

Decision of the Competition and Markets Authority

Competition Act 1998

**UK government bonds: Deutsche
Bank-Royal Bank of Canada
Infringement**

Case Number: 50601

21 February 2025



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Confidential information in the original version of this Decision has been redacted from the published version on the public register. Redacted confidential information in the text of the published version of the Decision is denoted by [§<]. Some numbers have been replaced by a range. These are shown in square brackets.

The names of individuals mentioned in the description of the infringements in the original version of this Decision have been removed from the published version on the public register. Names have been replaced by a general descriptor of the individual's role.

CONTENTS

1.	INTRODUCTION AND EXECUTIVE SUMMARY	5
2.	THE INVESTIGATION	7
3.	PARTIES AND KEY INDIVIDUALS.....	9
A.	Deutsche Bank.....	9
A.I	[DB Trader] (Deutsche Bank).....	9
B.	RBC	10
B.I	[RBC Trader 1] (RBC).....	10
B.II	[RBC Trader 2] (RBC).....	10
4.	INDUSTRY BACKGROUND.....	12
A.	Products	12
B.	Parties' role as GEMMs	12
B.I	Trading of gilts and gilt asset swaps	13
C.	The determination of pricing by a Party.....	14
5.	MARKET DEFINITION	17
6.	THE LAW.....	19
A.	The Chapter I prohibition.....	19
B.	Undertakings	19
C.	Agreement between undertakings and concerted practice	19
C.I	Agreement.....	19
C.II	Concerted practice	20
D.	Restriction of competition by object.....	22
D.I	Key principles.....	22
D.II	Information exchange as a 'by object' infringement	22
D.III	Subjective intention	24
D.IV	Implementation.....	24
E.	The burden and standard of proof.....	24
F.	Single infringement	25
G.	Appreciable restriction of competition	25
H.	Effect on trade within the UK.....	25
I.	Exemptions and exclusions.....	26
J.	Attribution of liability	26
J.I	Identification of the appropriate legal entity.....	26
J.II	Direct personal liability	26
J.III	Indirect personal liability	26
7.	ASSESSMENT OF THE DB-RBC INFRINGEMENT	28
A.	Summary.....	28
B.	Assessment of evidence	28
C.	Undertakings	29
D.	The DB-RBC Trading Conduct as a concerted practice and/or agreement.....	29
D.I	Disclosure of commercially sensitive information	30

D.II	The Parties remained active on the Relevant Market and did not publicly distance themselves from the disclosures of commercially sensitive information.....	45
D.III	Coordination of trading strategies (including in relation to pricing)	46
E.	Object of restricting or distorting competition	49
E.I	Content of the DB-RBC Trading Conduct	49
E.II	Objective	49
E.III	Legal and economic context.....	50
E.IV	Restriction or distortion of competition by object	51
E.V	Conclusion on the restriction or distortion of competition	52
F.	The DB-RBC Infringement as an appreciable restriction of competition	52
G.	Potential effect on trade within the UK of the DB-RBC Infringement.....	53
H.	Exclusion or exemption	53
I.	Legal characterisation and duration of the DB-RBC Infringement.....	53
J.	Conclusion on DB-RBC Infringement.....	54
K.	Attribution of liability	54
K.I	Deutsche Bank.....	55
K.II	RBC	55
8.	THE CMA'S ACTION.....	56
A.	The CMA's decision	56
B.	Directions	56
C.	Financial penalties	56
C.I	Intention/negligence	57
C.II	Calculation of RBC's penalty.....	58

ANNEX

Annex A – Glossary

Annex B – Chat Evidence

1. INTRODUCTION AND EXECUTIVE SUMMARY

- 1.1 By this Decision, the Competition and Markets Authority (the '**CMA**') has concluded that the persons listed below (each a '**Party**' and together the '**Parties**') have infringed the prohibition in section 2(1) (the '**Chapter I prohibition**') of the Competition Act 1998 (the '**Act**'):
- (a) Deutsche Bank Aktiengesellschaft¹ ('**Deutsche Bank**'); and
 - (b) RBC Europe Limited² ('**RBC Europe**') and its ultimate parent company Royal Bank of Canada³ (together '**RBC**').
- 1.2 During the period 13 November 2009 to 11 April 2013 (the '**DB-RBC Relevant Period**'), both Deutsche Bank and RBC were active and competed variously in relation to the trading of conventional gilts (referred to as 'gilts') and gilt asset swaps with various counterparties.⁴
- 1.3 The CMA has found that in the DB-RBC Relevant Period, Deutsche Bank and RBC infringed the Chapter I prohibition by participating in a concerted practice and/or, in some instances, in an agreement, which had as its object the restriction or distortion of competition within the UK.⁵
- 1.4 Specifically, and as described further in Chapter 7, the CMA has found that Deutsche Bank and RBC participated in a single and repeated infringement on the DB-RBC Specific Dates⁶ in the form of a concerted practice and/or, in some instances, an agreement, which comprised:
- (a) the disclosure by one or both of Deutsche Bank and RBC to the other of commercially sensitive strategic information ('**commercially sensitive information**') in relation to the trading of certain gilts and gilt asset swaps; and
 - (b) in some instances, the coordination of their trading strategies (including in relation to pricing) in relation to specific gilts,

¹ A company registered in England and Wales with company number FC007615 and overseas company address Taunusanlage 12, Frankfurt am Main, 60325, Germany. Its UK establishment number is BR000005 and the registered and trading address of its UK establishment is 21 Moorfields, London, EC2Y 9DB.

² A private limited company registered in England and Wales with company number 00995939 and registered and trading address of 100 Bishopsgate, London, EC2N 4AA.

³ A company registered in England and Wales with the company number FC000981 and overseas company address 1 Place Ville-Marie, Montreal, Quebec, Canada and corporate headquarters at Royal Bank Plaza, 200 Bay Street, Toronto, Ontario, M5J 2W7, Canada. Its UK establishment number is BR000548 and the registered and trading address for its UK establishment is 100 Bishopsgate, London, EC2N 4AA.

⁴ A gilt asset swap consists of a gilt and an interest rate swap (a derivative contract through which one stream of future payments (in this case, the cash payments made to holders of gilts) is exchanged for another payment stream (such as a floating rate), see paragraph 4.1(b)).

⁵ For the avoidance of doubt, this Decision makes no finding as to whether or not the concerted practice and/or agreement had as its effect the prevention, restriction or distortion of competition within the UK.

⁶ See the definition of DB-RBC Specific Dates in Chapter 7.

in various communications, through bilateral Bloomberg ‘chatrooms’.^{7, 8}

- 1.5 Deutsche Bank applied for, and was granted, full immunity from financial penalties under the CMA’s leniency policy.⁹ This immunity will continue to apply provided that Deutsche Bank continues to comply with the conditions of the CMA’s leniency policy.
- 1.6 By this Decision, the CMA is imposing a financial penalty on RBC under section 36 of the Act, in accordance with the terms of settlement that RBC has reached with the CMA.¹⁰
- 1.7 The CMA has indicated **in bold** in paragraphs 7.10, 7.11, 7.18 and 7.19 and at Annex B the specific disclosures which it has found to comprise the infringing disclosures in the DB-RBC Infringement. For the avoidance of doubt, this Decision makes no findings of fact or infringement in relation to any other matters that have been the subject of the CMA’s wider investigation (see Chapter 2).
- 1.8 A table of abbreviations and defined terms used in this Decision is provided at Annex A.

⁷ The communications were between certain traders employed by the Parties (each a ‘**Key Individual**’ and together the ‘**Key Individuals**’), see Chapter 3.

⁸ All references in this Decision to the DB-RBC Infringement are to the term as defined in Chapter 7.

⁹ *Applications for leniency and no-action in cartel cases* (OFT1495, adopted by the CMA Board). See Chapter 2.

¹⁰ See Chapter 2.

2. THE INVESTIGATION

- 2.1 The CMA launched a formal investigation into suspected anti-competitive arrangements involving several banks, including the infringement which is the subject of this Decision, by carrying out inspections on 13 November 2018 under section 27 of the Act without notice at the premises of certain banks, including RBC.¹¹ The case was allocated to the CMA under the concurrency framework¹² and followed an application by Deutsche Bank for a Type A immunity marker under the CMA's leniency policy.¹³
- 2.2 The CMA's investigation after launch included gathering material from the Parties to the CMA's Investigation and third parties including: contemporaneous documents,¹⁴ interviews of individuals previously employed by the Parties to the CMA's Investigation,¹⁵ and responses to informal information requests and/or notices issued under section 26 of the Act (together, '**Requests for Information**').¹⁶ The CMA also considered certain published documents.¹⁷
- 2.3 The CMA issued a Statement of Objections and Draft Penalty Statement to Deutsche Bank and RBC on 24 May 2023.¹⁸

¹¹ See B-URN-000500730. In addition to Deutsche Bank and RBC, the following were also party to the CMA's investigation: Citigroup Global Markets Limited and its ultimate parent company Citigroup Inc. (together '**Citi**'); HSBC Bank Plc and its ultimate parent company HSBC Holdings Plc (together, '**HSBC**'); and Morgan Stanley & Co. International Plc and its ultimate parent company, Morgan Stanley (together '**Morgan Stanley**') (the five parties to the CMA's investigation are each referred to as a '**Party to the CMA's Investigation**' and together as the '**Parties to the CMA's Investigation**'), in relation to other separate alleged infringements. For the avoidance of doubt, none of Citi, HSBC and Morgan Stanley is an addressee to this Decision, nor has the CMA made any findings of infringement in respect of Citi, HSBC and Morgan Stanley in relation to the DB-RBC Infringement.

¹² Both the CMA and the Financial Conduct Authority (the '**FCA**') have concurrent powers to apply competition law in the financial services sector (see *The Competition Act 1998 (Concurrency) Regulations 2014, Regulated Industries: Guidance on concurrent application of competition law to regulated industries (CMA10)* and *Memorandum of Understanding between the Competition and Markets Authority and the Financial Conduct Authority – concurrent competition powers, July 2019*).

¹³ *Applications for leniency and no-action in cartel cases (OFT1495)*. Deutsche Bank subsequently entered into an immunity agreement with the CMA, as part of which Deutsche Bank admitted its involvement in, and liability for, the DB-RBC Infringement.

¹⁴ Including contemporaneous communications between the Key Individuals sent in 'persistent' bilateral Bloomberg chatrooms ('**Bloomberg chats**') (see Annex B).

¹⁵ Including transcripts of interviews with two of the Key Individuals (B-URN-000502065; B-URN-000502066; B-URN-000502067; B-URN-000502068; B-URN-000502069; B-URN-000502070; B-URN-000502071; and B-URN-000502076). Each interviewed individual signed a statement of truth confirming the accuracy of their interview transcripts (including B-URN-000503013; and B-URN-000503290). The CMA was not able to interview [RBC Trader 1] (RBC).

¹⁶ The CMA obtained material from Deutsche Bank as part of its obligation to cooperate as a leniency applicant in response to a number of Requests for Information (including B-URN-000500791; B-URN-000501069; B-URN-000501172; and B-URN-000501579). The CMA also obtained material from RBC in response to a number of Requests for Information (including B-URN-000500734; B-URN-000501017; B-URN-000501077; B-URN-000501162; B-URN-000501759; and B-URN-000502159). The CMA also issued, and received responses to, Requests for Information to the Debt Management Office (an executive agency of HM Treasury) (the '**DMO**') (see B-URN-000501301) and the Bank of England (see B-URN-000501516).

¹⁷ Including versions of the DMO's guidebooks that were applicable during the DB-RBC Relevant Period (see B-URN-000503293; B-URN-000503302; B-URN-000503294; and B-URN-000503303). For the purpose of market definition (see Chapter 5), the CMA has also considered versions of the Bank of England's market notices that were applicable during the DB-RBC Relevant Period (B-URN-000503304; B-URN-000503305; B-URN-000503306; B-URN-000503307; B-URN-000503308; B-URN-000503309; B-URN-000503310; and B-URN-000503311).

¹⁸ Under section 31 of the Act and Rules 5 and 6 of the Competition Act 1998 (Competition and Markets Authority's Rules) Order 2014, SI 2014/458 (the '**CMA Rules**').

- 2.4 RBC provided written representations on the Statement of Objections and Draft Penalty Statement in August 2023 and an oral hearing was held in November 2023.¹⁹
- 2.5 The CMA and RBC reached a settlement on 19 February 2025, after the Statement of Objections was issued.²⁰ As part of that settlement, RBC admitted its involvement in, and liability for, the DB-RBC Infringement and agreed that a streamlined administrative procedure would apply to it for the remainder of the investigation. RBC also agreed to withdraw its written and oral representations in relation to the Statement of Objections and Draft Penalty Statement to the extent that any such representations are not consistent with its admission of participation in, and liability for, the DB-RBC Infringement as part of its settlement.

¹⁹ Consistent with the conditions of leniency under the CMA's leniency policy, Deutsche Bank did not provide full written or oral representations on the Statement of Objections or the Draft Penalty Statement.

²⁰ The draft infringement decision, on the basis of which RBC reached a settlement, was provided to Deutsche Bank and RBC in February 2025.

3. PARTIES AND KEY INDIVIDUALS

- 3.1 This Chapter sets out the relevant legal entities within both Parties and details of the Key Individuals through whom the communications involving the disclosures of information and/or coordination set out in Chapter 7 were made.

A. Deutsche Bank

- 3.2 Deutsche Bank is a global bank which offers *‘investment, financial and related products and services to private individuals, corporate entities and institutional clients around the world’*.²¹

- 3.3 The ultimate parent company of the undertaking is Deutsche Bank Aktiengesellschaft (**‘Deutsche Bank’**). Deutsche Bank is designated as a wholesale gilt-edged market maker (**‘GEMM’**)²² and was a GEMM throughout the DB-RBC Relevant Period.²³

A.1 [DB Trader] (Deutsche Bank)

- 3.4 [DB Trader] was employed by DB Group Services (UK) Limited, a subsidiary within Deutsche Bank,²⁴ from [X] to [X] ([X]).²⁵ [DB Trader] was therefore an employee of Deutsche Bank throughout the DB-RBC Relevant Period.
- 3.5 [DB Trader] was a trader on Deutsche Bank’s [desk] as part of a team that traded gilts and certain sterling derivatives (including interest rate swaps), which sat together.²⁶ In this role, [DB Trader] participated in the trading of gilts and gilt asset swaps on behalf of Deutsche Bank.²⁷
- 3.6 In light of the above and having taken into account the evidence summarised in Chapter 7 and Annex B, the CMA has concluded that [DB Trader] carried on the

²¹ Deutsche Bank Annual Report 2023, page 6. Available from: <https://investor-relations.db.com/files/documents/annual-reports/2024/Annual-Report-2023.pdf> [Accessed on 3 October 2024].

²² See Chapter 4. During the DB-RBC Relevant Period, there were between 15 and 19 wholesale GEMMs, including each of the Parties (B-URN-000503296, pages 50 to 51; B-URN-000503297, pages 42 to 43; B-URN-000503298, pages 49 to 51; and B-URN-000503299, pages 44 to 46). The DMO also designated a small number of retail GEMMs, which typically traded with smaller investors (B-URN-000503301, page 17; and B-URN-000501051, paragraph 6.5). Retail GEMMs are not the subject of the CMA’s investigation, so are not considered further in this Decision.

²³ B-URN-000503296; page 50; B-URN-000503297, page 42; B-URN-000503298, page 49; and B-URN-000503299, page 44 and the DMO’s list of GEMMs available from: <https://www.dmo.gov.uk/responsibilities/gilt-market/market-participants/> [Accessed on 17 October 2024].

²⁴ B-URN-000503142. DB Group Services (UK) Limited is a private limited company registered in England and Wales with the company number 03077349, which acts as an employing entity for Deutsche Bank and its subsidiaries. DB Group Services (UK) Limited is owned and controlled by Deutsche Bank (See Deutsche Bank Annual Report for the year ending 31 December 2023, page 360. Available from: <https://investor-relations.db.com/files/documents/annual-reports/2024/Annual-Report-2023.pdf> [Accessed on 3 October 2024]).

²⁵ B-URN-000503262; and B-URN-000502065, pages 15 to 16. [X].

²⁶ B-URN-000501299, paragraphs 1.1 to 1.5; and B-URN-000502068, pages 24 to 25.

²⁷ B-URN-000501299, paragraphs 1.2 to 1.5; and B-URN-000502065, pages 16 to 19.

activities of Deutsche Bank during the DB-RBC Relevant Period, namely the participation in trading that formed part of the DB-RBC Infringement.

B. RBC

3.7 RBC is a global financial institution which provides a range of financial products and services including ‘*advisory & origination, sales & trading, lending & financing and transaction banking to corporations, institutional clients, asset managers, private equity firms and governments globally*’.²⁸

3.8 The ultimate parent company of the undertaking is Royal Bank of Canada.

3.9 RBC Europe is a GEMM and was a GEMM throughout the DB-RBC Relevant Period.²⁹ RBC Europe is owned and controlled by Royal Bank of Canada.³⁰

B.I [RBC Trader 1] (RBC)

3.10 [RBC Trader 1] was employed by RBC Europe, a subsidiary within RBC, from [X] to [X],³¹ that is throughout [X] part of the DB-RBC Relevant Period [X].

3.11 [RBC Trader 1] was a trader on RBC’s [desk].³² In this role, [RBC Trader 1] participated in the trading of gilts and gilt asset swaps on behalf of RBC.³³

B.II [RBC Trader 2] (RBC)

3.12 [RBC Trader 2] was employed by Royal Bank of Canada ([legal entity])³⁴ from [X] to [X], that is, throughout [X] part of the DB-RBC Relevant Period [X].³⁵

²⁸ Royal Bank of Canada Annual Report for the year ending 31 October 2024, page 24. Available from: https://www.rbc.com/investor-relations/assets-custom/pdf/ar_2024_e.pdf [Accessed on 24 January 2025].

²⁹ B-URN-000503296; page 51; B-URN-000503297, page 43; B-URN-000503298, page 50; and B-URN-000503299, page 45 and the DMO’s list of GEMMs available from: <https://www.dmo.gov.uk/responsibilities/gilt-market/market-participants/> [Accessed on 17 October 2024].

³⁰ Royal Bank of Canada Annual Report for the year ended 31 October 2024, page 247. Available from: https://www.rbc.com/investor-relations/assets-custom/pdf/ar_2024_e.pdf [Accessed on 24 January 2025] and Companies House [Online] Available from: <https://find-and-update.company-information.service.gov.uk/company/00995939> [Accessed on 7 October 2024]. This was also the case throughout the DB-RBC Relevant Period, see Royal Bank of Canada Annual Report for each of the years ending 31 October 2010 (page 157), 31 October 2011 (page 166), 31 October 2012 (page 186) and 31 October 2013 (page 187). Companies House [Online] Available from: <https://find-and-update.company-information.service.gov.uk/company/FC000981> [Accessed on 7 October 2024] (RBC Europe changed its name on 17 August 2011, having previously been called Royal Bank of Canada Europe Limited (certificate of incorporation on change of name available from Companies House [Online]: <https://find-and-update.company-information.service.gov.uk/company/00995939> [Accessed on 7 October 2024])).

³¹ Although RBC initially informed the CMA that it employed [RBC Trader 1] until [X] (B-URN-000500180, page 1), RBC later corrected that date to [X] (B-URN-000503285).

³² See Chapter 4.

³³ The CMA understands that [RBC Trader 1] was primarily involved in the trading of gilts (B-URN-000501051, paragraph 32.1).

³⁴ [X].

³⁵ B-URN-000503285; B-URN-000500180, page 3; B-URN-000500539; and B-URN-000502076, pages 8 to 9 and 145.[X].

3.13 [RBC Trader 2] was a trader on RBC's [desk]³⁶ alongside three or four other traders.³⁷ Although [RBC Trader 2]'s initial role at RBC was primarily related to the trading of interest rate swaps and gilt asset swaps, he said in interview that he '*could trade gilts*' and that '*over time [he] started to get more and more involved in the gilt side*'.³⁸ In this role, [RBC Trader 2] therefore participated in the trading of gilts and gilt asset swaps on behalf of RBC.³⁹

³⁶ B-URN-000501176, paragraph 18.1.

³⁷ B-URN-000502076, page 16.

³⁸ B-URN-000502076, page 16.

³⁹ B-URN-000501051, paragraphs 32.2 and 32.3; and B-URN-000502076, pages 9 to 12 and 14.

4. INDUSTRY BACKGROUND

A. Products

4.1 The DB-RBC Infringement⁴⁰ relates to the following two products:⁴¹

- (a) **Gilts:**⁴² sterling-denominated UK government bonds, pursuant to which the UK government guaranteed to pay the holder of the gilt an annual cash payment (the coupon) in two equal semi-annual payments until the gilt's maturity date, at which point the UK government would pay the holder the final coupon payment and the principal amount ('gilts');⁴³ and
- (b) **Gilt asset swaps:** a product consisting of a gilt and an interest rate swap, typically with the same or similar maturity date as the gilt ('**gilt asset swap**').⁴⁴ An interest rate swap was a derivative contract through which one stream of future payments (in this case, the gilt's fixed coupon payments) was exchanged for another payment stream (such as a floating rate).⁴⁵ A dealer would use a gilt asset swap to, for example, hedge interest rate risk.⁴⁶

B. Parties' role as GEMMs

4.2 In relation to gilts, each of the Parties was designated as a GEMM during the DB-RBC Relevant Period. GEMMs were subject to a number of obligations,⁴⁷ and were entitled to certain privileges,⁴⁸ in relation to the trading of gilts. The Parties played a similar, but informal, role as dealers of gilt asset swaps.⁴⁹

⁴⁰ This Decision uses the past tense to denote that the relevant description refers to matters as they pertained during the DB-RBC Relevant Period.

⁴¹ These products were interrelated. For example, their prices were linked (see footnotes 77 and 78) and gilt asset swaps could be bought and sold through a single trade or through two separate trades (referred to as legs): (i) an outright trade of a gilt; and (ii) an interest rate swap (see B-URN-000502068, pages 29 to 30).

⁴² References to 'gilts' in this Decision are to conventional gilts. Since no other sub-categories of gilts are the subject of the DB-RBC Infringement, they are not addressed further in this Decision. On occasion, Parties and/or the Key Individuals would refer to a gilt as a 'bond' (see B-URN-000502065, page 56; and B-URN-000502076, page 89).

⁴³ B-URN-000503300, page 4; B-URN-000500865, paragraph 1.1(a); and B-URN-000501051, paragraph 1.2. When referring to individual gilts, each Party often used a shorthand referring to the annual coupon (with a letter replacing the decimal figure ('q' for .25, 'h' for .5 and 't' for .75)) and the last two digits of the gilt maturity year. On occasion, this was further shortened to just the last two digits of the gilt maturity year (see B-URN-000502065, pages 123 to 124). A Party would also have referred to a gilt by reference to its remaining maturity (for example, a reference to a gilt switch consisting of five-year and ten-year gilts in 2010 would have been a reference to a gilt switch between gilts maturing in 2015 and 2020 (see B-URN-000502066, page 281; and Annex B).

⁴⁴ A gilt asset swap would also have been referred to by a number of other names, including 'asset swap', 'asw', 'matched maturity' or 'mm' (see B-URN-000502065, pages 127 to 128 and 161).

⁴⁵ B-URN-000501195, paragraph 20.2; and B-URN-000502065, pages 208 to 209.

⁴⁶ B-URN-000501195, paragraph 20.2.

⁴⁷ Including, in relation to the trading of gilts, to make '*continuous and effective two-way prices*' to clients and maintain a specific market share in gilts over a rolling period (B-URN-000503293, paragraphs 13 and 15).

⁴⁸ Including, in relation to the trading of gilts, having exclusive trading and viewing access to the services of inter-dealer brokers ('IDBs') (see B-URN-000503293, paragraph 26).

⁴⁹ B-URN-000502066, pages 13 to 15.

4.3 The Parties were therefore active in (among other matters) the trading of gilts and gilt asset swaps with various counterparties (that is, GEMMs, other dealers and clients), as set out in more detail below.

B.1 Trading of gilts and gilt asset swaps

4.4 The Parties' trading of gilts and gilt asset swaps included:

- (a) in relation to gilts, the outright purchase or sale of an individual gilt; the purchase of one specific gilt and the sale of another specific gilt (a '**gilt switch**'),⁵⁰ and the purchase of two specific gilts and the sale of another specific gilt (or vice versa) (a '**gilt fly**') (such trading, individually and collectively, is referred to in this Decision as the '**trading of gilts**'); and
- (b) in relation to gilt asset swaps, the outright purchase or sale of a gilt asset swap (either as a single trade or in two separate legs); and the purchase of one specific gilt asset swap and the sale of another gilt asset swap (a '**gilt asset swap box**') (such trading, individually and collectively, is referred to in this Decision as the '**trading of gilt asset swaps**').

4.5 The trading of gilts and the trading of gilt asset swaps, individually and collectively, is referred to in this Decision as '**trading**', and '**trade**' shall be interpreted accordingly.⁵¹

4.6 The vast majority of trading took place 'over-the-counter' throughout the trading day (which typically began at 07:30 (for gilt asset swaps) or at 08:00 (for gilts) and ended at 17:00).⁵² The Parties and other dealers traded through a range of channels, including:

- (a) with clients:⁵³ directly,⁵⁴ via agency brokers⁵⁵ and, in relation to gilts only, via electronic trading platforms (including Bloomberg and Tradeweb);⁵⁶ and

⁵⁰ B-URN-000502067, page 54. The Parties also traded '**gilt basis**', which was similar to a gilt switch, but consisted of the purchase of a gilt and the sale of a '**gilt future**' (a derivative contract to buy or sell a gilt on a specified date at a predetermined price (B-URN-000501195, paragraph 20.3)) or vice versa (B-URN-000502065, pages 247 to 248).

⁵¹ Similarly, the price in relation to a trade or potential trade of gilts and gilt asset swaps by a dealer is referred to in this Decision as the '**trading price**' and the act of quoting a trading price for the purposes of trading is referred to in this Decision as '**offering to trade**'.

⁵² In particular, the trading day began when the relevant futures market opened (ie 07:30 for interest rate futures or 08:00 for gilt futures) and ended at 17:00 when those markets closed (see B-URN-000502068, pages 6 to 7; B-URN-000502076, pages 17 to 18; and B-URN-000503293, paragraph 99).

⁵³ Subject to each GEMM's obligation continually to make two-way prices (see footnote 47).

⁵⁴ B-URN-000502065, pages 38 to 39 and 44 to 45; B-URN-000502066, pages 12 to 13; and B-URN-000501176, paragraphs 14.2 and 16.7.

⁵⁵ See for example, in relation to gilts, B-URN-000500865, paragraph 4.1(c); and B-URN-000501051, paragraph 5.1(e).

⁵⁶ B-URN-000501195, paragraphs 9.1 to 9.7; and B-URN-000501176, paragraphs 6.1 to 6.10.

(b) with other counterparties: via brokers (including, for gilts, IDBs)⁵⁷ and directly (although such trading was not common).⁵⁸

4.7 A dealer would typically trade for a range of strategic reasons, including to build relationships with clients,⁵⁹ manage risk,⁶⁰ and, in relation to the trading of gilts only, to meet its obligations as a GEMM and to demonstrate a strong market presence to win a lead manager role in syndication.⁶¹

4.8 The Parties therefore competed with each other (and other dealers) in relation to trades with both clients and other counterparties. Typically, such competition was largely based on the level of the trading price.⁶² Although the Parties had access to certain information about trading pricing,⁶³ when determining its own trading price in normal conditions of competition a Party would not be expected to know the trading price quoted to a client by any competing dealer.⁶⁴

C. The determination of pricing by a Party

4.9 Since the vast majority of trading took place over-the-counter (see paragraph 4.6), there was no single, agreed 'market' price for each product.⁶⁵ Each Party was therefore required to apply its own independent judgement to determine the price at which it would be willing to buy or sell a product through trades⁶⁶ by reference to a range of imperfect sources of available information.

⁵⁷ B-URN-000500865, paragraphs 4.1(b) to (c); B-URN-000502066, pages 8 to 10; and B-URN-000501051, paragraph 5.3. GEMMs' obligation continually to make two-way prices applied only to clients and not with other GEMMs (see B-URN-000503293, paragraphs 96 to 97). See footnote 48 for the definition of IDBs.

⁵⁸ B-URN-000501195, paragraph 11.3; and B-URN-000501051, paragraphs 5.4 and 36.2. The CMA has not relied on the information disclosed by the Parties for the purpose of trading directly with each other as evidence of the DB-RBC Infringement (noting that such direct trades were uncommon).

⁵⁹ B-URN-000501051, paragraphs 28.2 and 28.8.

⁶⁰ B-URN-000501195, paragraph 16.7(b); and B-URN-000501297, paragraphs 2.3 to 2.10.

⁶¹ See footnote 47; and B-URN-000500865, paragraphs 10.1 and 10.2. Syndication is one of the means by which gilts were issued by the DMO, who would select certain GEMMs to act as lead managers who underwrote the majority of the gilts being issued, generated and recorded interest from investors and supported the DMO in the sale process in return for fees (B-URN-000500865, paragraphs 21.1 to 21.5). The DB-RBC Infringement does not relate to the issuance of gilts (including through syndications) so the Parties' roles in relation to syndication are not considered further in this Decision.

⁶² B-URN-000500865, paragraph 29.1.

⁶³ See paragraph 4.10 below.

