counterparty to avoid novation costs.
	Summary of analysis
Execution factors	PGGM defines the best possible result as a proper balance between cost, service and client added value within the existing risk and regulatory frameworks. PGGM takes into account the following factors:      Sustainability factors     Relationship factors     Service consistency     Footprint     Price     Cost of execution     Nature and size of the order     Speed and likelihood of execution     Settlement factors     All other relevant factors     All other relevant factors
Close links, conflicts of interest and common ownership with respect to execution venues Specific arrangements with execution venues regarding payments made or	Close links         PGGM has no close links with execution venues/brokers that were used to execute orders         Conflicts of interest         PGGM has no conflicts of interest to report.         Common ownerships         PGGM has no common ownership to report.         PGGM has no specific arrangements to report.
received, discounts, rebates or	

non-monetary benefits received						
Factors leading to a change in the list of execution venues listed in the order execution policy	There were no changes to the list of execution venu	es/brokers in the PGGM's Or	der Execution Policy.			
Differentiation across client categories	N/A - all of the PGGM's clients are classified as prot					
Use of data / tools relating to quality of execution	<ul> <li>PGGM has used the data and/or tools relating to quality of execution coming from:</li> <li>Order management System</li> <li>Trading venues</li> <li>In house TCA report</li> <li>In house Broker review</li> </ul>					
Use of consolidated tape provider output	The Firm has not used output from consolidated tap	e providers.				
Use of DEA	No direct electronic access to execution venues we	used. The list of the top 5 ver	nues:			
	Class of Instrument		Credit derivative	es		
	Notification if <1 average trade per business day in the prvious year	N N				
	Top 5 Venues in terms of volume (descending order)	-	Proportion of orders executed traded as a percentage of total in that class	Percentage of passive orders	Percentage of agressive orders	Percentage of directed orders
	HSBC PIc LONDEN MP6I5ZYZBEU3UXPYFY54	100,00%	100,00%	na	na	na

Conclusion	PGGM evaluates both the execution as well as its counterparties along the benchmark of its best execution definition.
	To evaluate brokers and counterparties a broker review is used. The 2019 broker review indicates that counterparties used acted in line with PGGM's best execution policy.
	Evaluation of transactions is done with Transaction Cost Analysis (TCA). This report evaluates the costs on a transaction basis. For 2019 PGGM acted in line with its best execution policy.
	An exemption report is set up and is monitored by Compliance. In 2019 no incidents were reported.
	Electronic trading platforms are selected on basis of functionality, counterparties connected, liquidity offered and user-friendliness. Periodically PGGM evaluates the offerings available in the market to see if the proper platforms are installed and used. The 2019 evaluation indicates that platforms used meet the requirements in line with PGGM's best execution policy
	The output of the used tools indicates that PGGM acted in line with its best execution policy during 2019.

Class of instrument	Futures
General observations	In 2019 all futures haven traded on the Chicago Board of Trade and Eurex.
	Summary of analysis
Execution factors	PGGM defines the best possible result as a proper balance between cost, service and client added value within the existing risk and regulatory frameworks. PGGM takes into account the following factors:      Sustainability factors     Relationship factors     Service consistency     Footprint     Price     Cost of execution     Nature and size of the order     Speed and likelihood of execution     Settlement factors     All other relevant factors     All other relevant factors
Close links, conflicts of interest and	Close links PGGM has no close links with execution venues/brokers that were used to execute orders
common ownership	Conflicts of interest PGGM has no conflicts of interest to report.
with respect to execution venues	Common ownerships PGGM has no common ownership to report.
Specific arrangements with execution venues regarding payments made or received, discounts, rebates or non-monetary	PGGM has no specific arrangements to report.

benefits received						
Factors leading to a change in the list of execution venues listed in the order execution policy	There were no changes to the list of execution venue	es/brokers in the PGGM's Or	der Execution Policy.			
Differentiation across client categories	N/A - all of the PGGM's clients are classified as prof	essional clients				
Use of data / tools relating to quality of execution	<ul> <li>PGGM has used the data and/or tools relating to quality of execution coming from:</li> <li>Order management System</li> <li>Trading venues</li> <li>In house TCA report</li> <li>In house Broker review</li> </ul>					
Use of consolidated tape provider output	The Firm has not used output from consolidated tape providers.					
Use of DEA	No direct electronic access to execution venues we used. The list of the top 5 venues:					
	Class of Instrument	Futures				
	Notification if <1 average trade per business day in the prvious year	Ν				
	Top 5 Venues in terms of volume (descending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed traded as a percentage of total in that class	Percentage of passive orders	Percentage of agressive orders	Percentage of directed orders
	ХСВТ					
	Chicago Board of Trade	79,23%	77,83%	na	na	na
	XEUR EUREX Deutschland	20,77%	22,17%	na	na	na
Conclusion	PGGM evaluates both the execution as well as its co	ounterparties along the bench	mark of its best execution definition			

To evaluate brokers and counterparties a broker review is used. The 2019 broker review indicates that counterparties used acted in line with PGGM's best execution policy.
Evaluation of transactions is done with Transaction Cost Analysis (TCA). This report evaluates the costs on a transaction basis. For 2019 PGGM acted in line with its best execution policy.
An exemption report is set up and is monitored by Compliance. In 2019 no incidents were reported.
Electronic trading platforms are selected on basis of functionality, counterparties connected, liquidity offered and user-friendliness. Periodically PGGM evaluates the offerings available in the market to see if the proper platforms are installed and used. The 2019 evaluation indicates that platforms used meet the requirements in line with PGGM's best execution policy.
The output of the used tools indicates that PGGM acted in line with its best execution policy during 2019.