⁶⁴ Although electronic trading platforms disclosed the (anonymous) second highest price to the successful GEMM, this would only be done after the trade had completed. See, for example, B-URN-000501195, paragraphs 9.5 and 9.6; and B-URN-000501176, paragraph 6.8). The CMA notes that [DB Trader] (Deutsche Bank) said in interview that certain, but not all, GEMMs' indicative prices may have been available on occasion through a page on one of the electronic trading platforms (see B-URN-000502066, pages 24 to 26).

⁶⁵ Instead, every specific trade made by a Party would be negotiated and priced bilaterally between it and the trading counterparty (whether directly, through an electronic trading platform, or via a broker).

⁶⁶ Prices of gilts were typically quoted as a price per £100 nominal (see B-URN-000503301, page 18). The Parties often only referred to the fractional part of the price (the pence or 'cents') (see B-URN-000502066, page 252). Prices could also have been expressed as a yield (reflecting the returns from a product as a percentage of the price), referred to in basis points or 'bps' (see B-URN-000502065, page 232). When considering a price for a product involving more than one leg (eg a gilt switch, gilt fly or gilt asset swap), the Parties typically referred to prices articulated as yields (see, for example, B-URN-000502065, page 83; and [RBC Trader 2]'s comment in interview ([<]) (B-URN-[<])). There was [a mathematical relationship] between a price and a yield (see the DMO's formulae for converting prices to yields (and vice versa): <https://www.dmo.gov.uk/media/1sljyqul/yldeqns.pdf> [Accessed on 18 October 2024]).

- 4.10 There was a range of information available to each Party (and other dealers) about variously gilts and gilt asset swaps, including information made available by:
- (a) the DMO, including composite and end-of-day mid-prices;⁶⁷
 - (b) electronic trading platforms, including composite mid-prices⁶⁸ and limited details of client trading;⁶⁹
 - (c) IDBs and other brokers, including:
 - (i) in relation to gilts: trading prices available via that broker⁷⁰ and details of trades after they had completed (including the product(s) and price);⁷¹
 - (ii) in relation to gilt asset swaps: trading prices available via that broker⁷² and details of trades after they had completed (including the product(s) and price);⁷³ and
 - (d) a client on an *ad hoc* basis.⁷⁴
- 4.11 Each Party (and other dealers) would typically have interpreted the available information, including the information listed above, in order to determine its internal mid-prices (sometimes referred to as ‘mid’ or ‘middle’)⁷⁵ for each gilt and gilt asset swap, which were intended to represent where the Party/dealer considered the market ‘*equilibrium*’ to be at that point.⁷⁶
- 4.12 The Parties each took broadly the same approach to determining their respective gilt mid-prices regardless of the context in which such mid-prices were to be applied.⁷⁷ To determine such mid-prices, in addition to and in combination with the information and approach referred to in paragraphs 4.10 and 4.11 above, the Parties will have used pricing software (also referred to as a ‘pricer’).⁷⁸ Each

⁶⁷ B-URN-000501382, pages 16 to 18; B-URN-000501195, paragraph 13.1; B-URN-000502065, page 52; and B-URN-000501176, paragraphs 10.1 to 10.5.

⁶⁸ B-URN-000501195, paragraph 11.1; and B-URN-000501176, paragraph 8.2.

⁶⁹ B-URN-000501195, paragraph 9.6; and B-URN-000501176, paragraph 6.9.

⁷⁰ B-URN-000501176, paragraph 7.3.

⁷¹ B-URN-000501195, paragraph 10.5; and B-URN-000501176, paragraphs 7.5 to 7.6.

⁷² B-URN-000502066, page 8.

⁷³ B-URN-000502068, pages 7 to 8.

⁷⁴ B-URN-000500865, paragraph 36.1; B-URN-000501195, paragraph 16.3(d)(i); B-URN-000501176, paragraph 13.1(d).

⁷⁵ Deutsche Bank’s responses to Requests for Information refer to the ‘*fair value*’ price rather than the mid-price (see, for example, B-URN-000501195, paragraph 16.3(a)), which the CMA understands to be the same as the mid-price (for example, [DB Trader] (Deutsche Bank) said in interview that Deutsche Bank’s pricer (see paragraph 4.12) produced mid-prices for gilts (B-URN-000502066, page 16)).

⁷⁶ [X] said in an interview ([X]) that ‘[t]he mid[-price] is supposed to be the objective um best guess of equilibrium at any point in time’ (B-URN-[X]).

⁷⁷ B-URN-000501195, paragraph 16.9; and B-URN-000501176, paragraph 13.3. In addition, a Party’s mid-price for a gilt asset swap derived from that Party’s mid-price of the relevant gilt and a similar process undertaken for the relevant interest rate swap (see B-URN-000502066, pages 28 to 29; and B-URN-000501176, paragraph 16.4).

⁷⁸ B-URN-000501195, paragraphs 16.3 to 16.6; and B-URN-000501176, paragraphs 13.1 to 13.4. For example, in relation to Deutsche Bank’s process, to change its gilt asset swap mid-price, an adjustment would need to be made to the gilt and/or interest rate swap pricer (see B-URN-000502066, pages 29 to 30).

Party's pricer was proprietary or confidential^{79, 80} and a Party's mid-prices for both gilts and gilt asset swaps were not ordinarily available to other GEMMs and dealers.⁸¹

- 4.13 There could be differences between two dealers' respective internal mid-prices, for example because certain information would only be disclosed to specific dealers (eg between counterparties to a trade), dealers could give different weight to information from certain sources or in certain contexts, and the available information changed frequently in response to market dynamics.⁸²
- 4.14 A dealer would then determine its trading price(s)⁸³ by reference to:⁸⁴
- (a) its mid-price for the relevant product; and
 - (b) the amount (if any) by which the dealer considered the relevant price ought to differ from that mid-price in order to reflect the dealer's interest in the trade in question, having had regard to a range of information, including that specified in paragraph 4.10.
- 4.15 In determining a trading price, in addition to the mid-price, a dealer would therefore also consider a range of other factors including, for example, its trading position and the levels of current and future demand in the relevant, and similar, products.⁸⁵

⁷⁹ B-URN-000501195, paragraph 16.8; and B-URN-000501176, paragraph 13.4.

⁸⁰ Given the nature of each Party's equivalent gilt asset swap pricer (see footnote 77), the CMA infers that they would also be considered proprietary or confidential.

⁸¹ B-URN-000502067, pages 60 to 61. Although Deutsche Bank referred to pricing outputs from the gilt pricer (ie gilt mid-prices) being disclosed to clients (B-URN-000501195, paragraph 16.8), given the evidence available, the CMA considers that such prices ordinarily remained confidential at least as between GEMMs and dealers.

⁸² [DB Trader] (Deutsche Bank) said in interview that '*some [trades] you'd maybe give more weight to and... that would raise your price*' (B-URN-000502066, page 180).

⁸³ Given the similarities in how gilts and gilt asset swaps were priced and traded (see paragraphs 4.6 and 4.12), the CMA has inferred that a dealer would typically have considered certain similar factors when determining a trading price for gilts and gilt asset swaps (except factors that relate to their obligations as GEMMs, which did not apply to gilt asset swaps).

⁸⁴ B-URN-000501195, paragraphs 16.1 to 16.10; B-URN-000502066, pages 180 to 182; and B-URN-000501176, paragraphs 13.1 to 13.4.

⁸⁵ B-URN-000500865, paragraphs 4.1(a) and 29.1(e); B-URN-000501195; paragraphs 16.7(b) and 16.7(c); B-URN-000502065, page 51; and B-URN-000501051, paragraphs 33.2(e)(vi) and 33.2(f).

5. MARKET DEFINITION

- 5.1 In the present case, it is not necessary to reach a definitive view on the relevant market, since it is possible, without such a definition, to determine whether there has been an infringement of the Chapter I prohibition.⁸⁶ Nor is it necessary for the CMA to set out the precise relevant market definition in order to assess the appropriate level of the penalty.⁸⁷
- 5.2 The CMA has considered the two focal products for the DB-RBC Infringement (gilts and gilt asset swaps). For the reasons set out below, the CMA has treated the relevant market for the purposes of calculating the relevant turnover to establish the level of any financial penalty (see Chapter 8) as comprising bidding for gilts in gilt auctions, trading of gilts and gilt asset swaps and offering of gilts in gilt buy-back auctions globally (the '**Relevant Market**').
- 5.3 In relation to the relevant product market, the CMA has concluded that gilts and gilt asset swaps (of all maturities and across all market segments⁸⁸) formed part of the same product market, since:
- (a) there is evidence of demand-side substitutability,⁸⁹ albeit that such substitutability was potentially limited and dependent on the circumstances;⁹⁰

⁸⁶ Case T-216/13 *Telefónica, SA v Commission*, EU:T:2016:369, paragraph 214; Case T-62/98 *Volkswagen AG v Commission*, EU:T:2000:180, paragraph 230; Case T-29/92 *SPO and Others v Commission*, EU:T:1995:34, paragraph 74.

⁸⁷ *Argos and Littlewoods v OFT* and *JJB Sports v OFT* [2006] EWCA Civ 1318, paragraphs 169 to 173 and 189 and *Argos and Littlewoods v OFT* [2005] CAT 13 at [178]. CMA, *Guidance as to the appropriate amount of a penalty*, CMA73, 16 December 2021 ('**Penalty Guidance**'), paragraph 2.10. Rather, the CMA must be '*satisfied on a reasonable, and properly reasoned basis, of what is the relevant product market affected by the infringement*' (Penalty Guidance, paragraph 2.10, *Argos and Littlewoods v OFT* and *JJB Sports v OFT* [2006] EWCA Civ 1318, paragraph 170). The CMA considers that this principle also applies when assessing the relevant geographic market.

⁸⁸ For the purposes of the CMA's investigation, the market segments are gilt auctions, trading and gilt buy-back auctions. The DMO conducted regular gilt auctions to issue new gilts, and additional volumes of existing gilts, on behalf of HM Treasury throughout the DB-RBC Relevant Period. GEMMs (including the Parties) were subject to a number of obligations in relation to their participation in gilt auctions (see B-URN-000503293, paragraphs 16 and 17). The Bank of England conducted regular gilt buy-back auctions at certain points during the DB-RBC Relevant Period as part of its quantitative easing policy. Although GEMMs' obligations and privileges did not relate to gilt buy-back auctions, GEMMs were eligible to participate in gilt buy-back auctions (see B-URN-000500756, tab 'Info requests – responses'). The CMA has found that the DB-RBC Infringement related to trading only – it did not relate to gilt auctions or gilt buy-back auctions (see Chapter 7) – but the CMA has nevertheless considered whether the gilt auction and gilt buy-back auction segments form part of the relevant market.

⁸⁹ Since GEMMs were involved in two-way trading (see paragraph 4.6 and footnote 47), the CMA has considered 'demand-side substitutability' from the perspective of clients (see paragraph 4.3) and 'supply-side substitutability' and conditions of competition from the perspective of the Parties and their competitors.

⁹⁰ For example: (i) gilts and gilt asset swaps were interrelated (see footnote 41), but they exposed holders to different risks; (ii) although clients typically specified the maturity of the gilt or gilt asset swap product they were looking to trade (see B-URN-000501299, paragraphs 3.1 and 3.3; and B-URN-000501297, paragraph 3.1), a client's trading strategy could have involved considerations of the liquidity and pricing of similar products (eg those with similar maturities) (see B-URN-000501299, paragraph 3.2); and (iii) there was some demand-side substitutability between trading and gilt auctions, since clients could participate indirectly in gilt auctions by placing a bid through a GEMM (see B-URN-000500865, paragraph 3.2; and B-URN-000501051, paragraph 4.1(c)).

- (b) in relation to supply-side substitutability, there were several key similarities in the conditions of competition between the Parties across gilts and gilt asset swaps, regardless of their maturity, and across market segments;⁹¹ and
- (c) the Parties have highlighted limitations in their abilities to retrieve, and provide the CMA with, income information that specifically relates to the focal products, such that the CMA's determination of relevant turnover either includes income that falls outside, or excludes income that falls within, the focal products.⁹²

5.4 In relation to the relevant geographic market, the CMA has for the purposes of this Decision treated the relevant market as global (notwithstanding that the CMA's findings relate to a restriction or distortion of competition within the UK) since:

- (a) although each Party's GEMM entity was designated by the DMO in the UK and registered in England and Wales (see Chapter 3), the CMA is not aware of any obligations requiring GEMMs or their counterparties to have been located in the UK; and
- (b) the Parties traded with both UK and non-UK counterparties through the same processes,⁹³ which were not tied to any particular physical location.

⁹¹ For example: (i) the Parties' activities across focal products, maturities and market segments were highly interrelated (see Chapter 4) and were undertaken by traders working on the same, or very closely connected, desks (see Chapter 3 and B-URN-000501299, paragraphs 2.2 to 2.4; B-URN-000502068, pages 24 to 25; and B-URN-000502076, page 16); (ii) the Parties (as GEMMs) competed against each other for all maturities of the relevant products through similar trading processes for gilts and gilt asset swaps and auction processes in gilt auctions and gilt buy-back auctions (see Chapter 4) (both gilt auction and gilt buy-back auction processes involved participants being able to submit, withdraw and amend bids (in relation to gilt auctions) or offers (in relation to gilt buy-back auctions) throughout the auction window with results determined by the prices quoted, although gilt buy-back auctions related to a range of gilt maturities rather than a single auction gilt (see B-URN-000503293, paragraphs 40 to 56; and B-URN-000503304, paragraphs 32 to 41)); and (iii) and each Party's closest competitors for gilts and gilt asset swaps were GEMMs (each of the Parties identified other dealers designated as GEMMs as their closest competitors for gilts and gilt asset swaps (B-URN-000501299, paragraphs 4.1 to 4.2; and B-URN-000501297, paragraph 4.1 (although RBC did not provide any information about its top ten competitors for gilt asset swaps))).

⁹² See Chapter 8.

⁹³ See footnote 92. The customer information provided by the Parties identified both UK and non-UK customers, although neither included information about gilt asset swaps specifically (see B-URN-000501396, tab 'Top 10 Customers for Gilts'; and B-URN-000501392, paragraphs 5.1 to 5.10).

6. THE LAW

- 6.1 This Chapter sets out the key legal principles applicable to the CMA's assessment of the DB-RBC Infringement.⁹⁴

A. The Chapter I prohibition

- 6.2 The CMA's findings are made by reference to the Chapter I prohibition which prohibits (among other matters) agreements between undertakings and concerted practices which may affect trade within the UK and have as their object or effect the prevention, restriction or distortion of competition within the UK,⁹⁵ unless they are excluded under, or exempt in accordance with, the Act.⁹⁶

B. Undertakings

- 6.3 The concept of an 'undertaking' covers every entity engaged in economic activity, regardless of its legal status and the way in which it is financed.⁹⁷ An entity is engaged in '*economic activity*' where it conducts an activity '*... of an industrial or commercial nature by offering goods and services on the market ...*'.⁹⁸

C. Agreement between undertakings and concerted practice

- 6.4 It is not necessary to distinguish between an agreement and a concerted practice, or to characterise conduct as exclusively an agreement or a concerted practice.⁹⁹

C.1 Agreement

- 6.5 The Chapter I prohibition is intended to catch a wide range of agreements.¹⁰⁰ The key question is whether there has been '*a concurrence of wills between at least*

⁹⁴ Following the UK's exit from the European Union (EU), the UK no longer has jurisdiction to apply Article 101 of the Treaty on the Functioning of the European Union (European Union (Withdrawal) Act 2018 and the European Union (Withdrawal Agreement) Act 2020). However, EU competition law principles (and European Commission decisions and statements) which predate the UK's exit from the EU remain relevant to the extent provided by section 60A of the Act.

⁹⁵ References to the UK are to the whole or part of the UK (section 2(7) of the Act).

⁹⁶ Section 2(1) of the Act, as applicable in relation to (among other matters) agreements between undertakings made, and concerted practices engaged in, before the coming into force (on 1 January 2025) of amendments made to section 2 of the Act (section 119 of the Digital Markets, Competition and Consumers Act 2024 and the Digital Markets, Competition and Consumers Act 2024 (Commencement No. 1 and Savings and Transitional Provisions) Regulations 2024, S.I. 2024/1226).

⁹⁷ C-41/90 *Klaus Höfner and Fritz Elser v Macrotron GmbH*, EU:C:1991:161, paragraph 21.

⁹⁸ C-118/85 *Commission v Italian Republic*, EU:C:1987:283, paragraph 7.

⁹⁹ *Argos, Littlewoods and JJB Sports v OFT* [2006] EWCA Civ 1318, paragraphs 21 and 22. See also for example, C-49/92 *P Commission v Anic Partecipazioni*, EU:C: 1999:356 ('*Anic*'), paragraphs 81, 131 and 132.

¹⁰⁰ C-41/69 *ACF Chemiefarma v Commission*, EU:C:1970:71, paragraphs 106 to 114; T-41/96 *Bayer AG v Commission*, EU:T:2000:242, paragraph 71; *Anic*, paragraph 81; and, *Argos Limited and Littlewoods Limited v OFT* [2004] CAT 24 at [658].

two parties, the form in which it is manifested being unimportant, so long as it constitutes the faithful expression of the parties' intention'.¹⁰¹

- 6.6 Although it is essential to show the existence of a joint intention to act on the market in a specific way in accordance with the terms of the agreement, it is not necessary to establish a joint intention to pursue an anti-competitive aim.¹⁰² It is sufficient that the undertakings *'expressed their joint intention to conduct themselves on the market in a specific way'*.¹⁰³
- 6.7 The Competition Appeal Tribunal has confirmed that *'[a]n agreement ... can be constituted by an "understanding" even if there is nothing to prevent either party from going back on, or disregarding, the understanding in question'*.¹⁰⁴ Thus, even if a party 'cheats' on the agreement, that does not absolve it of liability for an infringement.¹⁰⁵

C.II Concerted practice

- 6.8 A concerted practice is *'a form of coordination between undertakings by which, without having reached the stage where an agreement properly so-called has been concluded, knowingly substitutes practical cooperation between them for the risks of competition'*.¹⁰⁶
- 6.9 Each undertaking must determine independently the policy that it intends to adopt on the market.¹⁰⁷ This principle precludes *'any direct or indirect contact'* between undertakings of which *'the object or effect ... is either to influence the conduct on the market of an actual or potential competitor or to disclose to such a competitor the course of conduct which they themselves have decided to adopt or contemplate adopting on the market'*.¹⁰⁸
- 6.10 It is in this context that the caselaw has emphasised that, in a properly functioning competitive market, competitors should not know how their competitors are likely

¹⁰¹ Cases T-44/02 etc *Dresdner Bank v Commission*, EU:T:2006:271, paragraph 55, citing T-41/96 *Bayer v Commission*, EU:T:2000:242, paragraph 69 (upheld on appeal in joined cases C-2/01 P and C-3/01 P *BAI and Commission v Bayer*, EU:C:2004:2, paragraphs 96 and 97) and T-7/89 *Hercules Chemicals v Commission*, EU:T:1991:75, paragraph 256.

¹⁰² T-168/01 *GlaxoSmithKline Services Unlimited v Commission*, EU:T:2006:265, paragraph 77 (upheld on appeal in joined cases C-501/06 P, C-513/06 P, C-515/06 P and C-519/06 P, *GlaxoSmithKline Services Unlimited v Commission* EU:C:2009:610).

¹⁰³ Case T-7/89 *SA Hercules Chemicals NV v Commission*, EU:T:1991:75, paragraph 256.

¹⁰⁴ *Argos Limited and Littlewoods Limited v OFT* [2004] CAT 24 at [658].

¹⁰⁵ *Balmoral Tanks Limited v CMA* [2017] CAT 23 at [94] citing T-588/08 *Dole Food and Dole Germany v Commission*, EU:T:2013:130, paragraph 484.

¹⁰⁶ C-48/69 *ICI v Commission*, EU:C:1972:70, paragraph 64. See also C-8/08 *T-Mobile Netherlands and Others* EU:C:2009:343 ('*T-Mobile*'), paragraph 26 and *JJB Sports plc v Office of Fair Trading* [2004] CAT 17 at [151]. An agreement requires *'a concurrence of wills between at least two parties, the form in which it is manifested being unimportant, so long as it constitutes the faithful expression of the parties' intention'* (Cases T-44/02 etc *Dresdner Bank v Commission*, EU:T:2006:271, paragraph 55, citing T-41/96 *Bayer v Commission*, EU:T:2000:242, paragraph 69 and T-7/89 *Hercules Chemicals v Commission*, EU:T:1991:75, paragraph 256).

¹⁰⁷ C-40/73 *Suiker Unie v Commission*, EU:C:1975:174 ('*Suiker Unie*'), paragraph 173.

¹⁰⁸ *Suiker Unie*, paragraph 174. See also *Apex Asphalt and Paving Co Limited v OFT* [2005] CAT 4 at [206(v)]; *Balmoral Tanks Limited v CMA* [2017] CAT 23 at [38] and *T-Mobile*, paragraph 33.

to behave. A reduction of uncertainty is therefore a key part of the concept of a concerted practice.¹⁰⁹

- 6.11 Information exchange can constitute a concerted practice. A situation in which only one undertaking discloses its future intentions or conduct to its competitor can constitute a concerted practice where ‘*the latter requests it or, at the very least, accepts it*’.¹¹⁰ Therefore, the mere receipt of information is sufficient to give rise to a concerted practice.¹¹¹ An exchange of information on a single occasion can give rise to a concerted practice.¹¹²
- 6.12 The mere receipt by an undertaking of price information, including pricing intentions, from a competitor is also capable of removing, or at least reducing, strategic uncertainty about future conduct on the market in question.¹¹³ Information may be commercially sensitive even if it is capable of being obtained from other sources or inaccurate.¹¹⁴
- 6.13 Where an undertaking participating in a concerted practice remains active on the market, there is a presumption that it will take account of information exchanged with its competitors when determining its conduct on the market.¹¹⁵

¹⁰⁹ C-286/13 P *Dole Food and Dole Fresh Fruit Europe v Commission*, EU:C:2015:184 (*‘Dole’*), paragraph 121; *T-Mobile*, paragraph 35; C-194/99 P *Thyssen Stahl v Commission*, EU:C:2003:527, paragraph 81; Case C-7/95 *John Deere Limited v Commission*, EU:C:1998:256, paragraph 90; Joined cases T-25/95 etc. *Cimenteries CBR SA and Others v Commission of the European Communities*, EU:T:2000:77, paragraph 1852, and *Balmoral Tanks Limited v CMA* [2017] CAT 23 at [39] (upheld on appeal in *Balmoral Tanks Ltd & Anor v CMA* [2019] EWCA Civ 162).

¹¹⁰ Joined cases T-25/95 etc. *Cimenteries CBR SA and Others v Commission of the European Communities*, EU:T:2000:77, paragraph 1849; *Balmoral Tanks Limited v CMA* [2017] CAT 23 at [39]. The Court of Justice has held that this principle also applies in situations where a party receives information via email, rather in the context of a meeting: *Eturas UAB and Others v Lietuvos Respublikos konkurencijos taryba*, EU:C:2016:42, paragraph 50.

¹¹¹ *JJB Sports plc and Allsports Limited v OFT* [2004] CAT 17 at [159] and *Argos Limited and Littlewoods Limited v OFT* [2004] CAT 24 at [155] citing Cases T-202/98, T-204/98 and T-207/98 *Tate & Lyle a.o v Commission*, EU:T:2001:185 paragraphs 54-58 (*‘Tate & Lyle’*), and T-1/89 *Rhone-Poulenc v Commission*, EU:T:1991:56, paragraphs 122-123.

¹¹² *Lexon (UK) Limited v CMA* [2021] CAT 5 at [187(8)] citing *T-Mobile*, paragraph 59, *Balmoral Tanks Limited v CMA* [2017] CAT 23 at [46] (upheld on appeal to the Court of Appeal in *Balmoral Tanks Ltd & Anor v CMA* [2019] EWCA Civ 16, paragraph 18).

¹¹³ T-240/17, *Campine NV and Others v Commission*, EU:T:2019:778, (*‘Campine’*), paragraph 186.

¹¹⁴ Joined cases C-204/00 P etc *Aalborg Portland and Others v Commission*, EU:C:2004:6, paragraphs 281-282 (*‘Aalborg’*); *Dole*, paragraph 295; T-762/14 *Koninklijke Philips NV v Commission*, EU:T:2016:738 (*‘Philips’*); paragraph 91; *Tate & Lyle*, paragraph 60; and, *Lexon (UK) Limited v CMA* [2021] CAT 5 at [187(7)] citing *Balmoral Tanks Limited v CMA* [2017] CAT 23 at [43] and [122].

¹¹⁵ Case C-49/92 P *Anic Participazioni SpA v Commission*, EU:C:1999:356, paragraph 121. See also *Apex Asphalt and Paving Co Limited v OFT* [2005] CAT 4 at [206(x)]. The burden is on the parties concerned to adduce evidence to rebut this presumption: T-105/17 *HSBC Holdings plc a.o v Commission*, EU:T:2019:675 (*‘HSBC’*) paragraph 67 referring to *T-Mobile*, paragraph 51, and *Dole*, paragraph 127. Where an undertaking receives strategic data from a competitor it will be presumed to have accepted the information and adapted its market conduct accordingly unless it rebuts that presumption, for example by publicly distancing itself through responding with a clear statement that it does not wish to receive such data, or reporting it to the administrative authorities – see CMA Guidance on Horizontal Agreements, August 2023 at paragraph 8.62 and the caselaw cited.

D. Restriction of competition by object

D.I Key principles

- 6.14 The Chapter I prohibition prohibits agreements and concerted practices between undertakings which have as their object or effect the prevention, restriction or distortion of competition within the UK. The term ‘object’ in this regard refers to the ‘aim’, ‘purpose’ or ‘objective’ of the coordination between the undertakings.¹¹⁶
- 6.15 The caselaw has held that certain types of coordination between undertakings reveal a sufficient degree of harm to competition that it may be found that there is no need to examine their effects.¹¹⁷ That caselaw arises from the fact that certain types of coordination between undertakings can be regarded, by their very nature, as being harmful to the proper functioning of normal competition.¹¹⁸
- 6.16 When determining whether an agreement or concerted practice reveals a sufficient degree of harm such as to constitute a restriction of competition by object, regard must be had to the content of its provisions, its objectives and the economic and legal context of which it forms a part.¹¹⁹ When determining that context, it is also necessary to consider the nature of the goods or services affected, as well as the real conditions of the functioning and structure of the market or markets in question.¹²⁰
- 6.17 An agreement or concerted practice may be regarded as having a restrictive object even if it does not have the restriction of competition as its sole aim.¹²¹

D.II Information exchange as a ‘by object’ infringement

- 6.18 It is settled law that the exchange of information between competitors is liable to be incompatible with competition law if *‘it reduced or removed the degree of uncertainty as to the operation of the market in question, with the result that competition between undertakings was restricted’*.¹²²

¹¹⁶ See, for example, respectively: Case 56/64 *Consten & Grundig v Commission*, EU:C:1966:41, at 343; Case 96/82 *IAZ and Others v Commission*, EU:C:1983:310, paragraph 25; C-209/07 *Competition Authority v Beef Industry Development Society*, EU:C:2008:643, paragraphs 32-33.

¹¹⁷ C-67/13 P *Groupeement des Cartes Bancaires v Commission* (‘*Cartes Bancaires*’) EU:C:2014:2204, paragraphs 49 and 57 and the caselaw cited; *HSBC*, paragraph 53. *Ping Europe Ltd v CMA* [2020] EWCA Civ 13 at paragraph 37.

¹¹⁸ *Cartes Bancaires*, paragraph 50 and the caselaw cited; *HSBC*, paragraph 54; *Ping Europe Ltd v CMA* [2020] EWCA Civ 13 at paragraph 37.

¹¹⁹ *Carte Bancaires*, paragraph 53, citing C-32/11 *Allianz Hungaria v Commission*, EU:C:2013:160, paragraph 36 and the caselaw cited. See also C-373/14 P *Toshiba v Commission*, EU:C:2016:26, paragraph 27.

¹²⁰ *Cartes Bancaires*, paragraph 53.

¹²¹ See, for example, joined cases 96-102, 104, 105, 108 and 110/82 *NV IAZ International Belgium and others v Commission of the European Communities*, EU:C:1983:310, paragraphs 22-25; C-209/07 *Competition Authority v Beef Industry Development Society and Barry Brothers*, EU:C:2008:643, paragraph 21.

¹²² *HSBC*, paragraph 61 and the caselaw cited. *Balmoral Tanks Limited v CMA* [2019] EWCA Civ 162 at paragraph 17 and the caselaw cited; and *Lexon (UK) Limited v CMA* [2021] CAT 5 at [187(3)].

- 6.19 In particular, the caselaw has held that an exchange of information which is capable of removing uncertainty between participants as regards the timing, extent and details of the modifications to be adopted by the undertakings concerned in their conduct on the market must be regarded as pursuing an anti-competitive object.¹²³
- 6.20 The caselaw has also held that exchanges of information on factors relevant to pricing amount to a restriction of competition by object.¹²⁴ With specific regard to certain financial services products, this includes information relating to mid-prices.¹²⁵
- 6.21 The Competition Appeal Tribunal has stated that *'[t]he strictness of the law in this regard reflects the fact that it is hard to think of any legitimate reason why competitors should sit together and discuss prices at all'*.¹²⁶ It has also held that unilateral disclosures of pricing information can infringe the Chapter I prohibition: *'[t]he fact of having attended a private meeting at which prices were discussed and pricing intentions disclosed, even unilaterally, is in itself a breach of the Chapter I prohibition, which strictly precludes any direct or indirect contact between competitors having, as its object or effect, either to influence future conduct in the market or to disclose future intentions'*.¹²⁷

¹²³ HSBC, paragraph 62 citing *Dole*, paragraph 122; and *T-Mobile*, paragraph 41; and *Lexon (UK) Limited v CMA* [2021] CAT 5 at [187(4)].

¹²⁴ *Balmoral Tanks Limited v CMA* [2017] CAT 23, upheld on appeal in *Balmoral Tanks Ltd & Anor v CMA* [2019] EWCA Civ 162; *Lexon (UK) Ltd v CMA* [2021] CAT 5; *Dole*; and *Philips*, upheld on appeal to the Court of Justice in C-98/17 P *Koninklijke Philips NV v Commission*, EU:C:2018:774.

¹²⁵ HSBC, paragraphs 125 to 161. The General Court held, in the context of that case, that *'information relating to mids is relevant for pricing in the EIRD sector'* (paragraph 139) and that *'an exchange between competitors on a factor that is relevant for pricing and is not publicly available is all the more sensitive in terms of competition where it takes place between traders acting as 'market makers', in the light of the importance of such traders on the EIRD market'*. It continued that *'market makers are generally and continuously active on the EIRD market and therefore enter into a larger number of transactions than other market participants. From the point of view of competition on the market, it is particularly fundamental that prices be determined independently'* (paragraph 145).

On appeal, the Court of Justice upheld the General Court's finding on the merits of characterising the exchanges on EIRD mids as a restriction by object (C-883/19 P *HSBC Holdings and Others v Commission*, EU:C:2023:11, paragraphs 193 to 206). It is instructive to note also that the Court of Justice held that, even if it were established that a reduction in uncertainty as to the level of the market 'mid' enables traders to offer prices which are more favourable to those customers, *'such an assertion is insufficient to give rise to reasonable doubt as to whether the exchanges in question are sufficiently harmful to competition'* (paragraphs 198 and 199) and that in that case *'the HSBC companies' argument that those exchanges made it possible to offer prices which were more favourable to customers of the banks concerned does not give rise to any reasonable doubt as to the harmful nature of those exchanges with regard to competition on the market concerned'* (paragraph 205).

See also the Opinion of Advocate General Emiliou delivered on 12 May 2022 in Case C-883/19 P *HSBC Holdings plc a.o v Commission* EU:C:2022:384 at paragraphs 164 to 170, in which Advocate General Emiliou provided his opinion to dismiss the appellants' plea alleging a pro-competitive nature of the exchange of information on mid-prices in relation to the EIRD market.

¹²⁶ *Balmoral Tanks Limited v CMA* [2017] CAT 23, at [41].

¹²⁷ *JJB Sports v Office of Fair Trading* [2004] CAT 17, at [873] (cited with approval by the Competition Appeal Tribunal in *Balmoral Tanks Limited v CMA* [2017] CAT 23, at [41]).

D.III Subjective intention

- 6.22 Intention is not a necessary factor in determining whether an agreement or concerted practice is restrictive of competition.¹²⁸ However, there is nothing prohibiting a competition authority from taking the parties' intentions into account.¹²⁹

D.IV Implementation

- 6.23 It is sufficient that an agreement or concerted practice is capable, having regard to the specific legal and economic context, of resulting in the prevention, restriction or distortion of competition.¹³⁰ The fact that an agreement or concerted practice is not implemented is not sufficient to preclude the existence of an infringement.¹³¹ However, evidence of the parties' conduct demonstrating that the agreement or concerted practice was implemented may be taken into account.¹³²

E. The burden and standard of proof

- 6.24 The burden of proving an infringement of the Chapter I prohibition falls on the CMA.¹³³ The standard of proof is the civil standard, that is the balance of probabilities.¹³⁴ The burden of proof does not preclude the CMA from relying, where appropriate, on inferences or evidential presumptions.¹³⁵
- 6.25 The courts have confirmed that '*the evidence must be assessed not in isolation, but as a whole*'¹³⁶ and that '*the evidence must be assessed in its entirety, taking into account all relevant circumstances of fact*'.¹³⁷

¹²⁸ *Apex Asphalt and Paving Co Limited v OFT* [2005] CAT 4 at [250]. Nor is it relevant that the parties may not have considered the anti-competitive nature of their conduct (ibid. at [253]).

¹²⁹ *Cartes Bancaires*, paragraph 54 and the caselaw cited.

¹³⁰ *Philips*, paragraph 63 citing *T-380/10 Wabco Europe and Others v Commission*, EU:T:2013:449, paragraph 78 and the caselaw cited (upheld on appeal to the Court of Justice in *C-98/17 P Koninklijke Philips NV v Commission*, EU:C:2018:774).

¹³¹ Joined cases T-25/95 etc *Cimenteries CBR v Commission*, EU:T:2000:77, paragraph 2995 (see also paragraph 1389); and T-141/89 *Tréfileurope v Commission*, EU:T:1995:62, paragraph 60.

¹³² *Cityhook Limited v OFT* [2007] CAT 18 at [268]; and joined cases 96/82 etc. *NV IAZ v Commission*, EU:C:1983:310, paragraph 23.

¹³³ *Tesco Stores Limited and Others v Office of Fair Trading* [2012] CAT 31 ('Tesco') at [88].

¹³⁴ *Ibid.*

¹³⁵ *Napp Pharmaceutical Holdings Ltd and Subsidiaries v Director General of Fair Trading* [2002] CAT 1 at [110]; *JJB Sports plc and Allsports Limited v Office of Fair Trading* [2004] CAT 17 at [204]. See also *Argos Limited and Littlewoods Limited v Office of Fair Trading* [2004] CAT 24 at [164] to [166]; and, *Aalborg*, paragraph 57, which states '*[i]n most cases, the existence of an anticompetitive practice or agreement must be inferred from a number of coincidences and indicia which, taken together, may, in the absence of another plausible explanation, constitute evidence of an infringement of the competition rules*'.

¹³⁶ T-56/99 *Marlines v Commission*, EU:T:2003:333, paragraph 28. See also *C-48/69 ICI v Commission*, EU:C:1972:70, paragraph 68 cited in *Tesco*, at [46].

¹³⁷ T-141/94 *Thyssen Stahl v Commission*, EU:T:1999:48, paragraph 175.

F. Single infringement

- 6.26 The caselaw has established several criteria as relevant for determining whether an infringement is single in nature, as distinct from constituting separate infringements. These criteria include: the identical nature of the objective of the practice(s) at issue; the identical nature of the goods or services concerned; and the identical nature of the undertakings which participated in the infringement.¹³⁸ Whether the natural persons involved on behalf of those undertakings are identical is also a factor that may be taken into account.¹³⁹
- 6.27 Depending on the circumstances, a single infringement may be continuous or repeated. The way in which an infringement is committed determines whether it may be categorised as a single, continuous infringement or a single, repeated infringement.¹⁴⁰

G. Appreciable restriction of competition

- 6.28 An agreement or concerted practice will not infringe the Chapter I prohibition if its impact on competition is not appreciable.¹⁴¹ An agreement or concerted practice that has an anti-competitive object constitutes an appreciable restriction on competition by its nature and independently of any concrete effect that it may have.¹⁴²

H. Effect on trade within the UK

- 6.29 The Competition Appeal Tribunal has held that the effect on trade test is a purely jurisdictional test to demarcate the boundary line between the application of EU competition law and national competition law, and that there is no requirement that the effect on trade within the UK should be appreciable.¹⁴³

¹³⁸ *Campine*, paragraph 238 and the case-law cited.

¹³⁹ *Campine*, paragraph 238 and the case-law cited.

¹⁴⁰ *Campine*, paragraph 269 and the case-law cited. If conduct constituting a single infringement is interrupted, the infringement cannot be classified as continuous, but it may be classified as a single, repeated infringement provided a single objective is pursued both before and after an interruption. If the infringement is single and repeated, a penalty may not be imposed for the period of the interruption. (T-147/09 *Trelleborg v Commission*, paragraphs 88 and 89; *Campine*, paragraph 273 and the caselaw cited).

¹⁴¹ Case 5/69, *Franz Völk v S.P.R.L. Ets J. Vervaecke*, EU:C:1969:35. See also *North Midland Construction plc v OFT* [2011] CAT 14 at [45] and [52ff] and C-226/11 *Expedia Inc. v Autorité de la concurrence and Others*, EU:C:2012:795 ('*Expedia*'), paragraph 16.

¹⁴² *Expedia*, paragraph 37; and European Commission Notice on agreements of minor importance [2014] OJ C291/01, paragraphs 2 and 3. See also *Carewatch Care Services Limited v Focus Caring Services Limited and Others* [2014] EWHC 2313 (Ch), paragraph 149.

¹⁴³ *Aberdeen Journals v Director General of Fair Trading* [2003] CAT 11 at [459] and [460] and the caselaw cited. The Competition Appeal Tribunal considered this point also in *North Midland Construction plc v. OFT* [2011] CAT 14 at [48] to [51] and [62] but considered that it was not necessary to reach a conclusion.

I. Exemptions and exclusions

- 6.30 The Chapter I prohibition does not apply in any of the cases in which it is excluded by or as a result of Schedules 1 to 3 (section 3), or is exempt in accordance with sections 6, 9 or 10 of the Act.¹⁴⁴

J. Attribution of liability

J.I Identification of the appropriate legal entity

- 6.31 For each Party which the CMA finds has infringed the Act, the CMA has first identified the legal entity directly involved in the DB-RBC Infringement. It has then determined whether liability for the DB-RBC Infringement should also be attributed to another legal entity forming part of the same undertaking, in which case each legal entity's liability will be joint and several.

J.II Direct personal liability

- 6.32 Liability for an infringement of the Chapter I prohibition rests with the legal person(s) responsible for the operation of the undertaking at the time of the infringement (the 'personal responsibility' principle).¹⁴⁵

J.III Indirect personal liability

- 6.33 A parent company may be held jointly and severally liable for an infringement committed by its subsidiary – without the parent's knowledge or involvement¹⁴⁶ – where, as a matter of economic reality,¹⁴⁷ it exercised decisive influence over its subsidiary during its ownership period.¹⁴⁸ In such circumstances, the parent company and its subsidiary form a single economic unit and therefore form a single undertaking.¹⁴⁹ This assessment turns not only on intervention in, or supervision of, the subsidiary's commercial conduct in the strict sense, but on the economic, organisational and legal links between the parent and subsidiary, which may be informal.¹⁵⁰

¹⁴⁴ Section 3 of the Act sets out the following exclusions: Schedule 1 covers mergers and concentrations; Schedule 2 covers competition scrutiny under other enactments; and Schedule 3 covers general exclusions. Section 6 of the Act provides for block exemptions from the Chapter I prohibition. Section 9 sets out the cumulative criteria for an individual exemption. Section 10 of the Act provides for retained exemptions from the Chapter I prohibition.

¹⁴⁵ T-6/89, *Enichem Anic SpA v Commission*, EU:T:1991:74, paragraphs 236-237.

¹⁴⁶ C-90/09 P *General Química SA v Commission*, EU:C:2011:21, paragraph 102. See also C-97/08 *Akzo Nobel v Commission*, EU:C:2009:536 ('Akzo') paragraphs 59 and 77.

¹⁴⁷ C-293/13 P *Del Monte v Commission*, EU:C:2015:416, paragraphs 75-78.

¹⁴⁸ *Akzo*, paragraph 60; C-179/12 P *Dow v Commission*, EU:C:2013:605; *Allergan Plc v CMA* [2023] CAT 56 at [172].

¹⁴⁹ *Akzo*, paragraph 59; *Sainsbury's Supermarkets Ltd v MasterCard* [2016] CAT 11, at [363]; *Allergan Plc v CMA* [2023] CAT 56 at [163] to [165].

¹⁵⁰ C-440/11 *Commission v Stichting Administratiekantoort Portielje and Gosselin Group NV*, EU:C:2013:514, paragraphs 66 to 68; C-595/18 P *Goldman Sachs v Commission*, EU:C:2021:73, paragraphs 93-95.

- 6.34 Where a parent company holds, whether directly or indirectly,¹⁵¹ 100% (or nearly 100%)¹⁵² of the shares or voting rights¹⁵³ in a subsidiary, then the parent company is able to exercise decisive influence over the subsidiary and there is a rebuttable presumption in law that the parent did in fact exercise decisive influence over the commercial policy of the subsidiary.¹⁵⁴

¹⁵¹ C-508/11 P *Eni Spa v Commission*, EU:C:2013:289, paragraph 48; C-595/18 P, *Goldman Sachs v Commission*, EU:C:2021:73, paragraphs 32-33.

¹⁵² T-217/06 *Arkema France, Altuglas International SA, Altumax Europe SAS v Commission*, EU:T:2011:251, paragraph 53.

¹⁵³ T-419/14 *Goldman Sachs v Commission*, EU:T:2018:445, paragraphs 50 to 52 and 64, upheld in C-595/18P *Goldman Sachs v Commission*, EU:C:2021:73, paragraphs 35-36.

¹⁵⁴ *Akzo* paragraphs 60 and 61, T-24/05 *Alliance One & Others v Commission*, EU:T:2010:453, paragraphs 126-130.

7. ASSESSMENT OF THE DB-RBC INFRINGEMENT

A. Summary

- 7.1 For the reasons set out in this Chapter, the CMA has found that in the DB-RBC Relevant Period Deutsche Bank and RBC committed an infringement of the Chapter I prohibition by participating in a concerted practice and/or in some instances in an agreement which had as its object the restriction or distortion of competition within the UK.
- 7.2 Specifically, the CMA has found that Deutsche Bank and RBC participated in a single and repeated infringement on specific dates¹⁵⁵ (referred to collectively as the '**DB-RBC Specific Dates**') in the DB-RBC Relevant Period in the form of a concerted practice and/or in some instances an agreement which comprised the disclosure by one or both of Deutsche Bank and RBC to the other of variously current mid-prices, price parameters and future pricing in relation to specific gilts and gilt asset swaps and in some instances the coordination of trading strategies (including in relation to pricing) in relation to specific gilts contained in Bloomberg chats (collectively the '**DB-RBC Trading Communications**') (together the '**DB-RBC Infringement**').¹⁵⁶
- 7.3 The concerted practice and/or agreement had the objective to assist one or both of the Parties in formulating and executing aspects of their respective trading strategies in relation to (as applicable) the trading of certain gilts and gilt asset swaps.¹⁵⁷

B. Assessment of evidence

- 7.4 In its assessment of the evidence, the CMA has taken into account its historical and technical nature and has generally placed greater weight on the natural reading of the contemporaneous documentary evidence (namely the Bloomberg chats¹⁵⁸) in their proper context.

¹⁵⁵ 13 November 2009, 8 December 2009, 12 January 2010, 28 January 2010, 2 February 2010, 19 February 2010, 22 February 2010, 1 March 2010, 10 March 2010, 11 March 2010, 12 March 2010, 15 March 2010, 26 March 2010, 6 April 2010, 14 April 2010, 8 June 2010, 17 June 2010, 2 July 2010, 21 September 2010, 26 October 2010, 15 December 2010, 17 January 2011, 31 May 2011, 12 January 2012, 1 March 2012, 27 March 2012, 2 May 2012, 11 May 2012, 14 May 2012, 18 May 2012, 26 June 2012, 6 July 2012, 28 September 2012, 10 January 2013, 8 February 2013, 20 February 2013, 18 March 2013, 4 April 2013, 9 April 2013, 10 April 2013 and 11 April 2013.

¹⁵⁶ The CMA's findings in this Decision are made in respect of the conduct set out in this Chapter 7 in relation to the DB-RBC Infringement. The CMA has also indicated **in bold** at paragraphs 7.10, 7.11, 7.18 and 7.19 and at Annex B the specific disclosures which it has found to comprise the infringing disclosures in the DB-RBC Infringement.

¹⁵⁷ See further paragraphs 7.10, 7.11 and 7.19.

¹⁵⁸ The chats comprised messages sent in two persistent bilateral Bloomberg chatrooms (see Annex B). Such messages included technical, sector-specific jargon, abbreviations and shorthand. Discussions were often fast-paced (resulting in typographical errors and overlapping communications) and took place within the context of a range of available information (see Chapter 4), which the Key Individuals referenced on occasion in their communications.

- 7.5 In their respective interviews, the Key Individuals were able to explain the individual disclosures contained in the relevant Bloomberg chats put to them, including the relevant context, notwithstanding the passage of time since the DB-RBC Relevant Period and any lack of recall was mainly isolated to specific detailed points. At certain times and in relation to certain instances, the position taken by the Key Individuals was that the information disclosed was of minimal value. The CMA takes a different view.¹⁵⁹

C. Undertakings

- 7.6 The CMA has found that each of Deutsche Bank and RBC constituted an undertaking for the purposes of the Chapter I prohibition during the DB-RBC Relevant Period, since each of them was engaged in economic activity which included trading in gilts and gilt asset swaps. Each of Deutsche Bank and RBC continues to engage in economic activity.¹⁶⁰

D. The DB-RBC Trading Conduct as a concerted practice and/or agreement

- 7.7 The CMA has found that the disclosures on the DB-RBC Specific Dates were made in the context of the trading of certain gilts and/or gilt asset swaps whereby:

- (a) one or both of Deutsche Bank and RBC disclosed to the other commercially sensitive information in relation to the trading of certain gilts and/or gilt asset swaps; and
- (b) in some instances, in relation to the trading of gilts only, the Parties coordinated their trading strategies (including in relation to pricing) by concerting and/or agreeing that one or both would: (i) not trade specific gilts at a specific time; (ii) withdraw its/their trading price for specific gilts; or (iii) offer to trade the same gilt at a specific price,

(collectively the '**DB-RBC Trading Conduct**').

- 7.8 In reaching its finding that the DB-RBC Trading Conduct constituted a concerted practice and/or in some instances an agreement, the CMA has relied on the following evidence in the DB-RBC Relevant Period:

- (a) That the Parties were competitors in trading gilts and gilt asset swaps in the DB-RBC Relevant Period (see paragraph 4.8).

¹⁵⁹ The CMA's view is based, in part, on the fact that such statements are internally inconsistent with other statements made by the Key Individual during the interview and/or contradicted by the contemporaneous evidence (see for example footnote 168).

¹⁶⁰ See Chapter 3.

- (b) That the disclosures of a competitor's current mid-price, price parameters and/or future trading price constituted commercially sensitive information (see paragraphs 7.10 to 7.14 and Annex B).
- (c) That the Parties remained active on the Relevant Market in the DB-RBC Relevant Period and that there is no evidence that the Key Individuals expressed any reservation or objection to, or sought to publicly distance themselves from, the disclosures of commercially sensitive information in relation to the trading of the gilts and/or gilt asset swaps in question (see paragraph 7.15).

D.I Disclosure of commercially sensitive information

The content of the information disclosed

7.9 The DB-RBC Trading Conduct consisted of one or both of Deutsche Bank ([DB Trader]) and RBC (variously, [RBC Trader 1] and [RBC Trader 2]) disclosing to the other commercially sensitive information on variously its current mid-price, price parameters (see paragraph 7.10 and Annex B for further detail) and future pricing (see paragraph 7.11 and Annex B for further detail). In summary the disclosures occurred in the following communications in one or more circumstances:

- (a) Where one Party appeared uncertain as to their respective assessment of the current market conditions and sought reassurance from the other Party (see for example **DB-RBC, A-URN-007475** on 28 January 2010, in which Deutsche Bank ([DB Trader]) stated '*how do you mark it there?*', '*cant get my curve in line*' at 14:31:31 and 14:31:41, and **DB-RBC, A-URN-006832** on 14 May 2012, in which Deutsche Bank ([DB Trader]) stated '*bit of a struggle getting these 60s below 60*' at 07:14:26);
- (b) Where there appeared to be activity via brokers that one or both Parties were not expecting and the Parties disclosed to each other how they proposed to react (if at all) (see for example **DB-RBC, A-URN-007374** on 13 November 2009, in which Deutsche Bank ([DB Trader]) stated '*have 12 mid*', '*i'm not moving my screen*' at 15:25:15 and 15:25:12, to which RBC ([RBC Trader 1]) added '*yeah ...*' at 15:25:32, and **DB-RBC, A-URN-000150** on 11 March 2010, in which Deutsche Bank ([DB Trader]) asked '*how are 3q11 still bid at 82?*' at 11:24:29);
- (c) In response to a specific question as to current and/or future pricing from one Party to the other Party (see for example **DB-RBC, A-URN-000151** on 26 March 2010, in which RBC ([RBC Trader 1]) asked '*3Qs where do youh have those*' '*82.5?*' at 09:44:30 and 09:44:39, and **DB-RBC, A-URN-008406** on 28 September 2012, in which Deutsche Bank ([DB Trader]) asked '*when do u start shorting 1t22 ... 18bps?*' at 08:24:17 and 08:24:21).

7.10 As regards the disclosure of current mid-prices and price parameters, the evidence shows that:

- (a) In Bloomberg chat **DB-RBC, A-URN-007374** on 13 November 2009, in the context of a discussion about prices observed via brokers, Deutsche Bank ([DB Trader]) disclosed to RBC ([RBC Trader 1]) that his **current mid-price** for the 5% 2014 gilt was '12' and that he did not intend to adjust that mid-price despite the trading activity he was observing via the brokers (*'have 12 mid', 'i'm not moving my screen'* at 15:25:15 and 15:25:12). RBC ([RBC Trader 1]) acknowledged Deutsche Bank ([DB Trader])'s disclosure by stating *'yeah...'* at 15:25:32.
- (b) In Bloomberg chat **DB-RBC, A-URN-007413** on 8 December 2009, in the context of discussing how to react to a *'high'* DMO composite mid-price, Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 1]) disclosed to each other their respective **current mid-prices** for the 2.75% 2015 gilt. Deutsche Bank ([DB Trader]) disclosed that his **current mid-price** for that gilt was '99.97' (*'i have like 99.97 mid'* at 14:48:26) and RBC ([RBC Trader 1]) disclosed that his **current mid-price** was '91' (*'91 mid'* at 14:59:15).
- (c) In Bloomberg chat **DB-RBC, A-URN-007447** on 12 January 2010, in the context of the Parties disclosing to each other their difficulties in reconciling their respective current mid-prices with prices observed via brokers (*'cant even get my 2q14 that lwo [low]' 'nme [me] niether'* at 10:02:00 and 10:02:16), Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 1]) disclosed to each other their respective **current mid-prices** for a gilt switch consisting of gilts maturing in five and ten years: RBC ([RBC Trader 1]) disclosed that his current mid-price for that gilt switch was '130.9' (*'i have 130.9'* at 10:02:26) and Deutsche Bank ([DB Trader]) then disclosed that his **current mid-price** for the same gilt switch was '130.3' (*'i have 130.3'* at 10:02:36).
- (d) In Bloomberg chat **DB-RBC, A-URN-007475** on 28 January 2010:
 - (i) In the context of Deutsche Bank ([DB Trader]) experiencing difficulty in reconciling his current mid-price with trading activity observed via brokers, Deutsche Bank ([DB Trader]) disclosed to RBC ([RBC Trader 1]) his **current mid-price** ('55.25') for '16/19s' ie a gilt switch consisting of 2016 and 2019 gilts (*'how do you mark it there?', 'cant get my curve in line', '55/25 16/19s', '55.25'* at 14:31:31 to 14:32:00). RBC ([RBC Trader 1]) responded to Deutsche Bank ([DB Trader]) by disclosing his **current mid-price** ('29.5') for another gilt switch, the switch consisting of 5% 2014 ('5 14') and 4.75% 2015 gilts ('4 T 15') (*'i have 5 14 4 T 15 at 29.5'* at 14:32:25).

- (ii) Later that same day, Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 1]) disclosed to each other information about their respective current mid-prices for 2.25% 2014 gilts: RBC ([RBC Trader 1]) disclosed that he thought an offer to trade 2.25% 2014 gilts available via brokers was at a particularly low price (*'thats wrong in 2Qs'*) relative to his current mid-price. Deutsche Bank ([DB Trader]) subsequently disclosed his **current mid-price** for the 2.25% 2014 gilt of '51' (*'i have 51 mid'* at 15:47:40).
- (e) In Bloomberg chat **DB-RBC, A-URN-000147** on 2 February 2010, Deutsche Bank ([DB Trader]) asked RBC ([RBC Trader 1]) *'where to [do] you have 2t15...'*, ie the 2.75% 2015 gilt. Deutsche Bank ([DB Trader]) then disclosed that his current mid-price for that gilt *'looks so low'* (at 12:36:35). In response to Deutsche Bank ([DB Trader])'s original question, RBC ([RBC Trader 1]) disclosed his **current mid-price** (*'04'*) for that gilt (at 12:52:54).
- (f) In Bloomberg chat **DB-RBC, A-URN-007500** on 19 February 2010 in the context of trading via brokers:
 - (i) The Parties disclosed to each other their respective **current mid-prices** for two gilt switches: RBC ([RBC Trader 1]) disclosed that his **current mid-price** for a gilt switch consisting of 2014 and 2019 gilts was '140.4' and for a switch consisting of 2013 and 2019 gilts (*'13/19s'*) was '209' (*'I have it at 140.4', 'i got those at 209'* at 11:39:49 and 11:40:42). Deutsche Bank ([DB Trader]) disclosed that his **current mid-price** for a gilt switch consisting of 2014 and 2019 gilts was '140.7' and for a gilt switch consisting of 2013 and 2019 gilts was '208' (*'i have 140.7', '13/19s at 208'* at 11:39:59 and 11:40:14).
 - (ii) Later that day, in the context of Deutsche Bank ([DB Trader]) commenting on an offer to trade via brokers for the 5% 2014 gilt, Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 1]) disclosed to each other their respective **current mid-prices** for those same gilts: RBC ([RBC Trader 1]) disclosed that his **current mid-price** for that gilt was '59' (*'59 mid'* at 14:14:59) and Deutsche Bank ([DB Trader]) disclosed that his **current mid-price** was '61' (*'just moved to 61'* at 14:15:10).
- (g) In Bloomberg chat **DB-RBC, A-URN-007503** on 22 February 2010, in the context of trading via brokers, Deutsche Bank ([DB Trader]) disclosed his **current mid-price** (*'118'*) for the gilt switch consisting of gilts maturing in five and ten years (*'someone bidding 2t15 on my mids again', '118', 'thats where i had mid'* at 08:18:11, 08:18:27 and 08:18:37). RBC ([RBC Trader 1]) replied by disclosing his **current mid-price** (*'118.1'*) for the same gilt switch (*'118.1 i have em'* at 08:18:40).

- (h) In Bloomberg chat **DB-RBC, A-URN-000148** on 1 March 2010, in the context of trading via brokers:
- (i) In the context of RBC ([RBC Trader 1]) having disclosed to Deutsche Bank ([DB Trader]) that he was *'trying'* to trade a gilt switch consisting of 2013 gilts and 3.25% 2011 gilts (*'I'm trying to do 13s vs 3qs'* at 10:27:07), Deutsche Bank ([DB Trader]) disclosed his **current mid-price** (*'87.85 mid'*) for a gilt switch consisting of 2011 and 2013 gilts (*'i have 11/13s at 87.85 mid'* at 10:27:48) and stated that in his assessment and in light of his current mid-price, he thought RBC ([RBC Trader 1])'s trading price of *'89'* was *'wrong'* (*'89 is so wrong'* at 10:28:07).
 - (ii) Later that day, in the context of discussing trading activity being carried out by RBC ([RBC Trader 1]) for a gilt switch consisting of 2015 and 2019 gilts, Deutsche Bank ([DB Trader]) disclosed his **current mid-price** for the same gilt switch (*'i have 106.1 mid'* at 14:22:46).
 - (iii) See also paragraph 7.19 below in respect of the **coordination** of trading activity in this Bloomberg chat.
- (i) In Bloomberg chat **DB-RBC, A-URN-000150** on 11 March 2010, in the context of an exchange relating to trading activity observed via brokers for the 3.25% 2011 gilt (*'how are 3q11 still bid at 82?'* at 11:24:29), RBC ([RBC Trader 1]) disclosed his **current mid-price** (*'77 mid'* at 11:25:57) for that gilt, also saying that he thought his price was *'low'* (*'think i'm low here'* at 11:26:01). Deutsche Bank ([DB Trader]) then disclosed his **current mid-price** for the same gilt (*'78.25'* at 11:26:23).
- (j) In Bloomberg chat **DB-RBC, A-URN-003072** on 12 March 2010, in relation to a number of products in the context of trading via brokers involving gilts maturing in five and ten years, ie 2015 and 2019 gilts:
- (i) Deutsche Bank ([DB Trader]) disclosed his **current mid-price** (*'43.5'*) for the gilt asset swap box involving 4.75% 2015 and 2019 gilts (*'got 43.5 mid'*, *'4t15 vs 3t19'* at 11:44:54 and 11:45:15).
 - (ii) RBC ([RBC Trader 1]) then disclosed his **current mid-price** (*'120.25'*) for a related product, a gilt switch consisting of 2015 and 2019 gilts (*'120.25 cuve [curve]'* at 11:45:16) and asked Deutsche Bank ([DB Trader]) where his price was for that product (*'where do you have it'* at 11:45:27). Deutsche Bank ([DB Trader]) responded that his recent mid-price was *'121'* (*'i had it at 121'* at 11:45:35).
 - (iii) Further, in response to a query from RBC ([RBC Trader 1]) in relation to the price available via brokers for a gilt switch (*'that you i 4ts'* at

12:34:53), Deutsche Bank ([DB Trader]) disclosed to RBC ([RBC Trader 1]) his **current mid-price** ('120.75') for that gilt switch, ie the gilt switch consisting of 2015 and 2019 gilts (*'i have a 120.75 mid for that'* at 12:36:16).

- (k) In Bloomberg chat **DB-RBC, A-URN-000230** on 15 March 2010, in the context of a discussion between Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 1]) in relation to the price of 3.75% 2011 gilts observed on broker screens, ie '3qs' ('see 3qs go up' at 16:11:10), Deutsche Bank ([DB Trader]) disclosed that his **current mid-price** for those gilts was '83' (*'i still have a 83 mid'* at 16:11:53).
- (l) In Bloomberg chat **DB-RBC, A-URN-000151** on 26 March 2010, Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 1]) disclosed to each other their respective **current mid-prices** for various gilts and gilt switches. Specifically:
 - (i) In response to a question from RBC ([RBC Trader 1]) as to the price which Deutsche Bank ([DB Trader]) had for '3Qs', ie 3.25% 2011 gilts ('3Qs where do youh have those', '82.5?' at 09:44:30 and 09:44:39), Deutsche Bank ([DB Trader]) replied by disclosing his **current mid-price** for those gilts ('82.5' at 09:44:57).
 - (ii) Later that day, Deutsche Bank ([DB Trader]) disclosed that his **current mid-prices** for three gilt switches were '64.5', '39.5' and '37.5' (16:01:46 to 16:02:03). In response to Deutsche Bank ([DB Trader])'s request ('how you marking the curve?' at 16:00:52), RBC ([RBC Trader 1]) disclosed that his **current mid-prices** for the same three gilt switches were '64.65', '38.25' and '38.25' and for a gilt switch consisting of 2015 gilts ('15/15s') was '12.5' ('64.65', '38.25', '38.25', '12.5', '15/15s' at 16:07:31 to 16:07:43).
- (m) In Bloomberg chat **DB-RBC, A-URN-000152** on 6 April 2010 in the context of trading via brokers:
 - (i) Deutsche Bank ([DB Trader]) disclosed his **current mid-price** and assessment of a trading price for 3.25% 2011 gilts observed via brokers *'thats stupid'* (at 14:05:51) in light of his current mid-price of '70' (*'i have a 70 mid'* at 14:05:59). RBC ([RBC Trader 1]) then disclosed that he had the same **current mid-price** for the gilt, ie a current mid-price of '70' (*'me tpo [too]'* at 14:06:23).
 - (ii) See paragraph 7.11 below in respect of the disclosure of **future trading prices** in this Bloomberg chat.
 - (iii) See also paragraph 7.19 below in respect of the **coordination** of trading activity in this Bloomberg chat.

- (n) In Bloomberg chat **DB-RBC, A-URN-007642** on 8 June 2010, in the context of discussing two gilt switches - one consisting of 4.5% 2013 gilts and 2.25% 2014 gilts and the other consisting of 2013 and 2020 gilts – RBC ([RBC Trader 1]) asked Deutsche Bank ([DB Trader]) what his current mid-price was for the former gilt switch (*'where do you have 13s/14s'* at 08:12:40), to which Deutsche Bank ([DB Trader]) responded by disclosing that his **current mid-price** was **'43.8'** at 08:12:59. RBC ([RBC Trader 1]) then asked Deutsche Bank ([DB Trader]) where his current mid-price for the gilt switch consisting of 2013 and 2020 gilts was (*'and 13s 20s where'* at 08:13:08) and then disclosed his **current mid-price** for the latter gilt switch (**'219.2'** at 08:13:11), to which Deutsche Bank ([DB Trader]) confirmed that he also had the same **current mid-price** (*'yes'* at 08:24:49).
- (o) In Bloomberg chat **DB-RBC, A-URN-000155** on 17 June 2010, Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 1]) disclosed to each other their respective current mid-prices for the gilt switch consisting of 5% 2014 and 2.75% 2015 gilts (*'5 14 2t 1' '5'*). RBC ([RBC Trader 1]) asked Deutsche Bank ([DB Trader]) *'where do you have 5 14 2t 1 ... 5'* (at 15:22:08 and 15:22:09) following up by disclosing his **current mid-price** (*'...20.3'* at 15:22:27). Deutsche Bank ([DB Trader]) responded by disclosing his **current mid-price** to RBC ([RBC Trader 1]) (*'5 14 vs 2t15'*, **'21.2'** at 15:22:28 and 15:22:36).
- (p) In Bloomberg chat **DB-RBC, A-URN-000241** on 2 July 2010, in the context of various exchanges relating to Deutsche Bank ([DB Trader])'s comments on current trading activity via brokers, RBC ([RBC Trader 1]) disclosed to Deutsche Bank ([DB Trader]) his **current mid-price** (**'51.7'**, *'mid'* at 14:56:33 and 14:56:34) for the gilt switch that included 5% 2025 gilts. Deutsche Bank ([DB Trader]) then disclosed his **current mid-price** (**'51.65'**) for the same gilt switch (*'51.65 here'* at 14:56:40).
- (q) In Bloomberg chat **DB-RBC, A-URN-007750** on 21 September 2010, in the context of trading via brokers, Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 1]) disclosed to each other their respective current mid-prices for the gilt switch consisting of 2.75% 2015 and 4% 2016 gilts: RBC ([RBC Trader 1]) disclosed that his **current mid-price** for that gilt switch was **'47'** (*'i have 47 miod [mid]'* at 14:30:56) and Deutsche Bank ([DB Trader]) disclosed his **current mid-price** for the same gilt switch was **'46.75'** (*'i has [have] 46.75'* at 14:30:59).
- (r) In Bloomberg chat **DB-RBC, A-URN-007758** on 26 October 2010, in the context of a discussion in relation to a gilt switch consisting of two 2016 gilts, Deutsche Bank ([DB Trader]) asked RBC ([RBC Trader 1]) if he agreed that the **current mid-price** (*'fair value'*) of that gilt switch was a price of **'20'** basis points (*'fair value in 16s vs wi around 20bps?'* at 14:26:36). RBC ([RBC

Trader 1]) disclosed that he agreed with Deutsche Bank ([DB Trader])'s view ('*yh...*' at 14:33:52).

- (s) In Bloomberg chat **DB-RBC, A-URN-007815** on 17 January 2011, following a discussion in relation to recent trading activity via brokers for 2% 2016 gilts, RBC ([RBC Trader 1]) disclosed his **current mid-price** ('96') for the same gilt ('*i have 96 middle*' at 16:19:04).
- (t) In Bloomberg chat **DB-RBC, A-URN-007936** on 31 May 2011, in the context of a hedge fund ('*hf*') client seeking offers to trade a gilt fly consisting of 2021, 2034 and 2055 gilts from multiple dealers, Deutsche Bank ([DB Trader]) disclosed to RBC ([RBC Trader 1]) information on his **trading price parameters** for that gilt fly: Deutsche Bank ([DB Trader]) disclosed that he was quoting the client a spread, ie the difference between the yields of the three gilts involved, of 1 basis point for that gilt fly ('*...i made it 1bps wide*' at 14:15:32) and he would not make that spread any smaller, ie '*tighter*', than 1 basis point ('*hf asking 21/34/55s fly*', '*same*', '*right now*', '*[a RBC trader colleague] pricing*', '***yeah i made it 1bps wide***', '***not making them any tighter than that...***' at 14:15:14 to 14:15:44).
- (u) In Bloomberg chat **DB-RBC, A-URN-008131** on 12 January 2012, in the context of trading via brokers and in relation to a gilt asset swap involving gilts maturing in 30 years, RBC ([RBC Trader 1]) asked whether the current mid-price for the gilt asset swap was around '13.5' ('*13.5 mid here/?*' at 11:14:54). In response, Deutsche Bank ([DB Trader]) disclosed that his **current mid-prices** were '13' and '13.9' for two gilt asset swaps, one that the Parties had been discussing and another involving the 2040 gilt ('*i ahve [have] 13 mid on 30ry spreads*', '*but 40s macthed [matched] at 13.9*' at 11:14:54 to 11:15:28).
- (v) In Bloomberg chat **DB-RBC, A-URN-008188** on 1 March 2012, in the context of trading via brokers, Deutsche Bank ([DB Trader]) disclosed his recent trading activity to RBC ([RBC Trader 1]) ('*bought some 3t19*' at 13:26:43). RBC ([RBC Trader 1]) then asked for Deutsche Bank ([DB Trader])'s trading price ('*level/?*' at 13:31:06). In response to Deutsche Bank ([DB Trader])'s disclosure that he had traded at '53' (at 13:33:59), RBC ([RBC Trader 1]) disclosed to Deutsche Bank ([DB Trader]) that he had a **current mid-price** of '53.4' ('*i have them at 53.4*' at 13:36:14). Deutsche Bank ([DB Trader]) then disclosed that he had the same **current mid-price** of '53.4' for the same product ('*yeah so do we*' at 13:36:35).
- (w) In Bloomberg chat **DB-RBC, A-URN-008268** on 2 May 2012, Deutsche Bank ([DB Trader]) commented to RBC ([RBC Trader 2]) on the price observed via brokers of the gilt fly consisting of 2042, 2052 and 2060 gilts ('*52s fly is stupid*' at 08:44:35). Deutsche Bank ([DB Trader]) then disclosed to RBC

([RBC Trader 2]) his **current mid-price** ('11.7') for the same product ('*i have a 11.7 middle*' at 08:46:00).

- (x) In Bloomberg chat **DB-RBC, A-URN-006829** on 11 May 2012, over the course of the day, Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 2]) repeatedly disclosed to each other their **current mid-prices** in relation to the gilt fly consisting of 2042, 2052 and 2060 gilts, ie '*the fly*' in the context of trading via brokers. Specifically:
- (i) They repeatedly disclosed to each other their **current mid-prices** for '*the fly*': RBC ([RBC Trader 2]) disclosed to Deutsche Bank ([DB Trader]) that he had not moved his mid-price for the '*the fly*' that morning, further disclosing that his **current mid-price** remained '12.9' ('*i actually havent moved the fly today*', '*...i closed it at 12.9 and havent moved*' at 08:04:26 and 08:06:12). Deutsche Bank ([DB Trader]) meanwhile disclosed to RBC ([RBC Trader 2]) that his **current mid-price** for '*the fly*' was '13bps' ('*got 13bps today*' at 08:06:10).
 - (ii) Later that day, Deutsche Bank ([DB Trader]) disclosed to RBC ([RBC Trader 2]) that his **current mid-price** for '*the fly*' was '12.5' ('*i have a 12.5 mid*' at 14:37:23) and RBC ([RBC Trader 2]) then stated that he had the '**same**' **current mid-price** (at 14:37:49).
 - (iii) Almost half an hour later, Deutsche Bank ([DB Trader]) disclosed to RBC ([RBC Trader 2]) that his **current mid-price** for '*the fly*' was '*like 12.1bps*' ('*i have the fly at like 12.1bps now*' at 15:08:49) and RBC ([RBC Trader 2]) then stated that his **current mid-price** was '12.45' ('*we have 12.45*' at 15:09:06).
 - (iv) Later on, Deutsche Bank ([DB Trader]) disclosed to RBC ([RBC Trader 2]) that his **current mid-price** for '*the fly*' was '12' ('*got the fly at 12*' at 15:17:50) but that he was not certain of its accuracy ('*obviously wrong*' at 15:17:58).
 - (v) RBC ([RBC Trader 2]) went on to ask Deutsche Bank ([DB Trader]) where he had his current mid-price for several gilt switches related to '*the fly*' ('*where u have 42s29s*', '*42s49s*' at 15:20:46 and 15:20:49). Deutsche Bank ([DB Trader]) responded to RBC ([RBC Trader 2]) disclosing that his **current mid-price** was '6.7' but again queried its accuracy ('**6.7**', '*thats proabbly wrong*' at 15:21:32 and 15:21:35). RBC ([RBC Trader 2]) then disclosed to Deutsche Bank ([DB Trader]) that his **current mid-price** for that same gilt switch was '6.85' and that he had a **current mid-price** of '9.75' for a gilt switch consisting of 2042 and 2052 gilts and a current mid-price of '-2.75' for a gilt switch consisting of 2052

and 2060 gilts (**'have 6.85'**, **'9.75 for 42/52'**, **'and -2.75 for 52/60'** at 15:21:39 to 15:22:00).

- (vi) Finally, later that day, Deutsche Bank ([DB Trader]) disclosed to RBC ([RBC Trader 2]) that he had a **current mid-price** of **'12.4'** for the **'that fly'** (**'so got 12.4 for that fly'** at 15:25:34), in reaction to which RBC ([RBC Trader 2]) disclosed his **current mid-price** of **'12.5'** for that product (**'ew have 12.5'** at 15:25:44).
- (y) In Bloomberg chat **DB-RBC, A-URN-006832** on 14 May 2012, over the course of the day, in the context of their difficulties reconciling broker prices with their current mid-prices, Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 2]) repeatedly disclosed to each other pricing information in relation to the gilt fly consisting of 2042, 2052 and 2060 gilts, ie **'the fly'**. Specifically:
 - (i) Deutsche Bank ([DB Trader]) disclosed to RBC ([RBC Trader 2]) that he was having trouble aligning his current pricing with his observations on the 'broker market' (**'bit of a struggle getting these 60s below 60'** at 07:14:26). RBC ([RBC Trader 2]) reacted by stating that he considered that the trading price for **'the fly'** was **'close'** (**'that -12.25 on the fly looks close to me'** at 07:17:22). Deutsche Bank ([DB Trader]) then disclosed to RBC ([RBC Trader 2]) that he had a **current mid-price** of **'12.15'** for **'the fly'** (**'have 12.15'** at 17:08:03), in reaction to which RBC ([RBC Trader 2]) disclosed to Deutsche Bank ([DB Trader]) that he had moved his **current mid-price** for **'the fly'** to **'12.35'** (**'thats what i had but moved it to 12.35'** at 07:18:20). In reaction, Deutsche Bank ([DB Trader]) disclosed to RBC ([RBC Trader 2]) that he had adjusted his **current mid-price** for the switch consisting of 2042 and 2049 gilts and that had **'done the trick'** (**'yeah i have just adjusted 42/49s by 0.1'**, **'does the trick'** at 07:18:50 and 07:18:54) ie he had managed to align his price with the brokers.
 - (ii) Later that morning, in the context of discussing the prices observed via the brokers for the gilt switch consisting of 2050 and 2060 gilts and 2052 and 2060 gilts, RBC ([RBC Trader 2]) disclosed to Deutsche Bank ([DB Trader]) that his **current mid-price** for **'the fly'** was **'12.3'** (**'i have the fly at 12.3 now'** at 08:52:43).
 - (iii) Later still that day, in the context of asking RBC ([RBC Trader 2]) for his current mid-price for a gilt switch consisting of 2042 and 2049 gilts, Deutsche Bank ([DB Trader]) disclosed to RBC ([RBC Trader 2]) that his **current mid-price** for that gilt switch was **'10.3'** (at 12:11:41). RBC ([RBC Trader 2]) responded to Deutsche Bank ([DB Trader]) disclosing his **current mid-price** for the same gilt switch (**'10.3'** at 12:11:57), in

reaction to which Deutsche Bank ([DB Trader]) stated 'cool' (at 12:12:01).

- (iv) Later that day, RBC ([RBC Trader 2]) disclosed to Deutsche Bank ([DB Trader]) that he was having trouble with his pricing in relation to 'ultras' ('*something is wrong*', '*cant get everything to fit*', '*in ultras*' at 13:37:28 to 13:37:42). Deutsche Bank ([DB Trader]) then questioned '*what doesnt fit*' (at 13:37:51). RBC ([RBC Trader 2]) then disclosed to Deutsche Bank ([DB Trader]) that his **current mid-price** for '*the fly*' was '12.2' which did not align with the '-12.4' he was observing ('*fly still - 12.4*', '**have it 12.2**' at 13:38:05 and 13:38:08). In reaction, Deutsche Bank ([DB Trader]) disclosed to RBC ([RBC Trader 2]) that his **current mid-price** was '12.25' ('**got 12.25 here**' at 13:38:24) and also disclosed that his current mid-price for a related gilt switch consisting of 2042 and 2049 gilts was '7.3' ('**and thats with 42/49s at 7.3**' at 13:38:48).
- (z) In Bloomberg chat **DB-RBC, A-URN-006846** on 18 May 2012, Deutsche Bank ([DB Trader]) disclosed to RBC ([RBC Trader 2]) that he was offering to trade the gilt fly consisting of 2042, 2052 and 2060 gilts ('*i'm bidding for fly*' at 08:58:11). Deutsche Bank ([DB Trader]) then disclosed his **current mid-price** in the context of trading via brokers for that same gilt fly ('**12.35 mid**' at 08:58:33).
- (aa) In Bloomberg chat **DB-RBC, A-URN-008324** on 26 June 2012, in response to a request from Deutsche Bank ([DB Trader]) ('*where do u have them*'), RBC ([RBC Trader 2]) disclosed to Deutsche Bank ([DB Trader]) his **current mid-prices** ('5.4, 8.85, 12.4') for three gilt switches consisting of 2042 gilts and respectively 2046, 2049 and 2052 gilts in the context of trading via brokers ('*everyone must be marked 46s 49s and 52s quite funny*', '*where do u have them*' [...] '**5.4, 8.85, 12.4**' at 14:06:57 to 14:08:02). In response to RBC ([RBC Trader 2]) asking if he had similar mid-prices ('*u have similar?*' at 14:08:20), Deutsche Bank ([DB Trader]) disclosed his **current mid-prices** for the same gilt switches ('*i had*', '**5.5/8.9/12.45**' at 14:08:33 to 14:08:41).
- (bb) In Bloomberg chat **DB-RBC, A-URN-006927** on 6 July 2012, in response to a request from Deutsche Bank ([DB Trader]) ('*where do u think 42/46s are*' at 09:51:14), RBC ([RBC Trader 2]) disclosed to Deutsche Bank ([DB Trader]) his **current mid-price** ('6.6') for a gilt switch consisting of 2042 and 2046 gilts ('**marking them 6.6**' at 09:53:03).
- (cc) In Bloomberg chat **DB-RBC, A-URN-000192** on 10 January 2013, Deutsche Bank ([DB Trader]) disclosed his **current mid-price** ('12.9') for a gilt switch consisting of 2032 and 2034 gilts in the context of trading via brokers ('**still have 12.9 mid**' at 11:33:46). RBC ([RBC Trader 2]) then disclosed his

current mid-price ('20.35') for a gilt switch consisting of 2032 and 2036 gilts ('*i have them 20.35*' at 11:34:29).

(dd) In Bloomberg chat **DB-RBC, A-URN-007186** on 8 February 2013:

- (i) In response to a request from Deutsche Bank ([DB Trader]) ('*where do u have 42/60s*' at 10:01:26), RBC ([RBC Trader 2]) disclosed his **current mid-price** ('9.75') for a gilt switch consisting of 2042 and 2060 gilts in the context of trading via brokers ('*just looking at that 22/60s trade*', '*have it 9.75*' at 10:01:32 and 10:01:52).
- (ii) Later that day, Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 2]) disclosed to each other their current mid-prices for the gilt switch in the context of trading via brokers consisting of 2027 and 2028 gilts and debated what the 'right' mid-price was: in response to a request from RBC ([RBC Trader 2]) ('*where are you marking 27s28s*' at 10:51:03), Deutsche Bank ([DB Trader]) disclosed his **current mid-price** for that gilt switch ('**0.5**' at 10:54:40); RBC ([RBC Trader 2]) then disclosed his **current mid-price** ('0.9') for the same gilt switch and his reasons for why his current mid-price of '0.9' was '*right*', rather than Deutsche Bank ([DB Trader])'s ('*i have them 0.9*', '*which i think is right*', '*look at that 28s30s*', '*pick*' at 10:54:50 to 10:55:06).

(ee) In Bloomberg chat **DB-RBC, A-URN-000201** on 20 February 2013, in the context of trading via brokers, in relation to a gilt switch consisting of 2042 and 2055 gilts:

- (i) In response to a request from Deutsche Bank ([DB Trader]) ('*where do u have 42/55s*' at 14:27:45), RBC ([RBC Trader 2]) disclosed his **current mid-price** for that gilt switch ('**10.75**' at 14:27:50).
- (ii) In response to a request from RBC ([RBC Trader 2]) ('*where u think it is*' at 14:28:34), Deutsche Bank ([DB Trader]) disclosed his **current mid-price** ('**10.85**' at 14:28:41) for the same gilt switch, ie a gilt switch consisting of 2042 and 2055 gilts, following which RBC ([RBC Trader 2]) then disclosed that he had adjusted (ie '*moved*') his current mid-price for that gilt switch ('*k moved mine out*' at 14:28:51).

(ff) In Bloomberg chat **DB-RBC, A-URN-007251** on 18 March 2013, in the context of RBC ([RBC Trader 2])'s uncertainty in relation to demand for gilts maturing in 20 years, Deutsche Bank ([DB Trader]) disclosed information about his **current mid-price** for 2032 gilts, by stating that his current mid-price for 2032 gilts ('32s'), ie the gilt maturing in 20 years ('20yr'), was '60' ('*i am marked at 60 on 32s*' at 14:27:26). RBC ([RBC Trader 2]) then disclosed

that his **current mid-price** for the same gilts was '588' (*'i am 588'* at 14:27:33).

(gg) In Bloomberg chat **DB-RBC, A-URN-007273** on 4 April 2013, in relation to long-dated gilts in the context of trading via brokers:

- (i) RBC ([RBC Trader 2]) disclosed information about his current mid-prices for ultra-long gilts,¹⁶¹ stating they were '*high*' compared to other observable trading prices, ie '*the street*' (*'i look so high to street in ultras'*, '*but dont think i am*' at 13:56:15 and 13:56:20).
- (ii) Deutsche Bank ([DB Trader]) then disclosed his **current mid-prices** ('13' and '11') for two gilt switches consisting of 2042 gilts and respectively 2052 and 2055 gilts and stated that he did not think '*the street*' was far from being correct (*'i dont think the street are midles [miles] off'*, '*got 13 for 42/52s'*, '*11 for 42/55s*' at 13:56:39 to 13:56:53).
- (iii) RBC ([RBC Trader 2]) then disclosed his **current mid-prices** for the same gilt switches (*'i have 12.95 and 10.9'* at 13:57:01) and information about his **current mid-price** for a gilt switch consisting of 2052 and 2055 gilts, by stating that his **current mid-price** for that gilt switch was '*2.05 or 2.01*' (*'52s55s is 2.05 or 2.1'* at 13:57:10).

(hh) In Bloomberg chat **DB-RBC, A-URN-008619** on 9 April 2013:

- (i) In the context of RBC ([RBC Trader 2]) noting that his prices for gilts maturing in 20 years were '*high*' relative to prices observable via [electronic trading platform] (*'[electronic trading platform]'*) and that he could not understand why (*'i look so high in 20yr vs [electronic trading platform]'*, '*cant see why*' at 07:51:52 and 07:52:11), Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 2]) disclosed to each other their respective **current mid-prices**: Deutsche Bank ([DB Trader]) disclosed his **current mid-price** ('35.9') for a product related to gilts maturing in 20 years, ie for a gilt switch consisting of 2032 and 2042 gilts (*'i'm marking 32/42s at 35.9'* at 07:52:22); RBC ([RBC Trader 2]) then disclosed his **current mid-price** ('70.9') for another related product, ie a gilt fly consisting of 2022, 2032 and 2042 gilts (*'marking 22/32/42 at 70.9'* at 07:52:24); and Deutsche Bank ([DB Trader]) then disclosed his **current mid-price** ('71.3') for the same gilt fly (*'i have 71.3 for that'* at 07:52:59) and for a further related product (*'long[s]'*, ie a gilt switch) (*'btu i have long at 143.1'* at 07:53:17).

¹⁶¹ Gilts maturing in 35 years or more.

- (ii) Later that day, RBC ([RBC Trader 2]) disclosed to Deutsche Bank ([DB Trader]) his **current mid-price** for 'longs' (*'i mark them 143.15'* at 10:26:18). Deutsche Bank ([DB Trader]) then disclosed to RBC ([RBC Trader 2]) that he had a **current mid-price** for that product of '143' (*'i have 143'* at 10:26:29).
- (ii) In Bloomberg chat **DB-RBC, A-URN-007285** on 10 April 2013, in the context of composite mid-prices being observed via [electronic trading platform], RBC ([RBC Trader 2]) asked Deutsche Bank ([DB Trader]) for his current mid-price for a gilt switch consisting of 2032 and 2036 gilts (*'where u marking 32/36'* at 13:26:24). Deutsche Bank ([DB Trader]) disclosed to RBC ([RBC Trader 2]) his **current mid-price** for that gilt switch (*'19'* at 13:27:07) but then queried whether that was 'wrong' (at 13:27:20). RBC ([RBC Trader 2]) responded to Deutsche Bank ([DB Trader]) that he considered Deutsche Bank ([DB Trader])'s current mid-price was not wrong and disclosed that RBC ([RBC Trader 2])'s **current mid-price** was the '**same**' (*'no i have same'* at 13:27:58).
- (jj) In Bloomberg chat **DB-RBC, A-URN-008625** on 11 April 2013:
 - (i) In the context of RBC ([RBC Trader 2]) commenting on 'high' prices he was observing in relation to 2027 and 2028 gilts via brokers, Deutsche Bank ([DB Trader]) disclosed information about his **current mid-price** for a related gilt switch, by stating that his current mid-price for that gilt switch was *'in [the] middle'* of '75.5' and '75', ie at or approximately 75.25 (*'was 75.5/75', 'so i have marked in middle'* at 03:33:59 and 03:34:05). RBC ([RBC Trader 2]) then disclosed his **current mid-price** (*'4'* ie '75.4') for the same gilt switch (*'i have them .4'* at 03:34:16).
 - (ii) Some 20 minutes later, Deutsche Bank ([DB Trader]) then updated the disclosure he had made earlier, by stating that he had the same **current mid-price** (*'4'*) for the gilt switch as RBC ([RBC Trader 2]) had (*'oops... has them marked at .4'* at 03:52:13).

7.11 As regards the disclosure of future trading prices, the evidence shows that:

- (a) In Bloomberg chat **DB-RBC, A-URN-000152** on 6 April 2010, Deutsche Bank ([DB Trader]), in the context of trading via brokers, disclosed to RBC ([RBC Trader 1]) his **future trading price** for the 4.25% 2011 gilt, stating that he would buy that gilt in the event that a related gilt switch reached a price of '75' basis points (*'4q11 i will buy at 75bps'* at 14:09:38).
- (b) In Bloomberg chat **DB-RBC, A-URN-007789** on 15 December 2010, Deutsche Bank ([DB Trader]) disclosed to RBC ([RBC Trader 1]) that he was considering trading 2% 2016 gilts (as part of a gilt switch) at a point when

that gilt switch was at a price of '10bps' (*'can fancy 2 16 at 10bps now'* at 09:27:33). RBC ([RBC Trader 1]) then disclosed his **future trading price** for the same gilts, by stating that he intended to trade the 2% 2016 gilt again via brokers in the event that it reached a price of '9.25' (*'will go again at 9.25'* at 09:31:07). Following RBC ([RBC Trader 1])'s disclosure, Deutsche Bank ([DB Trader]) disclosed his **future trading price** for the same gilts, stating that he would trade those gilts again in the event that the related gilt switch reached a price of '9.5' or after an ongoing gilt auction (*'i'm waiting from 9.5 on', 'or until post auction'* at 09:31:19 and 09:31:24).

- (c) In Bloomberg chat **DB-RBC, A-URN-008406** on 28 September 2012, Deutsche Bank ([DB Trader]) asked RBC ([RBC Trader 1]) at what point he was intending to create a short trading position in 1.75% 2022 gilts eg by selling those gilts and whether RBC ([RBC Trader 1]) considered that '18bps' was the right price at which to do so (*'when do u start shorting 1t22 ... 18bps?'* at 08:24:17 and 08:24:21). RBC ([RBC Trader 1]) then disclosed his **future trading price** for those gilts, by saying that he would **'look to sell if they get to 18 for sure'** (at 08:28:59).

The information disclosed in the DB-RBC Trading Communications was commercially sensitive information

- 7.12 The information on current mid-prices, price parameters and future pricing was in each case confidential to the disclosing Party. It was not in the public domain or otherwise ordinarily available to the recipient Party at the time it was disclosed. Although some information relating to pricing was available from a number of sources (see paragraph 4.10), the CMA considers that this does not undermine its view that the information disclosed on current internal mid-prices, as well as price parameters and future pricing, in the specific context of the DB-RBC Trading Communications was confidential. In a normally competitive situation, each Party would have had to determine its mid-prices and future pricing strategy independently of the other and in the context of uncertainty as to the mid-prices and future pricing of others.¹⁶²
- 7.13 Moreover, the information disclosed by the disclosing Party on current mid-prices, price parameters and future pricing in the DB-RBC Trading Communications was strategic in nature, including in that it provided insight into specific aspects of (as applicable) the disclosing Party's current mid-prices or future trading prices for certain gilts or gilt asset swaps and/or was capable of influencing the recipient Party's trading strategies (including in relation to pricing) in relation to certain gilts or gilt asset swaps. In reaching this conclusion, the CMA has taken into account the nature of the information disclosed, the content and the context of the DB-RBC

¹⁶² See paragraphs 4.8 and 4.12. See also B-URN-000500865 at page 27; and B-URN-000501610 at page 3.

Trading Communications and, where relevant, evidence from the Parties and the Key Individuals, noting that:

- (a) The disclosing Party's mid-price was a pricing reference point in how that Party determined its trading price.¹⁶³
- (b) The information disclosed on current mid-prices, price parameters and future trading prices was specific, including that it related to certain gilts and/or gilt asset swaps.¹⁶⁴
- (c) Through the disclosures of current mid-prices, price parameters and/or future pricing the recipient Party obtained an insight into the disclosing Party's pricing based on the trading conditions at the time of the disclosure.
- (d) The disclosures of future pricing in particular provided the recipient Party with an insight into the disclosing Party's future pricing strategy for the relevant gilts and were therefore liable to assist the recipient Party to maintain or adjust its own pricing for the gilts in question.
- (e) The disclosures were made during the trading day (typically between 07:30 and 17:00)¹⁶⁵ when the Parties were engaged in ongoing trading and each would have been considering its trading strategies (including in relation to pricing), and in circumstances in which a Party could engage in or refrain from trading very quickly, if not immediately, upon receipt of the disclosed information.
- (f) The evidence provided by the Key Individuals, the context and, in some instances, the content of the disclosures indicates that they provided one or both Parties with a form of reassurance ([DB Trader] referred to a '*sense check*' or '*a form of sanity check*') which was liable to give one or both Parties more confidence when formulating and executing their respective trading strategies (including in relation to pricing).¹⁶⁶ The Parties valued each other's

¹⁶³ See paragraphs 4.12 to 4.15.

¹⁶⁴ This includes the various combinations of gilt and gilt asset swap trades noted, including gilt switches, gilt flies and gilt asset swaps boxes. The evidence shows that the information was expressed in such a way that the recipient Party would have understood that the information disclosed related to the disclosing Party's mid-prices in relation to those gilts and/or gilt asset swaps. As set out in Annex B, the evidence provided in interview from [DB Trader] (Deutsche Bank) and [RBC Trader 2] (RBC) in many cases confirmed the identity of the specific gilt and/or gilt asset swap that they were discussing in a particular Bloomberg chat. Where, given the passage of time, one or both of the traders were unclear at the time of interview as to what specific product was being discussed, the evidence (as set out in Annex B) shows that they each would have understood at the time of the chat in question the specific gilt and/or gilt asset swap being discussed.

¹⁶⁵ See paragraph 4.6.

¹⁶⁶ In his letter to the CMA following his interviews (B-URN-000502208), [DB Trader] stated that the reason he participated in such discussions '*was to test and **sense check** my views against those of other market participants*' (emphasis added) and that '*sharing bids was **a form of sanity check** as much as anything else*' (emphasis added). He also stated in the same document that '*the primary reason for sharing bids was to try and explain and reconcile activity in the market*'. See also for example, **DB-RBC, A-URN-007642** on 8 June 2010 in which RBC ([RBC Trader 1]) asked Deutsche Bank ([DB Trader]) '*where do you have 13s/14s*' at 08:12:40 and on receipt of Deutsche Bank ([DB Trader])'s disclosure of his current mid-price, RBC ([RBC Trader 1]) responded with '*thanks*' at 08:13:04 (paragraph 7.10(n)).

views and insights into market conditions and/or events.¹⁶⁷ From this the CMA has inferred that the information disclosed would have been of value to the recipient Party.¹⁶⁸

Conclusion – commercially sensitive information disclosed in relation to the DB-RBC Trading Conduct

- 7.14 In view of the above, the CMA has concluded that the information disclosed by each Party in the DB-RBC Trading Communications on (as applicable) its current mid-prices, price parameters and/or future trading prices in relation to certain gilts and gilt asset swaps was commercially sensitive information, the disclosure of which removed, or at least reduced, uncertainty as to specific aspects of the disclosing Party's pricing and other aspects of its trading strategies in relation to the gilts and gilt asset swaps in question and/or was capable of influencing specific aspects of the recipient Party's trading strategies (including in relation to pricing) in relation to the gilts and gilt asset swaps in question.

D.II The Parties remained active on the Relevant Market and did not publicly distance themselves from the disclosures of commercially sensitive information

- 7.15 In the DB-RBC Relevant Period, the Parties remained active on the Relevant Market, through their participation in trading, and there is no evidence that either Deutsche Bank ([DB Trader]) or RBC ([RBC Trader 1] and/or [RBC Trader 2]) expressed any reservation or objection to, or sought to publicly distance themselves from, the disclosures of commercially sensitive information in the DB-RBC Trading Conduct on the DB-RBC Specific Dates.¹⁶⁹ Therefore, the recipient Party is presumed to have taken account of the commercially sensitive information on current mid-prices, price parameters and/or future pricing disclosed by the disclosing Party in determining the recipient Party's conduct in relation to (as applicable) the trading of the gilts and gilt asset swaps in question.

¹⁶⁷ See for example **DB-RBC, A-URN-007475** on 28 January 2010 in which Deutsche Bank ([DB Trader]) asked RBC ([RBC Trader 1]) *'how do you mark it there?' 'cant get my curve in line'* (at 14:31:31 and 14:31:41) (paragraph 7.10(d)) and **DB-RBC, A-URN-000151** on 26 March 2010 in which RBC ([RBC Trader 1]) asked Deutsche Bank ([DB Trader]) *'3Qs where do youh have those'* at 09:44:30 (paragraph 7.10(l)). The CMA infers from the fact each of (i) [DB Trader] (Deutsche Bank) and (ii) [RBC Trader 1] (RBC) and [RBC Trader 2] (RBC) as applicable, sought each other's views that they valued those views.

¹⁶⁸ This is notwithstanding some evidence from [DB Trader] (Deutsche Bank) that there were limited benefits to knowing a competitor's mid-price. See for example B-URN-000502208; and B-URN-000502066 at page 181. The CMA's view, supported by the evidence set out in paragraphs 7.10 to 7.13, is that the benefits to knowing a competitor's current mid-price, trading price parameters and future trading prices were not limited (as contended by [DB Trader] (Deutsche Bank) and that disclosure of such information provided the recipient Party with insight into how a Party determined its trading prices.

¹⁶⁹ See paragraph 6.13. For example, neither recipient Party responded with a clear statement that it did not wish to receive the information in question. Nor has the presumption that the information disclosed was taken into account otherwise been rebutted.

- 7.16 Deutsche Bank and RBC thereby participated in a concerted practice by which they knowingly substituted practical cooperation between them for the risks of competition.

D.III Coordination of trading strategies (including in relation to pricing)

- 7.17 For the reasons set out below, the CMA has also concluded in respect of the DB-RBC Trading Communications that the Parties coordinated their trading strategies¹⁷⁰ (including in relation to pricing) in relation to specific gilts in certain instances and thereby:

- (a) the Parties participated in a concerted practice, in that they knowingly substituted practical cooperation between them for the risks of competition; and/or
- (b) the Parties participated in an agreement, in that there was a concurrence of wills between Deutsche Bank and RBC, who expressed their joint intention to conduct (as applicable) their trading strategies (including in relation to pricing) in relation to specific gilts in the context of the DB-RBC Trading Conduct in a specific way.

- 7.18 Specifically, the evidence shows that, in the following Bloomberg chats, which are set out more fully in paragraph 7.19 below and Annex B, Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 1]) concerted and/or agreed:

- (a) That one of them would not trade specific gilts at a certain time such that that Party would not compete to trade the gilt in question at the same time: for example, **DB-RBC, A-URN-000148** on 1 March 2010 (RBC ([RBC Trader 1]) '*you need to do it or I'm gonna hit 67s*' at 14:36:59 to which Deutsche Bank ([DB Trader]) responded '*go for it* ... '*i'll be 2nd noisy seller*' at 14:37:07 and 14:37:26).
- (b) That one of them would withdraw its trading price for a specific gilt such that that Party would no longer compete to trade that gilt at that price: for example, **DB-RBC, A-URN-007521** on 10 March 2010 (RBC ([RBC Trader 1]) '*can you pull price...*' at 15:57:22 to which Deutsche Bank ([DB Trader]) responded '*ok*' at 15:57:28).
- (c) That they would both offer to trade a specific gilt at the same trading price: for example, **DB-RBC, A-URN-000154** on 14 April 2010 (Deutsche Bank ([DB Trader]) '*we'll [j]ust build the brick wall at 43*' at 10:15:34 to which RBC ([RBC Trader 1]) responded '*yes agreed*' at 10:15:41).

¹⁷⁰ References to strategies, includes specific instances of trading activity.

7.19 The evidence shows that the Parties intended the coordination to benefit one or both Parties.

- (a) In Bloomberg chat **DB-RBC, A-URN-000148** on 1 March 2010, Deutsche Bank ([DB Trader]) disclosed that he was looking to trade the gilt switch via brokers consisting of 2012 and 2013 gilts (*'thats me in 12/13s ... ust een looking at it'* at 14:34:31) after which RBC ([RBC Trader 1]) then disclosed that he was considering the same gilt switch at a price of '67' (*'...i've been wieghing up the 67s'* at 14:34:47). RBC ([RBC Trader 1]) then advised Deutsche Bank ([DB Trader]) to trade that gilt switch at '67' or he was going to make the trade (*'you need to do it or i'm gonna hit 67s'* at 14:36:59). Deutsche Bank ([DB Trader]) then confirmed that he was happy for RBC ([RBC Trader 1]) to trade at that price (*'go for it'* at 14:37:07) and that he would refrain from trading until RBC ([RBC Trader 1]) had done so (*'i'll be 2nd noisy seller'* at 14:37:26). RBC ([RBC Trader 1]) asked Deutsche Bank ([DB Trader]) to wait to trade to avoid dissuading the potential counterparty from trading with RBC (*'not yet'*, *'dont want to put him off'* at 14:37:44 and 14:37:48).
- (b) In relation Bloomberg chat **DB-RBC, A-URN-007521** on 10 March 2010, Deutsche Bank ([DB Trader]) disclosed to RBC ([RBC Trader 1]) that he was the dealer offering to trade a two-way price for 2013 gilts via brokers (*'me in 13s'*, *'making 2 way'* at 15:50:58 and 15:51:03). RBC ([RBC Trader 1]) responded by expressing displeasure at Deutsche Bank ([DB Trader])'s trading price and trading activity (*'what are you doingh'*, *'geeeeeeeez'* and later *'hurry up and get it out geeeeeexz'*, *'hahaha'* at 15:51:06 to 15:51:09 and at 15:55:01 to 15:55:03). Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 1]) continued to discuss the price level at which Deutsche Bank ([DB Trader]) was trading via brokers and Deutsche Bank ([DB Trader]) stated that he was waiting for a *'call to start'* (*'i dont know yet'*, *'waiting for call to start'* at 15:57:10 and 15:57:14). RBC ([RBC Trader 1]) then asked Deutsche Bank ([DB Trader]) to *'pull'* his price until the call started (*'can you pull price til it fdoes'* at 15:57:22) to which Deutsche Bank ([DB Trader]) responded *'ok'* (15:57:28) and RBC ([RBC Trader 1]) expressed his gratitude (*'thanks'* at 15:57:52).
- (c) In Bloomberg chat **DB-RBC, A-URN-000152** on 6 April 2010, Deutsche Bank ([DB Trader]) disclosed that he was offering to trade a gilt switch consisting of 2015 and 2019 gilts at the trading price available via brokers (*'me in 4t15.3t19'* at 11:11:24). Deutsche Bank ([DB Trader]) then asked RBC ([RBC Trader 1]) to refrain from trading with him because it would disrupt Deutsche Bank ([DB Trader])'s attempts to trade with another dealer (*'dont hit me in 4t15'*, *'i am tempting someone in'* at 11:11:52 and 11:11:57). RBC ([RBC Trader 1]) replied *'...ok i wont'* (at 11:12:00).

- (d) In Bloomberg chat **DB-RBC, A-URN-000154** on 14 April 2010, Deutsche Bank ([DB Trader]) asked RBC ([RBC Trader 1]) whether he was the dealer offering to trade a gilt switch consisting of 2014 and 2015 gilts at a price of '42.75' via brokers ('*you trading 42.75*' at 10:12:02). RBC ([RBC Trader 1]) responded that he was ('yes' at 10:12:09). In reaction to RBC ([RBC Trader 1]) disclosing his pricing information, Deutsche Bank ([DB Trader]) expressed his displeasure ('*you lemon*' at 10:12:15) and disclosed the price at which he wanted to trade for the same gilt switch at a price of '43' ('*i was trying to broke him into trading with me at 43*' at 10:12:27). RBC ([RBC Trader 1]) acknowledged that he and Deutsche Bank ([DB Trader]) were competing for the same gilt switch trade, stating '*get out of my way*' (10:15:01) and '*get off my lawn*' (10:15:06). Deutsche Bank ([DB Trader]) said that he and RBC ([RBC Trader 1]) should '*not fight*' (10:15:10) and said that instead they should both offer to trade at a price of '43', ie '*...build the brick wall at 43*' at 10:15:34. RBC ([RBC Trader 1]) agreed he would do so by responding '**yes agreed**' (at 10:15:41). Later, Deutsche Bank ([DB Trader]) criticised RBC ([RBC Trader 1]) for offering to sell at a different price to that which RBC ([RBC Trader 1]) had 'agreed' ('*you are killing me at 42.1*' at 12:14:37). In response, RBC ([RBC Trader 1]) apologised and explained that it was inadvertent ('*that was a wrong price mate*', '*sorry*' at 12:15:36 and 12:15:38).
- (e) In Bloomberg chat **DB-RBC, A-URN-000175** on 27 March 2012, in the context of discussing their respective positions in relation to gilt basis, RBC ([RBC Trader 1]) informed Deutsche Bank ([DB Trader]) that he would refrain from trading gilt basis via brokers to allow Deutsche Bank ([DB Trader]) to '*go first*' and asked that Deutsche Bank ([DB Trader]) inform him once Deutsche Bank ([DB Trader]) had traded gilt basis, so that RBC ([RBC Trader 1]) could then trade it ('*you go first if you have it*', '*will hit down but after you if you like*' and '*yes let me know I'll go after*' at 11:43:47, 11:44:12 and 11:45:16). Deutsche Bank ([DB Trader]) confirmed that he would do so ('*will do*' at 11:45:25). RBC ([RBC Trader 1]) reiterated his offer to Deutsche Bank ([DB Trader]) twice more stating '*when you're done let me know*' (at 11:46:57) and '*will hi down after you whne they come back*' (at 11:47:48).

- 7.20 As regards the Parties' coordination of their trading strategies (including in relation to pricing), in each case, the Parties concerted on and/or agreed a specific course of action, regardless of whether a Party subsequently decided to disregard the concertation and/or agreement.
- 7.21 The Parties participated in a concerted practice, in that they knowingly substituted practical cooperation between them for the risks of competition. In addition, or in the alternative, the Parties participated in an agreement in that there was a concurrence of wills between Deutsche Bank and RBC, who expressed their joint intention to conduct (as applicable) their trading strategies (including in relation to

pricing) in relation to specific gilts in the context of the DB-RBC Trading Conduct in a specific way.

E. Object of restricting or distorting competition

- 7.22 For the reasons set out below, the CMA has found that the concerted practice and/or agreement consisting of the DB-RBC Trading Conduct had as its object the restriction or distortion of competition within the UK.

E.I Content of the DB-RBC Trading Conduct

- 7.23 The CMA has found that the content of the concerted practice and/or, in some instances, an agreement consisting of the DB-RBC Trading Conduct was (a) the disclosure by one or both of Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 1] or [RBC Trader 2]) to the other of commercially sensitive information on (as applicable) their current mid-prices, trading price parameters and future trading prices in relation to the trading of certain gilts and gilt asset swaps, and, in certain instances (b) the coordination by Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 1]) of their trading strategies (including in relation to pricing) in relation to the trading of specific gilts.

E.II Objective

- 7.24 The CMA has concluded that the objective of the DB-RBC Trading Conduct was to assist one or both of the Parties in formulating and executing their respective trading strategies (including in relation to pricing) in relation to the trading of certain gilts and gilt asset swaps.
- 7.25 Specifically, one or both of the Parties received or provided help in executing their trading strategies, by:
- (a) disclosing commercially sensitive information for the purpose of seeking and/or providing reassurance from/to one another in relation to their respective conduct and this was liable to give one or both of the Parties more confidence when formulating and executing their trading strategies (including in relation to pricing);¹⁷¹ and
 - (b) in some instances, coordinating their trading strategies (including in relation to pricing) to minimise the risk of interfering with each other's respective trading strategies (including in relation to pricing) in relation to specific gilts.¹⁷²

¹⁷¹ See paragraph 7.13(f).

¹⁷² See paragraph 7.20.

E.III Legal and economic context

- 7.26 For the purposes of the ensuing analysis, the CMA sets out below the key components of the legal and economic context that apply across the DB-RBC Trading Conduct.
- 7.27 The Parties were designated as GEMMs during the DB-RBC Relevant Period and were therefore amongst each other's closest competitors for the trading of gilts and gilt asset swaps.¹⁷³
- 7.28 The CMA notes that the Parties used two single persistent Bloomberg chat rooms (between (a) Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 1]) and (b) Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 2]) respectively) to disclose the commercially sensitive information and, as between Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 1]), in some instances, to coordinate their conduct in respect of the trading of specific gilts.
- 7.29 Since gilts and gilt asset swaps were traded over-the-counter through various channels and means, there was no single, agreed 'market' price for each product (see paragraph 4.9). Price setting was therefore a part of the role of each Party's trader(s) requiring the application of independent judgement by reference to a range of imperfect sources of available information, including information that was accessible to all market participants (eg via brokers and electronic trading platforms) (see paragraphs 4.9 to 4.15). The CMA notes that in the context of the DB-RBC Trading Conduct, the Parties often disclosed information on current mid-prices for example where there was a misalignment between the price a Party was observing via brokers and its own mid-price for a gilt or gilt asset swap.¹⁷⁴
- 7.30 A Party's mid-price (which was internal and not in the public domain or otherwise ordinarily available to other dealers) was a pricing reference point in how a Party determined its price in the context of the trading of gilts and gilt asset swaps (see paragraphs 4.12 to 4.15). Further, the adoption of an incorrect mid-price could risk undermining a trader's trading strategy for a particular gilt or gilt asset swap.¹⁷⁵
- 7.31 In determining its trading price for a gilt or gilt asset swap, a Party would have had regard to its current mid-price for the gilt or gilt asset swap being traded and its view on the amount (if any) by which the Party considered the relevant price ought to differ from that mid-price alongside other publicly available information and

¹⁷³ See footnote 91.

¹⁷⁴ See for example, **DB-RBC, A-URN-000150** on 11 March 2010, **DB-RBC, A-URN-000152** on 6 April 2010 and **DB-RBC, A-URN-007273** on 4 April 2013.

¹⁷⁵ For example, [RBC Trader 2] (RBC) explained in interview ([§<]) the consequences of adopting the wrong strategy in relation to whether to adjust his mid-price in response to market movements, stating that this could lead him to 'misprice' a trade or not to offer to trade because of a lack of 'confiden[ce]' in his price such that he could lose out on the possibility of trading (B-URN-[§<], 'Um, you could potentially misprice things, or you could just, you know just say that you, you can't quote something because, um, you know you're not confident in the price').

commercially sensitive information relevant to its trading strategies (including in relation to pricing) (see paragraphs 4.14 and 4.15).

- 7.32 During the DB-RBC Relevant Period, the Parties competed with each other (and other dealers) both in relation to trades with clients and trades with other counterparties.¹⁷⁶ In normal conditions of competition, the Parties' trading prices would have been derived independently, taking into account a range of factors.¹⁷⁷

E.IV Restriction or distortion of competition by object

- 7.33 In view of the foregoing analysis of the content, objective and legal and economic context in which the DB-RBC Trading Conduct took place, and for the further reasons set out below, the CMA has concluded that the concerted practice and/or agreement consisting of the DB-RBC Trading Conduct had as its object the restriction or distortion of competition.
- 7.34 The effective and competitive trading of gilts and gilt asset swaps involved all participants setting their trading strategies (including in relation to pricing) independently of each other.¹⁷⁸
- 7.35 The disclosures of commercially sensitive information on current mid-prices, price parameters and future trading prices in relation to gilts and gilt asset swaps in the DB-RBC Trading Communications and, in some instances, the coordination of trading strategies (including in relation to pricing) in relation to specific gilts, as applicable, removed, or at least reduced, uncertainty on each of the DB-RBC Specific Dates as to the disclosing Party's trading strategies (including in relation to pricing) in relation to the gilts and gilt asset swaps in question and/or were capable of influencing aspects of the recipient Party's trading strategies (including in relation to pricing) in relation to the trading of those gilts and gilt asset swaps. They also resulted in an informational asymmetry between the Parties and other participants in relation to the trading of those gilts and gilt asset swaps¹⁷⁹ thereby placing one or both of the Parties at a competitive advantage compared to counterparties (which included each Party's clients) and competitors.
- 7.36 Such disclosures provided the recipient Party with a form of reassurance and were liable to give one or both of the Parties more confidence regarding their trading strategies (including in relation to pricing) in relation to the gilts and gilt asset swaps in question.

¹⁷⁶ See paragraph 4.8.

¹⁷⁷ See paragraphs 4.8 and 4.15.

¹⁷⁸ See paragraphs 4.8, 4.9 to 4.15 and 7.32.

¹⁷⁹ The informational asymmetry was that one or both of the Parties had better information relevant to competition than was otherwise lawfully available to other participants.

- 7.37 Such conduct was not consistent with the Parties determining their trading strategies (including in relation to pricing) independently. It did not correspond to the normal conditions of competition in the trading of specific gilts and gilt asset swaps that would have been present absent the disclosures and/or the coordination. Moreover, the disclosures of commercially sensitive information and/or the coordination of trading strategies (including in relation to pricing) were not necessary for the proper functioning of normal competition in relation to the trading of those gilts and gilt asset swaps.
- 7.38 In view of the above, the disclosures of commercially sensitive information and/or the coordination of trading strategies (including in relation to pricing) were, by their very nature, harmful to the proper functioning of normal competition.

E.V Conclusion on the restriction or distortion of competition

- 7.39 For the reasons set out above, and having regard to the content of the concerted practice and/or agreement, its objectives and the legal and economic context of which it formed part, the CMA has concluded that the DB-RBC Trading Conduct revealed a sufficient degree of harm to competition in relation to the trading of the gilts and gilt asset swaps in question such as to constitute a restriction or distortion of competition in by object.

F. The DB-RBC Infringement as an appreciable restriction of competition

- 7.40 A concerted practice and/or agreement that has an anti-competitive object constitutes an appreciable restriction on competition by its nature and independently of any concrete effect that it may have.¹⁸⁰
- 7.41 The CMA has found that Deutsche Bank and RBC participated in a concerted practice and/or agreement that had the object of restricting or distorting competition (see paragraph 7.33 above). Therefore, the CMA has found that the concerted practice and/or agreement constitutes, by its nature, an appreciable restriction of competition within the UK for the purposes of the Chapter I prohibition.¹⁸¹

¹⁸⁰ See paragraph 6.28.

¹⁸¹ In any event, and in the alternative, the CMA has found that the DB-RBC Infringement constituted an appreciable restriction on competition within the UK for the purpose of the Chapter I prohibition based on the following: (i) the geographic scope of the DB-RBC Infringement covered conduct within the UK; (ii) the nature of the DB-RBC Infringement (see paragraphs 7.8 to 7.23); and (iii) the Parties' activities in the Relevant Market within the UK, including the nature of the Parties' roles as GEMMs.

G. Potential effect on trade within the UK of the DB-RBC Infringement

- 7.42 The CMA has found that the DB-RBC Infringement was capable of affecting trade within the UK given the geographical scope of the DB-RBC Infringement (which included the whole of the UK), the nature of the DB-RBC Infringement, and the Parties' activities in the Relevant Market within the UK.

H. Exclusion or exemption

- 7.43 The CMA has found that none of the exclusions from the Chapter I prohibition apply to the DB-RBC Infringement.¹⁸²
- 7.44 Concerted practices and/or agreements which have as their object the prevention, restriction or distortion of competition, are unlikely to benefit from individual exemption under section 9(1) of the Act as such restrictions generally fail (at least) the first two conditions for exemption: they neither create objective economic benefits nor do they benefit consumers. Moreover, such concerted practices generally also fail the third condition (indispensability).
- 7.45 However, each case ultimately falls to be assessed on its merits. Neither of the Parties has claimed that an exemption should apply in this case.¹⁸³ The CMA has therefore concluded that no exemption applies in this case.

I. Legal characterisation and duration of the DB-RBC Infringement

- 7.46 The CMA has found that, on the basis of the evidence taken as a whole, the DB-RBC Trading Conduct constituted a single and repeated infringement, comprising the specific disclosures of commercially sensitive information and/or coordination (as applicable) on each of the DB-RBC Specific Dates.¹⁸⁴
- 7.47 The CMA has relied on the following evidence to conclude that the DB-RBC Conduct constituted a single infringement:
- (a) The DB-RBC Trading Conduct pursued a single objective. Specifically, the Parties disclosed to each other commercially sensitive information and/or coordinated their conduct to assist one or both Parties in formulating and executing aspects of their respective trading strategies (including in relation to pricing) in relation to the trading of certain gilts and gilt asset swaps.¹⁸⁵

¹⁸² See paragraph 6.30.

¹⁸³ In accordance with section 9(2) of the Act, any Party claiming the benefit of an exemption bears the burden of proving that the conditions in section 9(1) of the Act are satisfied.

¹⁸⁴ See footnote 155.

¹⁸⁵ See paragraphs 7.10, 7.11 and 7.19.

- (b) The same individuals at the same two undertakings disclosed commercially sensitive information and/or in certain instances coordinated their conduct in the DB-RBC Relevant Period using the same means of communication (bilateral Bloomberg chatrooms) which existed throughout the DB-RBC Relevant Period.¹⁸⁶
- (c) The products that were the subject of the DB-RBC Infringement, namely gilts and gilt asset swaps, were the same or similar throughout the DB-RBC Relevant Period and were traded in similar ways.¹⁸⁷
- (d) There were certain similarities in how pricing of the gilts and gilt asset swaps in question was determined during the DB-RBC Relevant Period.¹⁸⁸

7.48 Through its own conduct, each of Deutsche Bank ([DB Trader]) and RBC (variously [RBC Trader 1] and [RBC Trader 2]) made an intentional contribution to that single objective. Furthermore, each of Deutsche Bank ([DB Trader]) and RBC (variously [RBC Trader 1] and [RBC Trader 2]) was a party to each DB-RBC Communication and, having understood its contents, was necessarily aware of the other's contribution to the DB-RBC Trading Conduct in pursuit of the single objective.

7.49 In the specific circumstances of this case, the CMA has found that the disclosures of commercially sensitive information and/or coordination in the DB-RBC Trading Communications between Deutsche Bank ([DB Trader]) and RBC (variously [RBC Trader 1] and [RBC Trader 2]) on the DB-RBC Specific Dates constitute a single and repeated infringement. The CMA has therefore found that the duration of the DB-RBC Infringement was 41 days.

J. Conclusion on DB-RBC Infringement

7.50 For the reasons set out above, the CMA has found that in the DB-RBC Relevant Period Deutsche Bank and RBC committed a single and repeated infringement of the Chapter I prohibition by participating in a concerted practice and/or in some instances in an agreement which had as its object the restriction or distortion of competition within the UK.

K. Attribution of liability

7.51 The CMA has set out below in relation to each Party the relevant legal persons, including the legal entity directly involved in the DB-RBC Infringement and (if different) the ultimate parent company.

¹⁸⁶ See Annex B.

¹⁸⁷ See paragraphs 4.4 to 4.8 and 4.12.

¹⁸⁸ See paragraphs 4.9 to 4.15.

K.I Deutsche Bank

- 7.52 The ultimate parent company of the undertaking is Deutsche Bank.¹⁸⁹
- 7.53 During the DB-RBC Relevant Period, [DB Trader]'s participation in the gilt trading activities described in this Chapter 7 was on behalf of Deutsche Bank.¹⁹⁰ Accordingly, the CMA has concluded that Deutsche Bank was directly involved in, and is therefore liable for, the DB-RBC Infringement. This Decision is therefore addressed to Deutsche Bank.

K.II RBC

- 7.54 [RBC Trader 1] was employed by RBC Europe, the GEMM entity within RBC, during part of the DB-RBC Relevant Period and he participated in the trading activities described in this Chapter 7 on behalf of RBC.¹⁹¹ The CMA has therefore found that RBC Europe was directly involved in, and is therefore liable for, the DB-RBC Infringement.
- 7.55 [RBC Trader 2] was employed by Royal Bank of Canada during part of the DB-RBC Relevant Period and he participated in the trading activities described in this Chapter 7 on behalf of RBC.¹⁹² The CMA has therefore found that Royal Bank of Canada was directly involved in, and is therefore liable for, the DB-RBC Infringement.
- 7.56 The CMA has also found that Royal Bank of Canada is jointly and severally liable with RBC Europe for the DB-RBC Infringement. That is because RBC Europe was owned and controlled by Royal Bank of Canada, which is the ultimate parent company of the undertaking,¹⁹³ which can therefore be presumed to have exercised decisive influence over RBC Europe during the DB-RBC Relevant Period, and thereby formed part of the same undertaking.
- 7.57 This Decision is therefore addressed to RBC Europe and Royal Bank of Canada.

¹⁸⁹ See paragraph 3.3.

¹⁹⁰ See paragraphs 3.5 and 3.6.

¹⁹¹ See paragraphs 3.10 and 3.11.

¹⁹² See paragraphs 3.12 and 3.13.

¹⁹³ See paragraphs 3.8 and 3.9.

8. THE CMA'S ACTION

A. The CMA's decision

- 8.1 On the basis of the evidence set out in this Decision, the CMA has made a decision addressed to the Parties, finding them liable for infringing the Chapter I prohibition.

B. Directions

- 8.2 Where the CMA has made a decision that a concerted practice or agreement infringes the Chapter I prohibition, it may give to such person or persons as it considers appropriate such directions as it considers appropriate to bring the infringement to an end.¹⁹⁴
- 8.3 As the DB-RBC Infringement has come to an end, the CMA has decided not to issue directions in this case.

C. Financial penalties

- 8.4 On making a decision that a concerted practice and/or an agreement has infringed the Chapter I prohibition, the CMA may require an undertaking which is a party to that concerted practice and/or agreement to pay the CMA a penalty in respect of the infringement.¹⁹⁵
- 8.5 The CMA signed an immunity agreement with Deutsche Bank, pursuant to which Deutsche Bank admitted its involvement in the DB-RBC Infringement.¹⁹⁶ Deutsche Bank was granted full immunity from financial penalties under the CMA's leniency policy. This immunity will continue to apply provided that Deutsche Bank continues to comply with the conditions of the CMA's leniency policy.¹⁹⁷
- 8.6 As part of its settlement,¹⁹⁸ RBC has admitted its involvement in, and liability for, the DB-RBC Infringement as set out in this Decision. Under the terms of the settlement, RBC has agreed to pay a maximum total financial penalty of **£34,200,000** in relation to the DB-RBC Infringement.

¹⁹⁴ Section 32(1), read together with section 2(5) of the Act.

¹⁹⁵ Section 36(1), read together with section 2(5) of the Act.

¹⁹⁶ See paragraph 2.1.

¹⁹⁷ The CMA has therefore not calculated the level of any financial penalty that the CMA would have imposed on Deutsche Bank if immunity had not been granted.

¹⁹⁸ See paragraph 2.5.

- 8.7 The CMA must have regard to the guidance on penalties in force at the time when setting the amount of a penalty,¹⁹⁹ which sets out a six-step approach for calculating the penalty to be imposed on an undertaking.²⁰⁰
- 8.8 The CMA has a discretion to impose financial penalties.²⁰¹ In assessing the appropriateness and proportionality of a penalty, the CMA is not bound by its previous decisions, but it should ensure that there is broad consistency in its approach.²⁰²

C.I Intention/negligence

- 8.9 The CMA may impose a penalty on an undertaking which has infringed the Chapter I prohibition only if it is satisfied that the infringement has been committed intentionally or negligently by the undertaking.²⁰³
- 8.10 In view of the objective of the conduct of the Parties in respect of the DB-RBC Infringement (see Chapter 7²⁰⁴) and the obligations the Parties, as GEMMs, were required to meet,²⁰⁵ the CMA has concluded that the Parties must have been aware, or could not have been unaware, that their conduct had the object of restricting competition.²⁰⁶ In the alternative, for the same reasons, the CMA has concluded that, at the very least, the Parties ought to have known that their conduct would result in a restriction or distortion of competition.
- 8.11 The CMA has therefore found, for the purposes of determining whether to exercise its discretion to impose a penalty, that the DB-RBC Infringement was committed intentionally. In the alternative, for the same reasons, the CMA has found that the DB-RBC Infringement was committed at least negligently.

¹⁹⁹ Section 38(8) of the Act. In this Decision the CMA has had regard to the Penalty Guidance, as published on 16 December 2021 (CMA73).

²⁰⁰ Penalty Guidance, paragraph 2.1.

²⁰¹ Penalty Guidance, paragraph 1.2.

²⁰² Penalty Guidance, paragraph 1.4.

²⁰³ Section 36(3) of the Act. The Competition Appeal Tribunal has defined the terms 'intentionally' and 'negligently' as follows: '*an infringement is committed intentionally for the purposes of section 36(3) of the Act if the undertaking must have been aware, or could not have been unaware, that its conduct had the object or would have the effect of restricting competition. An infringement is committed negligently for the purposes of section 36(3) if the undertaking ought to have known that its conduct would result in a restriction or distortion of competition*' (*Argos Limited and Littlewoods Limited v OFT* [2005] CAT 13 ('*Argos and Littlewoods*') at [221]. See also *Napp Pharmaceutical Holdings Limited and Subsidiaries v Director General of Fair Trading* [2002] CAT 1 ('*Napp*') at [456]). The CMA is not obliged to specify whether it considers the infringement to be intentional or merely negligent for the purposes of determining whether it may exercise its discretion to impose a penalty (*Napp* at [453] to [457]).

²⁰⁴ In particular, see paragraph 7.48 in relation to each Party's intentional contribution to the DB-RBC Conduct and its single objective, and also each Party's awareness of the other's contribution to the DB-RBC Conduct in pursuit of the single objective.

²⁰⁵ See Chapter 4. Specifically, the DMO guidebooks in force during the DB-RBC Relevant Period set out the DMO's view that '*liquidity in the gilt-edged market is best preserved by the presence of **competing market makers***' (emphasis added) (B-URN-000503293, paragraph 5).

²⁰⁶ It is not necessary to show that the undertaking also knew that it was infringing the Chapter I prohibition and, in some cases, the fact that certain consequences are plainly foreseeable is an element from which the requisite intention may be inferred (*Napp* at [456]).

C.II Calculation of RBC's penalty

Step 1 – starting point

- 8.12 The starting point for determining the level of financial penalty is calculated through a case specific assessment, having regard to the relevant turnover of the undertaking, the seriousness of the infringement and the need for general deterrence.²⁰⁷

Determination of RBC's relevant turnover

- 8.13 The CMA has calculated RBC's penalty using an income-based, rather than turnover-based, approach.²⁰⁸
- 8.14 RBC provided the CMA with the income information that it identified as most closely reflecting income derived from its activities within the Relevant Market (see Chapter 5),²⁰⁹ which the CMA used to determine the categories of income that it considers appropriate to include within RBC's relevant turnover.²¹⁰
- 8.15 The Penalty Guidance refers to relevant turnover in an undertaking's last business year (being the financial year preceding the date when the infringement ended).²¹¹

²⁰⁷ Penalty Guidance, paragraphs 2.2 to 2.13.

²⁰⁸ Normally, the CMA will base relevant turnover on revenue figures that reflect the turnover of sales. However, banks record revenue generated from their activities on a basis which reflects the net of prices paid and received for the buying and selling of assets, together with trading gains and losses and certain trading costs. This revenue is referred to as 'income' in this document. This approach is consistent with the Penalty Guidance (paragraphs 2.11 and 2.12, citing the Competition Act 1998 (Determination of Turnover for Penalties) Order 2000 (SI 2000/309) (the '**Penalties Order**'), which states that figures other than turnover figures may better reflect the true scale of an undertaking's activity in the relevant market and with Paragraph 5 of the Schedule to the Penalties Order, which prescribes an income-based approach to calculating the maximum penalty that may be imposed on financial institutions.

²⁰⁹ Namely, income relating to the issuance and trading of gilts and related derivative instruments (which the CMA notes is wider than income in relation to gilt asset swaps). RBC did not separately record income derived from its activities within the Relevant Market and it highlighted limitations in its ability to retrieve, and provide the CMA with, income information that specifically relates to gilts and gilt asset swaps (ie the products falling within the Relevant Market) (see, for example, B-URN-000502295, pages 1 to 3 and Annex 1). RBC was, however, able to distinguish between income from gilts and income from gilt-related derivatives. The CMA has therefore included only gilt income in its determination of RBC's relevant turnover, as the closest comparator to income related to gilts and gilt asset swaps.

²¹⁰ The CMA considers it appropriate to include syndication fees within relevant turnover, despite syndication not forming part of the Relevant Market, in order properly to reflect the way in which RBC (and other GEMMs) were remunerated for their activities within the Relevant Market (see, for example, B-URN-000502295, paragraph 10.6; B-URN-000501973; and B-URN-000501297, questions 9 and 10). Given the limitations on the information available and the ways in which revenues were generated in the Relevant Market, there is no perfectly accurate way to reflect the true scale of RBC's activities in the Relevant Market at Step 1 in this case.

²¹¹ Penalty Guidance, paragraph 2.10.

However, to reduce the distortive effect of gains and losses year on year,²¹² the CMA has taken an average of RBC's relevant turnover across:²¹³

- (a) the 'last business year', ie the financial year ending **31 October 2012**; and
- (b) any other financial year falling (in whole or in part) within the DB-RBC Relevant Period, ie the financial years ending **31 October 2010, 31 October 2011 and 31 October 2013**.

8.16 The CMA has therefore determined that RBC's relevant turnover was **£22,798,184**.²¹⁴

Assessment of the seriousness of the DB-RBC Infringement and the need for general deterrence

8.17 The CMA considers that the DB-RBC Infringement (as set out in Chapter 7) is, in terms of the Penalty Guidance, among '*the most serious types of infringement*', as it was '*likely by [its] very nature to harm competition most*' and that it would be appropriate to apply a starting point of **23%**.²¹⁵

8.18 In making this assessment, the CMA has considered the relevant circumstances of the case,²¹⁶ including the nature of the product,²¹⁷ the structure of the market,²¹⁸ the market coverage of the infringement,²¹⁹ and the potential harm from the DB-RBC Infringement for competitors and consumers, whether directly or indirectly.²²⁰

²¹² Reported income in relation to gilts and gilt asset swaps may also reflect external factors, which may vary considerably from year to year (eg gains and losses from holding assets and liabilities). A snapshot of one year's income therefore may not accurately reflect the true scale of an undertaking's activities in the Relevant Market in that financial year (for example, RBC reported negative income related to its gilt trading activities in the financial year ending 31 October 2013, despite actively participating in the Relevant Market throughout the DB-RBC Relevant Period (see B-URN-000502295) and RBC's market share (by volume) was significantly more stable than is implied by its income data and relevant turnover (CMA calculations based on B-URN-000501386, see footnote 218)).

²¹³ Although there is no certainty that the fluctuations caused by external factors will in practice average out within the DB-RBC Relevant Period, the CMA considers that the use of averaging is appropriate in seeking to reduce the variability in income, and therefore provides a relevant turnover figure which more closely reflects the true scale of activity.

²¹⁴ Based on the sum of the figures taken from rows 1 to 4 of Table 1 of B-URN-000502295 for each of 2010, 2011, 2012 and 2013 (£46.8 million, £36.4 million, £6.1 million and £1.9 million respectively, converted from CAD to GBP at prevailing exchange rates). This approach excludes certain gilt asset swap income that falls within the Relevant Market (see footnote 209).

²¹⁵ Penalty Guidance, paragraph 2.5; see also paragraphs 2.3 to 2.9.

²¹⁶ Penalty Guidance, paragraph 2.7.

²¹⁷ ie gilts and gilt asset swaps, which were interrelated to gilts (see footnote 41), which were issued as part of the UK government's debt management policy.

²¹⁸ Within which GEMMs (including RBC) were each other's closest competitors for gilts and gilt asset swaps (see footnote 91) and had an important role in supporting the issuance and liquidity of gilts. GEMMs' activities took place within a multi-trillion pound 'market' for gilts and, in each of the financial years ending 31 December 2010 to 2012, RBC traded gilt volumes of approximately £[>] to £[<] billion (the CMA has calculated RBC's volumes traded based on quarterly data provided by the DMO in B-URN-000501386. The DMO data used by the CMA comprises the total 'secondary' market turnover volumes on a quarter-by-quarter basis and the percentage of volumes attributable to RBC for gilts, based on GEMMs' own submissions of turnover data to the DMO (see B-URN-000501382, questions 14, 15 and 16)).

²¹⁹ Including the fact that conventional gilts represented the vast majority of the UK's gilt portfolio (see B-URN-000503299, page 62) and the Relevant Market was global (see Chapter 5).

²²⁰ See Chapter 7.

- 8.19 Finally, the CMA considers that a starting point of 23% is appropriate and sufficient for the purposes of general deterrence,²²¹ given the seriousness of the DB-RBC Infringement. A lower starting point would risk undermining the clear message for other businesses, both in the financial services sector and more broadly, that they should not engage in the same or similar conduct.
- 8.20 RBC's penalty at the end of Step 1 is therefore **£5,243,582**.

Step 2 – adjustment for duration

- 8.21 The CMA has found that the duration of the DB-RBC Infringement was less than one year (see paragraph 7.49), and there are no exceptional circumstances to warrant decreasing the starting point. The CMA has therefore treated the duration of the DB-RBC Infringement as a full year (ie the figure reached at the end of Step 1 will be **multiplied by 1**).²²²
- 8.22 RBC's penalty at the end of Step 2 is therefore **£5,243,582**.

Step 3 – adjustment for aggravating and mitigating factors

- 8.23 The amount of the penalty may be increased where there are aggravating factors, or decreased where there are mitigating factors.²²³ In particular, the CMA may decrease the penalty at Step 3 for cooperation which enables the enforcement process to be concluded more effectively and/or speedily.²²⁴
- 8.24 In light of RBC's cooperation,²²⁵ the CMA has applied a reduction of 5% at Step 3. RBC's penalty at the end of Step 3 is therefore **£4,981,403**.

Step 4 – adjustment for specific deterrence

- 8.25 A penalty may be increased at this step to ensure that it is sufficient to deter the undertaking from breaching competition law in the future.²²⁶
- 8.26 An increase at this step will be appropriate where an undertaking has a significant proportion of its turnover outside the relevant market, or where the potential fine is

²²¹ Penalty Guidance, paragraph 2.8.

²²² Penalty Guidance, paragraph 2.14.

²²³ Penalty Guidance, paragraphs 2.15 to 2.17.

²²⁴ Penalty Guidance, paragraph 2.17. For these purposes, what is expected is cooperation over and above respecting time limits specified or otherwise agreed (which will be a necessary but not sufficient criterion to merit a reduction at this step of the penalty calculation) (Penalty Guidance, footnote 31).

²²⁵ During the investigation, RBC agreed to a streamlined access to file process, provided the CMA with a limited amount of information and documents on a voluntary basis at an early stage of the investigation, and facilitated the separate legal representation for a former employee, [RBC Trader 2], enabling the CMA to progress the investigation more effectively than would otherwise have been possible.

²²⁶ Penalty Guidance, paragraph 2.19. Any penalty that is too low to deter an infringing undertaking is also unlikely to deter other undertakings that may be considering anti-competitive activities.

otherwise too low to achieve the objective of deterrence in view of the undertaking's size and financial position.²²⁷

- 8.27 In relation to RBC's specific size and financial position,²²⁸ RBC's total worldwide revenue was CAD\$57.3 billion (£33.0 billion) in the financial year ending 31 October 2024 and its average worldwide revenue was CAD\$52.6 billion (£31.4 billion) for the three-year period ending 31 October 2024.²²⁹
- 8.28 Over 99% of RBC's worldwide revenue is therefore generated outside the Relevant Market. Moreover, a penalty after Step 3 of £4,981,403 accounts for approximately 0.02% of RBC's total worldwide revenue for the financial year ending 31 October 2024 and approximately 0.02% of its three-year average revenue.
- 8.29 RBC's relevant turnover (see paragraph 8.16 above) does not reflect the scale of its involvement in the Relevant Market and therefore the potential harm to competition, since it is more comparable to direct profit²³⁰ and it is relatively small compared to each Party's total traded gilt volumes.²³¹ A more significant adjustment is therefore necessary at Step 4.²³²
- 8.30 The CMA has also concluded that other specific features of this case are relevant circumstances to be taken into account,²³³ including:
- (a) the potential harm from the DB-RBC Infringement;²³⁴ and
 - (b) the length of time that has passed since the end of the DB-RBC Infringement and the extensive compliance (and related monitoring and surveillance) measures that RBC has introduced since then (some of which were in place well before the start of the CMA's investigation), which are highly unusual in their extent and followed significant changes in the regulatory and

²²⁷ Penalty Guidance, paragraph 2.21. The CMA would expect to make more significant adjustments, both for general and specific deterrence, where an undertaking's relevant turnover is very low or zero with the result that the figure at the end of Step 3 would be very low or zero (Penalty Guidance, paragraph 2.23).

²²⁸ Penalty Guidance, paragraph 2.19. The CMA will consider indicators of size and financial position at the time the penalty is being imposed and may consider three-year averages for turnover (Penalty Guidance, paragraph 2.20).

²²⁹ The CMA has taken the undertaking's total worldwide turnover as the primary indicator of the size of the undertaking and its economic power (Penalty Guidance, paragraph 2.20). Unless otherwise stated, the CMA has based its assessment on publicly available financial information sourced from Royal Bank of Canada's consolidated financial statements for the financial year ending 31 October 2024 (source: [Royal Bank of Canada Annual Report 2024](#)). Figures have been converted from Canadian dollars into sterling using annual average exchange rates (source: Office of National Statistics). Averages have been calculated over the three-year period ending 31 October 2024.

²³⁰ See paragraph 8.13 and footnote 208.

²³¹ Which was approximately £[>] to £[>] billion in each of the financial years ending 31 December 2010 to 2012, which represents approximately [0-5]% to [6-10]% of the total volume traded by GEMMs per annum (CMA calculations based on B-URN-000501386, see footnote 218). The CMA further notes that, as set out in footnote 209, the limitations of the information available and the ways in which revenues were generated mean it is not possible to capture the true scale of RBC's activities in the Relevant Market.

²³² Penalty Guidance, paragraph 2.23.

²³³ Penalty Guidance, paragraph 2.19.

²³⁴ Including the number and range of DB-RBC Specific Dates (see paragraph 7.2) and RBC's share of the total volume traded by GEMMs (see footnote 231).

governance environment in the financial services sector that have occurred since the DB-RBC Infringement.²³⁵

8.31 Notwithstanding RBC's current compliance measures, the CMA has concluded that an uplift for specific deterrence is necessary for RBC for the following reasons:

- (a) since no compliance could reasonably be expected entirely to remove the risk of future breaches, the financial penalty itself needs to be of an order of magnitude that is capable of having a deterrent effect;
- (b) the size of the penalty at the end of Step 3 is not sufficiently high to command an appropriate degree of attention of the Party's top-level management to incentivise them to maintain robust competition compliance measures in this specialist sector; and
- (c) although the regulatory regime in the financial sector in effect means that RBC will maintain compliance measures, its incentives to do so are different from, and not a substitute for, those created through the CMA's competition law-specific fining powers; hence those incentives do not remove the need for an uplift in the present case for the reasons set out above.

8.32 In view of the above factors, and the fact that Step 4 is '*an important step for the purposes of achieving deterrence in accordance with the statutory objective set out in section 36(7A)(b) of [the Act]*',²³⁶ the CMA has increased RBC's penalty at the end of Step 4 to **£38,000,000** for the DB-RBC Infringement.²³⁷

Step 5 – adjustment to check that the penalty is proportionate and prevent the maximum penalty being exceeded

8.33 Where necessary, the penalty may be decreased to ensure that the level of the penalty is not disproportionate.²³⁸ The CMA is not restricted to imposing the lowest penalty that could reasonably be justified and it will select the figure which it considers is appropriate in the circumstances of the case.²³⁹

²³⁵ See, for example, B-URN-000504764, provided in response to a Request for Information (B-URN-000504647).

²³⁶ Penalty Guidance, paragraph 2.19.

²³⁷ The CMA acknowledges that RBC's penalty after Step 4 is large both in absolute terms and relative to the level of the penalty after Step 3. However, this remains a very small proportion of RBC's total worldwide revenue for the financial year ending 31 October 2024 (approximately 0.1%), its average worldwide revenue over its last three financial years (approximately 0.1%), its worldwide profit after tax for the financial year ending 31 October 2024 (approximately 0.4%) and its average worldwide profit after tax over the last three financial years (approximately 0.4%).

²³⁸ Penalty Guidance, paragraph 2.25. A penalty may be proportionate even if it exceeds the statutory cap; however, if that is the case a further adjustment will be needed (Penalty Guidance, paragraph 2.27).

²³⁹ Penalty Guidance, paragraph 2.25 and *FP McCann Limited v CMA* [2020] CAT 28 at [347].

- 8.34 The CMA considers that a penalty for RBC of £38,000,000 for the DB-RBC Infringement is appropriate and proportionate in the round. In making this assessment, the CMA has had regard to the following:²⁴⁰
- (a) RBC's specific size and financial position, as set out in paragraphs 8.27 and 8.28 and footnote 237;
 - (b) the factors set out in paragraph 8.30(a); and
 - (c) the extensive compliance (and related monitoring and surveillance) measures that RBC has put in place since the end of the DB-RBC Infringement (see paragraphs 8.30(b) and 8.31).
- 8.35 No adjustment is required as the penalty does not exceed 10% of RBC's worldwide revenue in the financial year ending 31 October 2024.
- 8.36 As a result of the above, at the end of Step 5, RBC's penalty for the DB-RBC Infringement is **£38,000,000**.

Step 6 – application of reductions including under the CMA's settlement policy

- 8.37 The CMA will reduce an undertaking's penalty at Step 6 where the undertaking has a leniency agreement with the CMA or reaches a settlement with the CMA.²⁴¹
- 8.38 As set out in paragraph 8.6, RBC has admitted its involvement in, and liability for, the DB-RBC Infringement as set out in this Decision. In light of that admission, and RBC's agreement to cooperate in the process for concluding the investigation, the CMA has reduced RBC's financial penalty by **10%** in relation to the DB-RBC Infringement (provided that it complies with the continuing requirements of the settlement reached with the CMA²⁴²).

Penalties imposed by the CMA

- 8.39 The CMA therefore requires RBC to pay a penalty of **£34,200,000** for the DB-RBC Infringement.

²⁴⁰ Penalty Guidance, paragraph 2.26.

²⁴¹ Penalty Guidance, paragraphs 2.30 and 2.31.

²⁴² See paragraph 2.5.

8.40 The penalty will become due to the CMA on Tuesday, 22 April 2025²⁴³ and must be paid to the CMA by close of banking business on that date.²⁴⁴

Juliette Enser

Acting Executive Director, Competition Enforcement

for and on behalf of the Competition and Markets Authority

²⁴³ The next working day two calendar months from the expected date of receipt of this Decision.

²⁴⁴ Details on how to pay are set out in the letter accompanying this Decision.

[ANNEXES] CONTENTS

Annex A: Glossary	3
Annex B: Chat Evidence	5
Introduction.....	5
2009	5
DB-RBC, A-URN-007374, 13 November 2009.....	5
DB-RBC, A-URN-007413, 8 December 2009.....	7
2010	8
DB-RBC, A-URN-007447, 12 January 2010	8
DB-RBC, A-URN-007475, 28 January 2010	10
DB-RBC, A-URN-000147, 2 February 2010.....	13
DB-RBC, A-URN-007500, 19 February 2010.....	14
DB-RBC, A-URN-007503, 22 February 2010.....	17
DB-RBC, A-URN-000148, 1 March 2010	18
DB-RBC, A-URN-007521, 10 March 2010	23
DB-RBC, A-URN-000150, 11 March 2010	26
DB-RBC, A-URN-003072, 12 March 2010	27
DB-RBC, A-URN-000230, 15 March 2010	30
DB-RBC, A-URN-000151, 26 March 2010	31
DB-RBC, A-URN-000152, 6 April 2010	34
DB-RBC, A-URN-000154, 14 April 2010	37
DB-RBC, A-URN-007642, 8 June 2010	41
DB-RBC, A-URN-000155, 17 June 2010	43
DB-RBC, A-URN-000241, 2 July 2010	44
DB-RBC, A-URN-007750, 21 September 2010.....	46
DB-RBC, A-URN-007758, 26 October 2010	48
DB-RBC, A-URN-007789, 15 December 2010.....	49
2011	51
DB-RBC, A-URN-007815, 17 January 2011	51
DB-RBC, A-URN-007936, 31 May 2011	52
2012	54
DR-RBC, A-URN-008131, 12 January 2012	54
DB-RBC, A-URN-008188, 1 March 2012	55
DB-RBC, A-URN-000175, 27 March 2012	56
DB-RBC, A-URN-008268, 2 May 2012	59
DB-RBC, A-URN-006829, 11 May 2012	60
DB-RBC, A-URN-006832, 14 May 2012	66
DB-RBC, A-URN-006846, 18 May 2012	73
DB-RBC, A-URN-008324, 26 June 2012	74
DB-RBC, A-URN-006927, 6 July 2012.....	76
DB-RBC, A-URN-008406, 28 September 2012.....	77
2013	78
DB-RBC, A-URN-000192, 10 January 2013	78

DB-RBC, A-URN-007186, 8 February 2013.....	80
DB-RBC, A-URN-000201, 20 February 2013.....	82
DB-RBC, A-URN-007251, 18 March 2013	84
DB-RBC, A-URN-007273, 4 April 2013	86
DB-RBC, A-URN-008619, 9 April 2013	88
DB-RBC, A-URN-007285, 10 April 2013	91
DB-RBC, A-URN-008625, 11 April 2013	92

Annex A: Glossary

A.1 In this Decision, the following terms have the meaning set out below. References to the singular include the plural and vice versa as the context requires.

Term	Definition
the Act	the Competition Act 1998
Bloomberg chat	contemporaneous communications between the Key Individuals sent in a 'persistent' bilateral Bloomberg chatroom
Chapter I prohibition	the prohibition in section 2(1) of the Act
Citi	together, Citigroup Global Markets Limited and its ultimate parent company Citigroup Inc.
the CMA	the Competition and Markets Authority
the CMA Rules	the Competition Act 1998 (Competition and Market Authority's Rules) Order 2014, SI 2014/458
commercially sensitive information	commercially sensitive strategic information
DB-RBC Infringement	the infringement in which Deutsche Bank and RBC participated, as defined in paragraph 7.2 of this Decision
DB-RBC Relevant Period	the period from 13 November 2009 to 11 April 2013
DB-RBC Specific Dates	has the meaning given to it in paragraph 7.2 of this Decision
DB-RBC Trading Communications	has the meaning given to it in paragraph 7.2 of this Decision
DB-RBC Trading Conduct	has the meaning given to it in paragraph 7.7 of this Decision
Deutsche Bank	Deutsche Bank Aktiengesellschaft
the DMO	the Debt Management Office (an executive agency of HM Treasury)
the FCA	the Financial Conduct Authority
GEMM	a wholesale gilt-edged market maker
gilt	a sterling-denominated UK government bond, pursuant to which the UK government guaranteed to pay the holder of the gilt an annual cash payment (the coupon) in two equal semi-annual payments until the gilt's maturity date, at which point the UK government would pay the holder the final coupon payment and the principal amount
gilt asset swap	a product consisting of a gilt and an interest rate swap, typically with the same or similar maturity date as the gilt
gilt asset swap box	a trade consisting of the purchase of one specific gilt asset swap and the sale of another gilt asset swap
gilt basis	a trade consisting of the purchase of a gilt and the sale of a gilt future (or vice versa)
gilt fly	a trade consisting of the purchase of two specific gilts and the sale of another specific gilt (or vice versa)
gilt future	a derivative contract to buy or sell a gilt on a specified date at a predetermined price

Term	Definition
gilt switch	a trade consisting of the purchase of one specific gilt and the sale of another specific gilt
HSBC	together, HSBC Bank Plc and its ultimate parent company HSBC Holdings Plc
IDB	an inter-dealer broker, to which GEMMs had exclusive trading and viewing access
Key Individual	certain traders employed by the Parties, as detailed in Chapter 3 of this Decision
mid-price / mid / middle	has the meaning given to it in paragraph 4.11 of this Decision
Morgan Stanley	together, Morgan Stanley & Co. International Plc and its ultimate parent company Morgan Stanley
offering to trade	the act of submitting a bid or offer for the purposes of trading
Party	has the meaning given to it in paragraph 1.1 of this Decision
Party to the CMA's Investigation	Each of Deutsche Bank, RBC, Citi, HSBC and Morgan Stanley
Penalties Order	the Competition Act 1998 (Determination of Turnover for Penalties) Order 2000, SI 2000/309
Penalty Guidance	CMA, <i>Guidance as to the appropriate amount of a penalty</i> , CMA73, 16 December 2021
pricer	a Party's pricing software
RBC	together, RBC Europe and its ultimate parent company Royal Bank of Canada
RBC Europe	RBC Europe Limited
Relevant Market	the bidding for gilts in gilt auctions, trading of gilts and gilt asset swaps, and offering of gilts in gilt buy-back auctions globally
Requests for Information	an informal information request or a notice issued under section 26 of the Act
trading / trade	individually and collectively, the trading of gilts and the trading of gilt asset swaps
trading of gilt asset swaps	individually and collectively, the outright purchase or sale of a gilt asset swap (either as a single trade or in two separate legs) and a gilt asset swap box
trading of gilts	individually and collectively, the outright purchase or sale of an individual gilt, a gilt switch trade and a gilt fly
trading price	a price in relation to a trade or potential trade of gilts and gilt asset swaps by a dealer

Annex B: Chat Evidence

Introduction

- B.1 This Annex sets out the CMA's factual assessment of the DB-RBC Trading Communications on which the CMA relies to evidence the DB-RBC Trading Conduct (as relevant to the DB-RBC Infringement). It consists of Bloomberg chats during the DB-RBC Relevant Period and referred to by the unique reference numbers (ie URNs) assigned to them by the CMA:
- (a) between Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 1]) that took place through a 'persistent'¹ Bloomberg chatroom titled '*[nickname for RBC Trader 1/nickname for DB Trader] are back*', which was opened on [X] October 2009 and closed on [X] April 2014; and
 - (b) between Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 2]) that took place through a persistent Bloomberg chatroom titled '*I just cant get enough*' which was opened on [X] March 2012 and closed on [X] April 2014.²
- B.2 The CMA has indicated **in bold** in each chat extract table and in the text accompanying each chat those disclosures which it has concluded constitute infringing conduct in relation to the DB-RBC Infringement. All other exchanges between Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 1] or [RBC Trader 2], as applicable) which are set out in this Annex B are included for context only.

2009

DB-RBC, A-URN-007374,³ 13 November 2009

Disclosure of current mid-prices for 5% 2014 gilts – 15:20:46 to 15:25:32

- B.3 Following an exchange in which Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 1]) discussed recent trading activity observed via brokers for 5% 2014 gilts,⁴ Deutsche Bank ([DB Trader]) disclosed to RBC ([RBC Trader 1]) his **current mid-price** for 5% 2014 gilts ('**have 12 mid**' at 15:25:15) and that he did not intend

¹ A persistent (or permanent) Bloomberg chatroom would retain and display participants' message history if they exited the chatroom (see B-URN-000502065, pages 109 and 111).

² The dates and titles of the Bloomberg chatroom is taken from the metadata of the Bloomberg chats. Given [X], it is possible that the persistent Bloomberg chatroom was closed earlier than the dates specified in the metadata; however, in any event, the evidence shows that the persistent Bloomberg chatroom was open throughout the periods of the DB-RBC Relevant Period [X] (see Chapter 3).

³ A-URN-007374. RBC also produced a chat on this date between Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 1]), A-URN-002580.

⁴ [DB Trader] (Deutsche Bank) confirmed in interview in relation to these communications that '*it sounds like there is some broker -- broker market activity*' and that he and RBC ([RBC Trader 1]) were discussing 5% 2014 gilts ('*Gilt, 5 per cent 2014 maturity*') (B-URN-000502067, page 121).

to adjust that mid-price (*'i'm not moving my screen'* at 15:25:12). [DB Trader] (Deutsche Bank) said in interview that he was referring to not adjusting his mid-price to reflect the trading activity via brokers that he and RBC ([RBC Trader 1]) were discussing.⁵ [DB Trader] (Deutsche Bank) also said in interview that the mid-price he disclosed was *'internal'*.⁶

- B.4 At 15:25:32, RBC ([RBC Trader 1]) acknowledged Deutsche Bank ([DB Trader])'s disclosure by stating *'yeah ...'*.

Chat extract table – 15:20:46 to 15:25:32

Timestamp (GMT)	Party (Key Individual) <i>Extract</i>
15:20:46	RBC ([RBC Trader 1]) <i>whos bidding 5 14</i>
15:21:13 15:21:15 15:21:22	Deutsche Bank ([DB Trader]) <i>haha</i> <i>some clown</i> <i>hit him at 22 earlier</i>
15:23:34 15:23:38	RBC ([RBC Trader 1]) <i>i was 25 offer</i> <i>thought he'd reach</i>
15:23:56 15:24:20 15:24:24 15:24:39	Deutsche Bank ([DB Trader]) <i>loser cleaner has outright order</i> <i>cleaner = clearly</i> <i>haha</i> <i>altho some of these traders would be better cleaners</i>
15:25:02	RBC ([RBC Trader 1]) <i>hahhahahahahahahaahahahahahah</i>
15:25:12 15:25:15	Deutsche Bank ([DB Trader]) <i>i'm not moving my screen</i> <i>have 12 mid</i>
15:25:32	RBC ([RBC Trader 1]) <i>yeah [...]</i>

⁵ [DB Trader] (Deutsche Bank) said in interview: *'So, that refers to I have not updated my internal mid to reflect the broker trades'* (B-URN-000502067, page 124).

⁶ [DB Trader] (Deutsche Bank) said in interview *'I've given him my internal mid shared of 12 which is, which is erm, Deutsche Bank only currency.'* (B-URN-000502067, page 124).

Disclosure of current mid-prices for the 2.75% 2015 gilt – 14:48:15 to 14:59:15

- B.5 At 14:48:15, Deutsche Bank ([DB Trader]) asked RBC ([RBC Trader 1]) why the DMO's composite mid-price for the 2.75% 2015 gilt was 'so high' ('why are 2t15 so high on dmo page').⁸ He then disclosed his **current mid-price** ('99.97') for that gilt ('*i have like 99.97 mid*' at 14:48:26).⁹ In response, at 14:59:15, RBC ([RBC Trader 1]) disclosed his **current mid-price** ('91') for the same gilt ('*91 mid*').¹⁰
- B.6 [DB Trader] (Deutsche Bank) confirmed in interview that he and RBC ([RBC Trader 1]) were both referring to prices from their respective '*pricer[s]*'.¹¹

Chat extract table – 14:48:15 to 14:59:15

Timestamp (GMT)	Party (Key Individual) <i>Extract</i>
14:48:15 14:48:26	Deutsche Bank ([DB Trader]) <i>why are 2t15 so high on dmo page</i> <i>i have like 99.97 mid</i>
14:59:15	RBC ([RBC Trader 1]) <i>91 mid</i>

⁷ A-URN-007413. RBC also produced a chat on this date between Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 1]), A-URN-002684.

⁸ [DB Trader] (Deutsche Bank) said in interview that 'I think I'm just asking him a little bit, like, "Why are they so --" look..., looking at the DMO pa..., page -- middle -- DMO mid, I'm saying, "What are they so high?"' (B-URN-000502070, page 75).

⁹ [DB Trader] (Deutsche Bank) said in interview that he was '*giv[ing]*' RBC ([RBC Trader 1]) his '*rough middle*' (B-URN-000502070, page 75).

¹⁰ [DB Trader] (Deutsche Bank) said in interview that RBC ([RBC Trader 1]) was saying that '*he's got a 91 middle*' (B-URN-000502070, page 75).

¹¹ [DB Trader] (Deutsche Bank) confirmed in interview that he and RBC ([RBC Trader 1]) were each referring to prices from their '*pricer*' (B-URN-000502070, page 77).

2010

DB-RBC, A-URN-007447,¹² 12 January 2010

Disclosure of current mid-prices for gilt switch – 10:00:48 to 10:02:49

- B.7 At 10:02:00 and 10:02:16, when discussing prices observed via brokers,¹³ Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 1]) disclosed information on their respective **current mid-prices**:
- (a) Deutsche Bank ([DB Trader]) said *'cant even get my 2q14 that lwo [low]'*¹⁴ at 10:02:00. The CMA infers that Deutsche Bank ([DB Trader]) was referring to a mismatch¹⁵ between, on the one hand, the 'low' price available via brokers and, on the other, his mid-price for the gilt switch consisting of gilts maturing in five and ten years.¹⁶
 - (b) RBC ([RBC Trader 1]) responded, at 10:02:16, *'nme [me] niether'*, by which the CMA infers RBC ([RBC Trader 1]) was also disclosing that his mid-price for the same gilt switch was also high relative to the price available via brokers. [DB Trader] (Deutsche Bank) in interview described the Parties' comments as *'a discussion' about 'how can we even reconcile the trade in the broker market with [...] where our pricer thinks it should be.'*¹⁷
- B.8 In the context of the Parties' difficulties reconciling their mid-prices with prices observed via brokers, RBC ([RBC Trader 1]) then disclosed his **current mid-price** ('130.9') for the same gilt switch, ie the gilt switch consisting of gilts maturing in 5 and 10 years (*'I have 130.9'* at 10:02:26). At 10:02:36, Deutsche Bank ([DB Trader]) also disclosed his **current mid-price** ('130.3') for the same gilt switch (*'i have 130.3'*). [DB Trader] (Deutsche Bank)'s evidence in interview was that both disclosures related to *'internal'* mid-prices.¹⁸

¹² A-URN-007447. RBC also produced a chat on this date between Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 1]), A-URN-002802.

¹³ The CMA infers that context from the reference to *'the seller'* being a *'complete panicker'* at 10:00:48. That inference is consistent with [DB Trader] (Deutsche Bank)'s comments in interview, in which he said that *'there's clearly been a trade in the brokers at this point [...] And I've been given colour by the broker'* (B-URN-000502067, page 36).

¹⁴ Consistent with the CMA's interpretation, [DB Trader] (Deutsche Bank) said in interview that *'lwo'* should be read as *'low'* (B-URN-000502067, page 45).

¹⁵ The CMA's inference is consistent with [DB Trader] (Deutsche Bank)'s comments in interview. For example, [DB Trader] (Deutsche Bank) said in interview that he was referring to *'where the trade is in the broker market and me trying to get my internal pricer in line with the trade in the broker market'* and *'there's been a trade in the broker market and you're trying to -- wow, that's really low. How can it be there?'* (B-URN-000502067, pages 37, 45 and 49).

¹⁶ [DB Trader] (Deutsche Bank) said in interview that he and RBC ([RBC Trader 1]) were *'definitely'* referring to a *'yield spread of 5s 10s curve'* (B-URN-000502067, pages 47, 49 and 50).

¹⁷ B-URN-000502067, page 37.

¹⁸ B-URN-000502067, pages 36 to 37 and 46.

B.9 At 10:02:49, RBC ([RBC Trader 1]) reacted to Deutsche Bank ([DB Trader])'s disclosure by stating 'gggrrrrrrrrrrrrrrrr'.¹⁹

Chat extract table – 10:00:48 to 10:02:49

Timestamp (GMT)	Party (Key Individual) <i>Extract</i>
10:00:48	Deutsche Bank ([DB Trader]) <i>apparently the seller is complete panicker</i>
10:01:28 10:01:33	RBC ([RBC Trader 1]) <i>nightmare</i> <i>who is it</i>
10:01:44 10:02:00	Deutsche Bank ([DB Trader]) <i>no idea</i> <i>cant even get my 2q14 that lwo</i>
10:02:16 10:02:26	RBC ([RBC Trader 1]) <i>nme niether</i> <i>I have 130.9</i>
10:02:36	Deutsche Bank ([DB Trader]) <i>i have 130.3</i>
10:02:49	RBC ([RBC Trader 1]) <i>gggrrrrrrrrrrrrrrrr</i>

¹⁹ [DB Trader] (Deutsche Bank) said in interview 'so I think the "gggrrrrrrrrrrrrrr" which comes after that is obviously he's struggling to, he's struggling to reconcile his internal pricer with, with where, erm -- with where the trade is in the broker market' (B-URN-000502067, page 37).

Summary

B.10 On 28 January 2010, Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 1]) engaged in the following **Trading Conduct**:

- (a) In the context of Deutsche Bank ([DB Trader]) struggling to reconcile his mid-price with trading activity observed via brokers, Deutsche Bank ([DB Trader]) disclosed to RBC ([RBC Trader 1]) his **current mid-price** for a gilt switch consisting of 2016 and 2019 gilts. RBC ([RBC Trader 1]) responded to Deutsche Bank ([DB Trader]) by disclosing his **current mid-price** for another gilt switch consisting of 5% 2014 and 4.75% 2015 gilts.
- (b) Later that same day, in the context of discussing trading activity for the 2.25% 2014 gilt, Deutsche Bank ([DB Trader]) disclosed to RBC ([RBC Trader 1]) his **current mid-price** for that gilt.

Disclosures of current mid-prices for related gilt switches – 14:31:31 to 14:32:54

- B.11 At 14:31:31 and 14:31:41, Deutsche Bank ([DB Trader]) said to RBC ([RBC Trader 1]) in relation to '16/19s', ie a gilt switch consisting of 2016 and 2019 gilts ('*how do you mark it there?*' '*cant get my curve in line*'). [DB Trader] (Deutsche Bank)'s evidence in interview was that the context to him seeking RBC ([RBC Trader 1])'s input was that he was struggling to reconcile his '*internal pricer*' with prices he observed via brokers.²¹ [DB Trader] (Deutsche Bank) also said it would have been clear to RBC ([RBC Trader 1]) to which prices he was referring.²²
- B.12 At 14:31:56 and 14:32:00, Deutsche Bank ([DB Trader]) then disclosed his **current mid-price** ('**55.25**')²³ for that gilt switch. [DB Trader] (Deutsche Bank)'s evidence in interview was that he was disclosing his '*internal*' mid-price for that gilt

²⁰ A-URN-007475. RBC also produced a chat on this date between Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 1]), A-URN-002901.

²¹ [DB Trader] (Deutsche Bank) said in interview '*I can't get my internal pricer to reflect where that's just traded in the broker market*' and '*I am trying to sort of say, "How can you get it there?" like the trade obviously looks like quite a long way from where my screen has got or my internal pricer is publishing and stuff [...]* So, I'm trying to say, "*How can, how can that -- you know, how can that make sense*' and "*Can't get my curve in line*" is me -- that's me saying with where my internal pricer is, I can't explain that trade in a broker market' and '*sort of, saying, "Can't make sense of this, you know"*' (B-URN-000502067, pages 53, 56 and 69).

²² [DB Trader] (Deutsche Bank) said in interview that '*There must have been a trade flashing through in a broker market or something like that, that I kind of -- I can't think otherwise. There's no reason to sort of put it down and there's no kind of context before that.*' [DB Trader] (Deutsche Bank) also said in interview that it would have been clear to RBC ([RBC Trader 1]) to what he was referring because RBC ([RBC Trader 1]) had not '*asked me*' (B-URN-000502067, page 69).

²³ [DB Trader] (Deutsche Bank) said in interview that his comment at 14:31:56 ('55/25') was '*a typo. It's 55 – 55.25, I think I corrected it on the next, the next line.*' (B-URN-000502067, page 59).

switch²⁴ and that he disclosed that mid-price because he hoped it might help RBC ([RBC Trader 1]) reconcile Deutsche Bank ([DB Trader])'s price with what was trading via brokers.²⁵

- B.13 In response to Deutsche Bank ([DB Trader])'s question, at 14:32:25, RBC ([RBC Trader 1]) disclosed his **current mid-price** ('29.5') for another gilt switch, ie the gilt switch consisting of 5% 2014 and 4.75% 2015 gilts ('5 14 4 T 15') (***'i have 5 14 4 T 15 at 29.5'***).²⁶ [DB Trader] (Deutsche Bank) said in interview that he interpreted RBC ([RBC Trader 1]) as disclosing his '*internal mid*'²⁷ and that the disclosure may have helped RBC ([RBC Trader 1]) to explain to Deutsche Bank ([DB Trader]) the trade taking place via brokers.²⁸

Chat extract table – 14:31:31 to 14:32:54

Timestamp (GMT)	Party (Key Individual) <i>Extract</i>
14:31:31 14:31:41 14:31:56 14:32:00	Deutsche Bank ([DB Trader]) <i>how do you mark it there?</i> <i>cant get my curve in line</i> <i>55/25 16/19s</i> 55.25
14:32:25	RBC ([RBC Trader 1]) <i>i have 5 14 4 T 15 at 29.5</i>
14:32:34 14:32:44	Deutsche Bank ([DB Trader]) <i>ok</i> <i>i just dont love 2t15</i>
14:32:50 14:32:54	RBC ([RBC Trader 1]) <i>me neither</i> <i>but 5 14 are toastie</i>

Disclosures of current mid-prices for the 2.25% 2014 gilt – 15:47:05 to 15:47:52

- B.14 At 15:47:05 to 15:47:16, Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 1]) discussed with each other information about their current mid-prices for the 2.25% 2014 gilt: at those timestamps, RBC ([RBC Trader 1]) disclosed that he thought an

²⁴ [DB Trader] (Deutsche Bank) said in interview, 'So, that would be just my yield -- that would be my yield spread differential between -- that I'm using on my internal pricer between the 2019 bond and the 2016 bond' and 'that's me telling what my internal mid was at that time of that yield spread' (B-URN-000502067, pages 59 and 60).

²⁵ [DB Trader] (Deutsche Bank) said in interview that: 'I'm telling him this because I'm trying to reconcile a trade in a broker market and I'm like, almost like this trade's here, this trade's happened here. I've got it marked here and here and I can't understand that and I'm thinking maybe he'll give me an -- he'll, he will be able to explain it to me, he'll be able to answer it.' (B-URN-000502067, page 62).

²⁶ [DB Trader] (Deutsche Bank) said in interview that 'he's giving the spread between the 5 per cent of 14s and the, sort of, September 14 and September 15.' (B-URN-000502067, pages 62).

²⁷ B-URN-000502067, page 63.

²⁸ [DB Trader] (Deutsche Bank) said in interview, in respect of the price that RBC ([RBC Trader 1]) had disclosed, 'maybe where he's marking that, you know, might be significantly different and might allow him to explain that trade.' (B-URN-000502067, page 63).

offer to trade 2.25% 2014 gilts available via brokers was at a particularly low price (*'thats wrong in 2Qs'*) relative to his current mid-price (*'I honestly cant get them there'*).²⁹ Deutsche Bank ([DB Trader]) then said *'me neither'*, by which [DB Trader] (Deutsche Bank) said in interview he was disclosing that he was in a similar position to RBC ([RBC Trader 1]).³⁰

- B.15 Following very brief further exchanges between them, Deutsche Bank ([DB Trader]) then disclosed his **current mid-price** for the 2.25% 2014 gilts (*'i have 51 mid'* at 15:47:40).³¹

Chat extract table – 15:47:05 to 15:47:52

Timestamp (GMT)	Party (Key Individual) <i>Extract</i>
15:47:05 15:47:10	RBC ([RBC Trader 1]) <i>thats wrong in 2Qs</i> <i>I honestly cant get them there</i>
15:47:16	Deutsche Bank ([DB Trader]) <i>me neither</i>
15:47:25	RBC ([RBC Trader 1]) <i>tempted to lift</i>
15:47:26	Deutsche Bank ([DB Trader]) <i>leaving it alone</i>
15:47:31 15:47:38	RBC ([RBC Trader 1]) <i>going 46</i> <i>see what happens</i>
15:47:40	Deutsche Bank ([DB Trader]) <i>i have 51 mid</i>
15:47:44 15:47:52	RBC ([RBC Trader 1]) <i>hahaha there up</i> <i>that was wierd</i>

²⁹ [DB Trader] (Deutsche Bank) said in interview, in respect of this extract, that *'there was a cheap offer in 2q14, so a gilt on the broker screen. [RBC Trader 1] saying that he can't -- he can't -- his pricing, internal pricing thing can't explain that, that level [...] He said, "thats wrong" yeah, he thinks the price is too low, yeah.'* (B-URN-000502067, page 72).

³⁰ [DB Trader] (Deutsche Bank)'s evidence was that he was *'the same'* (B-URN-000502067, page 68).

³¹ [DB Trader] (Deutsche Bank) said in interview, *'So, you know, he says, "see what happens" and I -- there, I give him 51 mid which would have been my internal mid.'* (B-URN-000502067, page 74).

Disclosure of current mid-price for a 2.75% 2015 gilt – 12:36:35 to 12:52:54

- B.16 Deutsche Bank ([DB Trader]) asked RBC ([RBC Trader 1]) '*where to [do] you have 2t15...*', ie 2.75% 2015 gilts. Deutsche Bank ([DB Trader]) then disclosed that his mid-price for those gilts was '*so low*' (at 12:36:35 and 12:38:57). In response to Deutsche Bank ([DB Trader])'s question, RBC ([RBC Trader 1]) disclosed his **current mid-price** ('**04**') for those gilts (at 12:52:54).

Chat extract table – 12:36:35 to 12:52:54

Timestamp (UTC)	Party (Key Individual) <i>Extract</i>
12:36:35	Deutsche Bank ([DB Trader]) <i>where to you have 2t15 cahs price</i> <i>mine looks so low</i> <i>i reckon all of them are long and marking too high</i>
12:36:43	
12:38:57	
12:52:54	RBC ([RBC Trader 1]) 04

³² A-URN-000147. RBC also produced a chat on this date between Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 1]), A-URN-002904.

Summary

- B.17 On 19 February 2010, Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 1]) engaged in the following **Trading Conduct** in the context of trading via brokers:
- (a) The Parties disclosed to each other their respective **current mid-prices** for two gilt switches: RBC ([RBC Trader 1]) disclosed to Deutsche Bank ([DB Trader]) his **current mid-price** for a gilt switch consisting of 2014 and 2019 gilts and his **current mid-price** for a gilt switch consisting of 2013 and 2019 gilts. Deutsche Bank ([DB Trader]) disclosed to RBC ([RBC Trader 1]) his **current mid-prices** for both of those gilt switches.
 - (b) Later that day, in the context of Deutsche Bank ([DB Trader]) commenting on an offer to trade via brokers for 5% 2014 gilts, Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 1]) disclosed to each other their respective **current mid-prices** for that gilt.

Disclosure of current mid-prices for two gilt switches – 11:38:32 to 11:41:00

- B.18 In the context of discussing trading observed via brokers,³⁴ RBC ([RBC Trader 1]) and Deutsche Bank ([DB Trader]) disclosed to each other their respective **current mid-prices** for two gilt switches, the first consisting of 2014 and 2019 gilts and the second consisting of 2013 and 2019 gilts. [DB Trader] (Deutsche Bank) said in interview that these '*mids*' were '*internal*' and '*proprietary*'.³⁵
- (a) In response to Deutsche Bank ([DB Trader])'s comments about not adjusting his pricer, at 11:39:49, RBC ([RBC Trader 1]) disclosed a price of '*140.4*' ('*I have it at 140.4*'). The CMA infers that Deutsche Bank ([DB Trader]) was referring to his **current mid-price** for the gilt switch consisting of 2014 and 2019 gilts, in particular in light of his references to 2014 and 2019 gilts elsewhere in the same extract.³⁶ Consistent with the CMA's interpretation, [DB Trader] (Deutsche Bank) said in interview that he was referring to his '*mid*' for that particular gilt switch.³⁷ In any event, the CMA infers that the Parties would have known the gilts to which RBC ([RBC Trader 1]) was

³³ A-URN-007500. RBC also produced a chat on this date between Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 1]), A-URN-002949.

³⁴ [DB Trader] (Deutsche Bank) confirmed in interview that the discussion concerned '*broker trades*' (B-URN-000502067, page 141).

³⁵ B-URN-000502067, page 140.

³⁶ See eg 11:38:32 and 11:40:14.

³⁷ B-URN-000502067, page 140.

referring. At 11:39:59, in response, Deutsche Bank ([DB Trader]) disclosed his **current mid-price** ('140.7') for the same gilt switch ('*i have 140.7*').³⁸

- (b) At 11:40:14 Deutsche Bank ([DB Trader]) disclosed his **current mid-price** ('208') for the gilt switch consisting of 2013 and 2019 gilts ('**13/19s at 208**'). In response, RBC ([RBC Trader 1]) disclosed his **current mid-price** ('209') for the same gilt switch ('*i got those at 209*' at 11:40:42). [DB Trader] (Deutsche Bank) said in interview that he was referring to his '*mid*' for that particular gilt switch.³⁹ RBC ([RBC Trader 1]) then disclosed some context to his mid-price, saying that '*just cos that guy trying to buy more off me*' (at 11:40:48).

Chat extract table – 11:38:32 to 11:41:00

Timestamp (GMT)	Party (Key Individual) <i>Extract</i>
11:38:32	RBC ([RBC Trader 1]) <i>[...] 5 14 [...]</i>
11:39:05 11:39:16 11:39:27 11:39:35 11:39:40	Deutsche Bank ([DB Trader]) <i>[...]</i> <i>[...]</i> <i>[...]</i> <i>[...]</i> <i>[...]</i>
11:39:49 11:39:50	RBC ([RBC Trader 1]) <i>I have it at 140.4</i> <i>haha</i>
11:39:59 11:40:14	Deutsche Bank ([DB Trader]) <i>i have 140.7</i> 13/19s at 208
11:40:42 11:40:48	RBC ([RBC Trader 1]) <i>i got those at 209</i> <i>just cos that guy trying to buy more off me</i>
11:41:00	Deutsche Bank ([DB Trader]) <i>yeah probably right [...]</i>

Disclosure of current mid-prices for 5% 2014 gilts – 14:13:54 to 14:15:10

- B.19 At 14:13:54, Deutsche Bank ([DB Trader]) commented on an offer to trade via brokers for 5% 2014 gilts ('*who is bidding 5 14 there*'). [DB Trader] (Deutsche

³⁸ [DB Trader] (Deutsche Bank) said in interview that the mid-prices referred to in these timestamps were '*internal*' (B-URN-000502067, page 142).

³⁹ B-URN-000502067, page 140.

Bank) said in interview that he was reacting to a price offered via brokers, and that price appeared *'high'* compared to his *'internal price'* for those gilts.⁴⁰

- B.20 At 14:14:57 to 14:14:59, RBC ([RBC Trader 1]) acknowledged the offer to trade and disclosed his **current mid-price** ('59') for that same gilt (*'i knw' '59 mid'*). [DB Trader] (Deutsche Bank) said in interview he interpreted RBC ([RBC Trader 1])'s disclosure to refer to his *'internal'* mid-price.⁴¹
- B.21 Deutsche Bank ([DB Trader]) then disclosed his **current mid-price** for the same gilts: Deutsche Bank ([DB Trader]) disclosed to RBC ([RBC Trader 1]) that he had had the same mid-price as RBC ([RBC Trader 1]) but that his mid-price was now '61' (*'sos did i [so did i]'*⁴² ***'just moved to 61'*** at 14:15:07 to 14:15:10).⁴³ [DB Trader] (Deutsche Bank) confirmed in interview that '61' was a reference to his *'internal'* mid-price.⁴⁴ [DB Trader] (Deutsche Bank) also said in interview that he had moved his mid-price *'probably reflecting the trade or the bid in the broker market'*.⁴⁵

Chat extract table – 14:13:54 to 14:15:10

Timestamp (GMT)	Party (Key Individual) Extract
14:13:54 14:13:59	Deutsche Bank ([DB Trader]) <i>who is bidding 5 14 there</i> <i>haha</i>
14:14:57 14:14:59	RBC ([RBC Trader 1]) <i>i knw</i> 59 mid
14:15:07 14:15:10	Deutsche Bank ([DB Trader]) <i>sos did i</i> <i>just moved to 61</i>

⁴⁰ [DB Trader] (Deutsche Bank) said in interview that *'there's clearly a price in the IDB screen, I believe. So, I've asked the question, "who is bidding 5 14 there?" obviously the price looks high versus what my internal pricer is saying.'* (B-URN-000502067, page 158).

⁴¹ [DB Trader] (Deutsche Bank) said in interview that *'[RBC Trader 1] said what his mid is, er, which I believe is, erm -- which I believe it would be the RBC internal mid'* (B-URN-000502067, page 158).

⁴² [DB Trader] (Deutsche Bank) said in interview that at this timestamp, he said *'so did I'* (B-URN-000502067, page 158).

⁴³ [DB Trader] (Deutsche Bank) said in interview that he had changed his mid-price for the gilt, most likely in response to the price he had observed via brokers (*'so I was saying at the time I had a mid there, but I've moved my middle to 61. So, I, I moved my mid probably reflecting the trade'*, B-URN-000502067, page 158).

⁴⁴ [DB Trader] (Deutsche Bank) said in interview, in the context of this exchange, that the Parties were referring to *'Internal mids in all cases'* (B-URN-000502067, page 158).

⁴⁵ B-URN-000502067, page 158.

Disclosure of current mid-prices for a gilt switch – 08:18:11 to 08:18:40

- B.22 Deutsche Bank ([DB Trader]) disclosed his **current mid-price** ('118') for a gilt switch via brokers consisting of gilts maturing in five and ten years ('*someone bidding 2t15 on my mids again*' '**118**' '*thats where i had mid*' at 08:18:11 to 08:18:37). RBC ([RBC Trader 1]) replied by disclosing his **current mid-price** ('118.1') for the same gilt switch ('**118.1 i have em**' at 08:18:40).
- B.23 In interview, [DB Trader] (Deutsche Bank) confirmed that he and RBC ([RBC Trader 1]) were referring to that particular gilt switch. [DB Trader] (Deutsche Bank) also confirmed in interview that, but for their respective disclosures, he and RBC ([RBC Trader 1]) would not have known that each other's mid-prices.⁴⁷

Chat extract table – 08:18:11 to 08:18:40

Timestamp (GMT)	Party (Key Individual) <i>Extract</i>
08:18:11	Deutsche Bank ([DB Trader]) <i>someone bidding 2t15 on my mids again</i>
08:18:21	RBC ([RBC Trader 1]) <i>where</i>
08:18:25 08:18:27 08:18:37	Deutsche Bank ([DB Trader]) <i>[broker]</i> 118 <i>thats where i had mid</i>
08:18:40	RBC ([RBC Trader 1]) 118.1 i have em

⁴⁶ A-URN-007503. RBC also produced a chat on this date between Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 1]), A-URN-002952.

⁴⁷ [DB Trader] (Deutsche Bank) said in interview that '*He's giving me his middle, the same yield differential previously mentioned. So, 2t15 against ten year [...] that would've been the RBC middle [...] he wouldn't have known my middle other than the fact that I said someone's bidding it on my middle. And then my -- where my middle was happened to be on screen. So, I basically told him by saying that someone's bidding on my middle.*' (B-URN-000502069, page 187).

Summary

- B.24 On 1 March 2010, Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 1]) engaged in the following **Trading Conduct**:
- (a) Deutsche Bank ([DB Trader]) disclosed to RBC ([RBC Trader 1]) his **current mid-price** for a gilt switch consisting of 2011 and 2013 gilts.
 - (b) Deutsche Bank ([DB Trader]) subsequently disclosed to RBC ([RBC Trader 1]) his **current mid-price** for a gilt switch consisting of 2015 and 2019 gilts.
 - (c) Later that same day, Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 1]) discussed their current trading activity for a gilt switch consisting of 2012 and 2013 gilts, Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 1]) **coordinated their trading activity** in respect of this gilt switch.

Disclosures of current mid-price for switch consisting of 2011 and 2013 gilts – 10:27:07 to 10:28:16

- B.25 At 10:27:48, in the context of RBC ([RBC Trader 1]) having disclosed to Deutsche Bank ([DB Trader]) that he was *'trying'* to trade a gilt switch consisting of 2013 gilts and 3.25% 2011 gilts (*'I'm trying to do 13s vs 3qs'* at 10:27:07),⁴⁹ Deutsche Bank ([DB Trader]) disclosed his **current mid-price** (*'87.85 mid'*) for a related gilt switch via brokers consisting of 2011 and 2013 gilts (*'i have 11/13s at 87.85 mid'*). [DB Trader] (Deutsche Bank) said in interview he was referring to his *'internal mid'*.⁵⁰
- B.26 Deutsche Bank ([DB Trader]) then advised RBC ([RBC Trader 1]) at 10:28:07 that the price RBC ([RBC Trader 1]) disclosed was *'wrong'* (*'89 is so wrong'*). [DB Trader] (Deutsche Bank) said in interview he made that comment because the price RBC ([RBC Trader 1]) had disclosed at 10:27:10 (*'89'*) seemed *'strange'* to Deutsche Bank ([DB Trader]) in the context of Deutsche Bank ([DB Trader])'s mid-price.⁵¹

⁴⁸ A-URN-000148. RBC also produced a chat on this date between Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 1]), A-URN-002974.

⁴⁹ The CMA infers that RBC ([RBC Trader 1]) was referring specifically to the 3.25% 2011 gilt because that was the only *'3q'*, ie gilt with a coupon of 3.25%, in issue at this date (B-URN-000500738, DMO, *'Gilt Market Issuance Calendar 2009-2010'*, B-URN-000500748, DMO, Gilt Market, *'Gilts in issue on 31 March 2009'* and B-URN-000500739, DMO, Gilt Market, *'Gilts in issue on 31 March 2010'*).

⁵⁰ B-URN-000502067, page 171.

⁵¹ [DB Trader] (Deutsche Bank) said in interview that *'in the context of that mid, "89 drop" seems very strange because if my mid's at 87.85 if someone's willing to drop 89 basis points that's quite a -- that's quite a long way from my mid' and 'And then also his levels seem to come out quite strange. So, I said, "89 is so wrong".'* (B-URN-000502067, pages 171 and 172).

Chat extract table – 10:27:07 to 10:28:16

Timestamp (UTC)	Party (Key Individual) <i>Extract</i>
10:27:07 10:27:10 10:27:14	RBC ([RBC Trader 1]) <i>I'm trying to do 13s vs 3qs</i> [...] [...]
10:27:32 10:27:48	Deutsche Bank ([DB Trader]) <i>only [a trader at another bank] wants 3q11</i> <i>i have 11/13s at 87.85 mid</i>
10:27:49	RBC ([RBC Trader 1]) <i>hahaha i'll give him a 3qs burger everyday</i>
10:28:07	Deutsche Bank ([DB Trader]) <i>89 is so wrong</i>
10:28:14 10:28:16	RBC ([RBC Trader 1]) <i>yes i know</i> <i>ssssshhhhhhhhhhhhhhhhhhhhh</i>

Disclosures of current mid-price for gilt switch consisting of 2015 and 2019 gilts – 14:21:52 to 14:23:08

- B.27 In the context of discussing trading activity being carried out by RBC ([RBC Trader 1]) for a gilt switch consisting of 2015 and 2019 gilts⁵², at 14:22:46, Deutsche Bank ([DB Trader]) disclosed his **current mid-price** ('106.1') to RBC ([RBC Trader 1]) for that gilt switch ('***i have 106.1 mid***').⁵³

Chat extract table – 14:21:52 to 14:23:08

Timestamp (UTC)	Party (Key Individual) <i>Extract</i>
14:21:52	RBC ([RBC Trader 1]) <i>[...] my 4Ts 19s [...]</i>
14:21:58	Deutsche Bank ([DB Trader]) <i>[...]</i>
14:21:58 14:22:01 14:22:02	RBC ([RBC Trader 1]) <i>[...]</i> <i>[...]</i> <i>[...]</i>
14:22:02 14:22:07	Deutsche Bank ([DB Trader]) <i>[...]</i> <i>[...]</i>
14:22:14	RBC ([RBC Trader 1]) <i>[...]</i>

⁵² [DB Trader] (Deutsche Bank) in an interview said that he interpreted RBC ([RBC Trader 1]) as referring to trades 'on the broker screen' for '2015 gilt against 2019 gilt' (B-URN-000502067, page 187).

⁵³ [DB Trader] (Deutsche Bank) in an interview said that he was referring to his '106.1 mid.' (B-URN-000502067, pages 191 and 192).

Timestamp (UTC)	Party (Key Individual) <i>Extract</i>
14:22:17	Deutsche Bank ([DB Trader]) [...]
14:22:21	RBC ([RBC Trader 1]) [...]
14:22:25 14:22:26	Deutsche Bank ([DB Trader]) [...] [...]
14:22:31	RBC ([RBC Trader 1]) [...]
14:22:32	Deutsche Bank ([DB Trader]) [...]
14:22:35	RBC ([RBC Trader 1]) [...]
14:22:46	Deutsche Bank ([DB Trader]) <i>i have 106.1 mid</i>
14:22:51	RBC ([RBC Trader 1]) <i>mate i'm happy if i never get lifted again at that level</i>
14:23:08	Deutsche Bank ([DB Trader]) <i>seen any buying today</i>

Coordination of trading activity for a gilt switch consisting of 2012 and 2013 gilts – 14:34:31 to 14:37:50

- B.28 At 14:34:31, Deutsche Bank ([DB Trader]) disclosed that he was looking at trading via brokers the gilt switch consisting of 2012 and 2013 gilts (*'thats me in 12/13s..... ust een looking at it'*).⁵⁴ RBC ([RBC Trader 1]) then disclosed that he was considering trading the same gilt switch at a price of '67' (*'i've been wieghing up the 67s'*).⁵⁵
- B.29 Following their trading activity disclosures, Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 1]) then **coordinated their trading activity** in respect of the same gilt switch they had been discussing:
- (a) At 14:36:59, RBC ([RBC Trader 1]) offered to refrain from trading, by confirming whether Deutsche Bank ([DB Trader]) *'need[ed]'* to trade that gilt switch at the price (*'67[...]'*) available via a broker (*'on [broker]'*)⁵⁶ because if

⁵⁴ [DB Trader] (Deutsche Bank) explained in interview, that *'this starts, erm, with me telling him about a price in the broker market and telling him that's me. And basically, you know, I have been looking at a spread between the 2012 and 2013 bond'* (B-URN-000502067, page 194).

⁵⁵ [DB Trader] (Deutsche Bank) in interview, explained that *'By "weighing up" I think there's obviously a price at 67 in the broker market, a drop and by that he means he think -- he's been thinking about trading it by weighing up.'* And that '67s' referred to the *'yield spread between the 12s and 13 bonds'* (B-URN-000502067, page 195).

⁵⁶ [DB Trader] (Deutsche Bank) in interview, explained *'that's [broker]'s, the broker'* (B-URN-000502067, page 195).

not RBC ([RBC Trader 1]) would make the trade at that price (**'you need to do it or i'm gonna hit 67s'**).⁵⁷

- (b) In response to RBC ([RBC Trader 1])'s suggestion, Deutsche Bank ([DB Trader]) confirmed that RBC ([RBC Trader 1]) should trade the gilt switch at the price available via the broker (**'go for it'** at 14:37:07) and confirmed that he would refrain from selling until RBC ([RBC Trader 1]) had done so, ie he would sell **'2nd'** after RBC ([RBC Trader 1]) (**'i'll be 2nd noisy seller'** at 14:37:07). [DB Trader] (Deutsche Bank)'s evidence in interview was that in this timestamp he was **'agreeing'** to let RBC ([RBC Trader 1]) **'go first'**.⁵⁸
- (c) RBC ([RBC Trader 1]) then confirmed that Deutsche Bank ([DB Trader]) should not offer to sell **'yet'** in order to avoid dissuading the potential counterparty from trading with RBC ([RBC Trader 1]) (**'not yet'** **'dont want to put him off'** at 14:37:44 to 14:37:48).

B.30 RBC ([RBC Trader 1]) then confirmed to Deutsche Bank ([DB Trader]) once he was trading (**'hitting'** at 14:37:50).⁵⁹

Chat extract table – 14:34:31 to 14:37:50

Timestamp (UTC)	Party (Key Individual) Extract
14:34:31 14:34:34	Deutsche Bank ([DB Trader]) <i>thats me in 12/13s..... ust een looking at it should be much lower</i>
14:34:47	RBC ([RBC Trader 1]) <i>yes it shud i've been wieghing up the 67s</i>
14:35:01 14:35:06 14:35:20	Deutsche Bank ([DB Trader]) <i>i reckon should be closer to 60bps looking at 2-3-4s vs 5 12-4h13-2q14</i>
14:35:27	RBC ([RBC Trader 1]) <i>i prefer doing 3qs 13s but yes</i>
14:35:45	Deutsche Bank ([DB Trader]) <i>cant find a bid for 3q11</i>
14:36:08 14:36:59 14:37:02	RBC ([RBC Trader 1]) <i>i know me neither</i> <i>you need to do it or i'm gonna hit 67s</i> <i>on [broker]</i>
14:37:07	Deutsche Bank ([DB Trader]) <i>go for it</i>
	RBC ([RBC Trader 1])

⁵⁷ [DB Trader] (Deutsche Bank) said in interview that RBC ([RBC Trader 1]) was telling him that 'So, he's telling me, "I'm going to do this trade. If you --I'm going to do this trade, if you don't need to do it"' (B-URN-000502067, page 195).

⁵⁸ [DB Trader] (Deutsche Bank) in interview explained that in this timestamp he 'I agreed before then to let him go first' and 'I mean I am agreeing to let him go first when I say, "go for it"' (B-URN-000502067, pages 197 and 198).

⁵⁹ [DB Trader] (Deutsche Bank) in interview said that in this timestamp, RBC ([RBC Trader 1]) was saying 'he's doing a trade' (B-URN-000502067, page 196).

Timestamp (UTC)	Party (Key Individual) <i>Extract</i>
14:37:25	<i>i only need to do 70mm 12s for now</i>
14:37:26	Deutsche Bank ([DB Trader]) <i>i'll be 2nd noisy seller</i>
14:37:44 14:37:48 14:37:50	RBC ([RBC Trader 1]) <i>not yet</i> <i>dont want to put him off</i> <i>hitting</i>

Coordination of trading activity – 15:50:58 to 16:00:44

- B.31 At 15:50:58 and 15:51:03, Deutsche Bank ([DB Trader]) disclosed to RBC ([RBC Trader 1]) that he was the dealer offering to trade a two-way price for 2013 gilts via brokers (*'me in 13s' 'making 2 way'*).⁶¹
- B.32 RBC ([RBC Trader 1]) responded by expressing displeasure at Deutsche Bank ([DB Trader])'s trading price and trading activity (*'what are you doingh' 'geeeeeeez'* and later *'hurry up and get it out geeeeexz' 'hahaha'* at 15:51:06 to 15:51:09 and at 15:55:01 to 15:55:03).
- B.33 Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 1]) continued to discuss the price level at which Deutsche Bank ([DB Trader]) was trading via brokers and Deutsche Bank ([DB Trader]) stated that he was waiting for a call to start (*'I dont know yet' 'waiting for call to start'* at 15:57:10 and 15:57:14). RBC ([RBC Trader 1]) then asked Deutsche Bank ([DB Trader]) to *'pull'*, ie to withdraw, his trading price, such that he would no longer be offering to trade at that price until after that call (*'can you pull price til it fdoes'* at 15:57:22), which Deutsche Bank ([DB Trader]) confirmed he would do (*'ok'* at 15:57:28).⁶² RBC ([RBC Trader 1]) then thanked Deutsche Bank ([DB Trader]) (*'thanks'* at 15:57:52).
- B.34 The CMA's inference that, in responding *'ok'*, Deutsche Bank ([DB Trader]) was confirming that he would withdraw his trading price at RBC ([RBC Trader 1])'s request, is consistent with [DB Trader](Deutsche Bank)'s evidence in interview: [DB Trader] (Deutsche Bank) said in interview that RBC ([RBC Trader 1]) was *'asking me to take my price off the screen. It looks like I do because I say, "Okay" and that 'it looks like I was helping him by taking the price off screen'*.^{63 64}

Chat extract table – 15:50:58 to 16:00:44

Time stamp (GMT)	Party (Key individual) Extract
15:50:58	Deutsche Bank ([DB Trader]) <i>me in 13s</i>

⁶⁰ A-URN-007521. RBC also produced a chat on this date between Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 1]), A-URN-003044.

⁶¹ [DB Trader] (Deutsche Bank) said in interview, *'I say me in 13s making the two-way. So, obviously, I'm in the broker market making a two-way price.'* (B-URN-000502070, page 93).

⁶² [DB Trader] (Deutsche Bank) said in interview that RBC ([RBC Trader 1]) was asking *'me to take my price off the screen. It looks like I do because I say, "Okay", "Thanks". But then I can't have taken it off -- from what I can tell, I can't have taken it off very long, maybe because the call got delayed, um, because ... it looks like there's a bid back on the screen quite shortly after. So, I take my price off the screen because he asked me to or it looks like I do, anyway, here, which ... Um, and then looks - - I think, later on, I put it back on the screen shortly after, um, because I say, "Got hit" at 16:08:15. So, means I man... -- I managed to get some risk from the broker market.'* (B-URN-000502070, pages 99 and 100).

⁶³ B-URN-000502070, page 99.

⁶⁴ B-URN-000502070, page 105.

Time stamp (GMT)	Party (Key individual) <i>Extract</i>
15:51:03	<i>making 2 way</i>
15:51:06 15:51:09	RBC ([RBC Trader 1]) <i>what are you doingh</i> <i>geeeeeeeez</i>
15:51:10	Deutsche Bank ([DB Trader]) <i>pricing</i>
15:51:23	RBC ([RBC Trader 1]) <i>i see</i>
15:51:23 15:51:28	Deutsche Bank ([DB Trader]) <i>you can hit it in 1m</i> <i>in a few mins</i>
15:51:31	RBC ([RBC Trader 1]) <i>k</i>
15:54:00 15:54:02	Deutsche Bank ([DB Trader]) <i>some idiots lidts 3q11</i> <i>haha</i>
15:54:23 15:54:27	RBC ([RBC Trader 1]) <i>i was the offer</i> <i>what are they doing</i>
15:54:40 15:54:52	Deutsche Bank ([DB Trader]) <i>they think 4j13 is real</i> <i>but shows risk aversion at that part of the curve</i>
15:55:01 15:55:03	RBC ([RBC Trader 1]) <i>hurry up and get it out geeeeexz</i> <i>hahaha</i>
15:55:19 15:55:41	Deutsche Bank ([DB Trader]) <i>[...]</i> <i>[...]</i>
15:55:44 15:55:47	RBC ([RBC Trader 1]) <i>[...]</i> <i>[...]</i>
15:55:51	Deutsche Bank ([DB Trader]) <i>[...]</i>
15:55:52 15:55:53	RBC ([RBC Trader 1]) <i>[...]</i> <i>[...]</i>
15:56:09 15:56:14	Deutsche Bank ([DB Trader]) <i>[...]</i> <i>[...]</i>
15:56:50 15:56:53 15:57:02	RBC ([RBC Trader 1]) <i>[...]</i> <i>[...]</i> <i>[...]</i>
15:57:10 15:57:14 15:57:15	Deutsche Bank ([DB Trader]) <i>i dont know yet</i> <i>waiting for call to start</i> <i>haha</i>
15:57:22	RBC ([RBC Trader 1]) <i>can you pull price til it fdoes</i>

Time stamp (GMT)	Party (Key individual) <i>Extract</i>
15:57:25	;:-)
15:57:28	Deutsche Bank ([DB Trader]) <i>ok</i>
15:57:52 15:57:57	RBC ([RBC Trader 1]) <i>thanks</i> <i>jeeeeeeeeeeeeeez</i>
15:58:11 15:58:13	Deutsche Bank ([DB Trader]) <i>haha... they are so short this stuff though</i> <i>worrying</i>
15:59:19	RBC ([RBC Trader 1]) <i>yes it is</i>
16:00:44	Deutsche Bank ([DB Trader]) <i>5 mins</i>

Disclosure of current mid-prices for the 3.25% 2011 gilt – 11:24:29 to 11:26:23

- B.35 In the context of an exchange relating to trading activity observed via brokers⁶⁶ for the 3.25% 2011 gilt (*'how are 3q11 still bid at 82?'* at 11:24:29), RBC ([RBC Trader 1]) disclosed his **current mid-price** ('77') for that gilt, stating that despite having a mid-price of '77', he thought that mid-price was 'low' compared to an offer to buy available via brokers (*'77 mid' 'think i'm low here'* at 11:25:57 and 11:26:01).
- B.36 Deutsche Bank ([DB Trader]) reacted by disclosing his **current mid-price** ('78.25') for the same gilt (*'78.25'* at 11:26:23). [DB Trader] (Deutsche Bank) said in interview that he interpreted the disclosures to be of each Party's '*mids*' for the 3.25% 2011 gilt and that both were '*quite low*' compared to the offer to buy available via brokers.⁶⁷

Chat extract table – 11:24:29 to 11:26:23

Timestamp (UTC)	Party (Key Individual) <i>Extract</i>
11:24:29	Deutsche Bank ([DB Trader]) <i>how are 3q11 still bid at 82?</i>
11:25:57 11:26:01 11:26:02	RBC ([RBC Trader 1]) <i>77 mid</i> <i>think i'm low here</i> <i>ha</i>
11:26:23	Deutsche Bank ([DB Trader]) <i>78.25</i>

⁶⁵ A-URN-000150. RBC also produced a chat on this date between Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 1]), A-URN-003057.

⁶⁶ [DB Trader] (Deutsche Bank) said in interview regarding that timestamp that '*it's a reference to, um, a broker screen, ...*' (B-URN-000502070, page 125).

⁶⁷ B-URN-000502070, page 125.

Summary

- B.37 On 12 March 2010, Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 1]) engaged in the following **Trading Conduct** in the context of trading via brokers:
- (a) In the context of discussing current trading activity for a gilt asset swap box including 4.75% 2015 and 3.75% 2019 gilts, Deutsche Bank ([DB Trader]) disclosed to RBC ([RBC Trader 1]) his **current mid-price** for that gilt swap box. RBC ([RBC Trader 1]) then disclosed to Deutsche Bank ([DB Trader]) his **current mid-price** for a related product, a gilt switch consisting of 2015 and 2019 gilts.
 - (b) Later that day, Deutsche Bank ([DB Trader]) disclosed to RBC ([RBC Trader 1]) his **current mid-price** for a gilt switch consisting of 2.75% 2015 and the 4.5% 2019 gilts.

Disclosures of current mid-price for a gilt asset swap box and a gilt switch including 2015 and 2019 gilts – 11:44:06 to 11:45:40

- B.38 At 11:44:06 to 11:44:27, RBC ([RBC Trader 1]) disclosed that he thought the price of '41' was *'wrong'* (*'yes 41 on asw box is so wrong'*) and Deutsche Bank ([DB Trader]) disclosed that he thought the price should be *'wider'* (*'its wider geez'* at 11:44:19).
- B.39 In light of the disclosures that follow in relation to *'4t15 vs 3t19'* (at 11:45:15) the CMA infers that the Parties were specifically referring to the gilt asset swap box including 4.75% 2015 and 3.75% 2019 gilts. Consistent with that inference, [DB Trader] (Deutsche Bank) said in interview that he interpreted RBC ([RBC Trader 1]) as referring specifically to a gilt asset swap box including 4.75% 2015 and 2019 gilts.⁶⁹
- B.40 Deutsche Bank ([DB Trader]) subsequently disclosed his **current mid-price** ('43.5') for that same gilt asset swap box, ie the gilt asset swap box including 4.75% 2015 and 3.75% 2019 gilts (***'got 43.5 mid'*** *'4t15 vs 3t19'* at 11:44:54 and 11:45:15).⁷⁰

⁶⁸ A-URN-003072. Deutsche Bank also produced a chat on this date between Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 1]), A-URN-007522.

⁶⁹ B-URN-000502070, pages 135 and 136.

⁷⁰ [DB Trader] (Deutsche Bank) said in interview that he was referring to his *'middle'* (*'Maybe when I gave that middle of 43.5, but maybe subsequently I've moved it.'*, B-URN-000502070, page 138).

B.41 At 11:45:16, RBC ([RBC Trader 1]) disclosed his **current mid-price** ('120.25') for a related product, a gilt switch consisting of 2015 and 2019 gilts⁷¹ ('**120.25 cuve [curve]**') and asked Deutsche Bank ([DB Trader]) what his price was for that product ('*where do you have it*' at 11:45:27). In response, at 11:45:35, Deutsche Bank ([DB Trader]) disclosed his recent mid-price for that gilt switch ('*i had it at 121*').⁷²

Chat extract table – 11:44:06 to 11:45:40

Timestamp (UTC)	Party (Key Individual) Extract
11:44:06 11:44:10	RBC ([RBC Trader 1]) <i>yes 41 on asw box is so wrong budget trade</i>
11:44:19	Deutsche Bank ([DB Trader]) <i>its wider geez</i>
11:44:24 11:44:27	RBC ([RBC Trader 1]) <i>oh well second that</i>
11:44:38 11:44:43	Deutsche Bank ([DB Trader]) <i>i'm biddign for it now bidding 44.5</i>
11:44:49 11:44:54	RBC ([RBC Trader 1]) <i>whaaaaaaat where is it</i>
11:44:54 11:45:15	Deutsche Bank ([DB Trader]) got 43.5 mid <i>4t15 vs 3t19</i>
11:45:16 11:45:27	RBC ([RBC Trader 1]) 120.25 cuve <i>where do you have it</i>
11:45:35	Deutsche Bank ([DB Trader]) <i>i had it at 121</i>
11:45:40	RBC ([RBC Trader 1]) <i>ok cool</i>

Disclosure of current mid-price for a gilt switch including 2015 and 2019 gilts – 12:34:53 to 12:36:30

B.42 In response to a query from RBC ([RBC Trader 1]) in relation to the price available via brokers for a gilt switch ('*that you i 4ts*' at 12:34:53), at 12:36:16, Deutsche Bank ([DB Trader]) disclosed his **current mid-price** ('120.75') for that gilt switch,

⁷¹ [DB Trader] (Deutsche Bank) said in interview that the Parties were discussing the '5s 10s curve' (B-URN-000502067, page 148), which the CMA infers was a reference to the gilt switch consisting of gilts maturing in five and ten years respectively. The CMA therefore infers that the Parties were referring specifically to the gilt switch consisting of 2015 and 2019 gilts, and that in any event the Parties knew what product they were discussing.

⁷² [DB Trader] (Deutsche Bank) said in interview that he interpreted these figures as his and RBC ([RBC Trader 1])'s respective 'middles' ('*So 120 and a quarter, I think it's his middle. 121 is where I had the middle*', B-URN-000502070, page 139).

ie the gilt switch consisting of 2.75% 2015 and the 4.5% 2019 gilts (**'i have a 120.75 mid for that'**).⁷³ Deutsche Bank ([DB Trader]) then disclosed to RBC ([RBC Trader 1]) information about his reasons for his price for that gilt switch: Deutsche Bank ([DB Trader]) said that he *'want[s] to tempt these boys in slowly'* (12:36:30).⁷⁴

Chat extract table – 12:34:53 to 12:36:30

Timestamp (UTC)	Party (Key Individual) Extract
12:34:53 12:35:06	RBC ([RBC Trader 1]) <i>that you i 4ts</i> <i>whoever is lifting that (rap bond vs 3ts here is crazy</i>
12:35:35 12:36:16 12:36:30	Deutsche Bank ([DB Trader]) <i>that was my price... meant 2t15 vs 4h19... they put he wrong thing in</i> <i>i have a 120.75 mid for that</i> <i>want to temp these boys in slowly</i>

⁷³ [DB Trader] (Deutsche Bank) said in interview that, 'as far as [he] can make out', he was referring specifically to the '2T15' and '4H19' gilts (B-URN-000502070, page 142).

⁷⁴ [DB Trader] (Deutsche Bank) said in interview that 'maybe I'm sharing a price but not a very aggressive price because maybe I think maybe I can -- it feels like there's quite a lot of buyers out there, so I'm, I'm not showing a very aggressive price' (B-URN-000502070, page 140).

Disclosure of current mid-price for 3.75% 2011 gilt – 16:11:10 to 16:12:03

B.43 In the context of a discussion between Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 1]) in relation to the price of 3.75% 2011 gilts observed on broker screens, ie ‘3qs’ (‘see 3qs go up’ at 16:11:10),⁷⁶ Deutsche Bank ([DB Trader]) disclosed his **current mid-price** (‘83’) for those gilts (‘***i still have a 83 mid***’ at 16:11:53)⁷⁷ and that Deutsche Bank ([DB Trader]) was ‘gonna’ offer to trade those gilts at a price of ‘85’ via a broker, [broker], (‘gonna offer at 85 on [broker]’ at 16:12:03).⁷⁸

Chat extract table – 16:11:10 to 16:12:03

Timestamp (UTC)	Party (Key Individual) <i>Extract</i>
16:11:10	RBC ([RBC Trader 1]) <i>see 3qs go up</i>
16:11:17 16:11:26	Deutsche Bank ([DB Trader]) [...] [...]
16:11:32	RBC ([RBC Trader 1]) [...]
16:11:47 16:11:53 16:12:03	Deutsche Bank ([DB Trader]) [...] <i>i still have a 83 mid</i> <i>gonna offer at 85 on [broker]</i>

⁷⁵ A-URN-000230. RBC also produced a chat on this date between Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 1]), A-URN-003076.

⁷⁶ [DB Trader] (Deutsche Bank) said in interview ‘3qs’ was a reference to ‘3 Q 11s’, ie 3.75% 2011 gilts (B-URN-000502070, page 147).

⁷⁷ [DB Trader] (Deutsche Bank) said in interview that he was ‘giving him [RBC Trader 1] my middle’ (B-URN-000502070, page 148).

⁷⁸ [DB Trader] (Deutsche Bank) said in interview that ‘I’ve sort of said where, where I’m going to offer. I’m going to offer someone-- [broker] is [broker] -- is just an IDB, electronic’ and that ‘I think as far as I can tell from this conversation it would either be on or going on very shortly’ (B-URN-000502070, pages 148 and 150).

Summary

B.44 On 26 March 2010, Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 1]) engaged in the following **Trading Conduct**:

- (a) Deutsche Bank ([DB Trader]) disclosed to RBC ([RBC Trader 1]) his **current mid-price** for 3.25% 2011 gilts.
- (b) Later that day, Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 1]) disclosed to each other their **current mid-prices** for various gilt switches.

Disclosures of current mid-prices for 3.25% 2011 gilts – 09:44:30 to 09:44:57

B.45 At 09:44:30 and 09:44:39, RBC ([RBC Trader 1]) asked Deutsche Bank ([DB Trader]) for his price for 3.25% 2011 gilts ('3Qs where do youh have those')⁸⁰ and then said '82.5?'. In response to RBC ([RBC Trader 1])'s question, at 09:44:57, Deutsche Bank ([DB Trader]) disclosed his **current mid-price** for the same gilt ('82.5').⁸¹

Chat extract table – 09:44:30 to 09:44:57

Timestamp (UTC)	Party (Key Individual) <i>Extract</i>
09:44:30 09:44:39	RBC ([RBC Trader 1]) 3Qs where do youh have those 82.5?
09:44:57	Deutsche Bank ([DB Trader]) 82.5

Disclosures of current mid-prices for various gilt switches – 16:00:52 to 16:09:39

B.46 Later that day, Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 1]) disclosed to each other their **current mid-prices** for various gilt switches, after Deutsche Bank ([DB Trader]) had asked RBC ([RBC Trader 1]) about the latter's price 'curve'. At 16:00:52, Deutsche Bank ([DB Trader]) asked RBC ([RBC Trader 1]) for information about his pricing, saying '*how you marking the curve?*'. At 16:01:46 to

⁷⁹ A-URN-000151. RBC also produced a chat on this date between Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 1]), A-URN-003128.

⁸⁰ [DB Trader] (Deutsche Bank) said in interview in respect of that timestamp that '[RBC Trader 1]'s just asking me where do I have mid on 3Q11s' (B-URN-000502070, page 150).

⁸¹ [DB Trader] (Deutsche Bank) said in interview 'I've agreed, well I've given him my middle, 82.5. Just cash price on the bonds.' (B-URN-000502070, page 151).

16:02:05, [DB Trader] (Deutsche Bank) then disclosed **current mid-prices** for various gilt switches ('**64.5**' '**39.5**' '**37.5**').

B.47 In response, at 16:07:31 to 16:07:43, RBC ([RBC Trader 1]) disclosed his **current mid-prices** for the same three gilt switches were '**64.65**' '**38.25**' and '**38.25**', and for a gilt switch consisting of 2015 gilts ('15/15s') was '**12.5**'.

B.48 In light of [DB Trader] (Deutsche Bank)'s evidence in interview and the Parties' references to particular gilt switches in timestamps that follow,⁸² the CMA infers that:

- (a) Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 1]) were specifically disclosing their respective mid-prices for various gilt switches.⁸³
- (b) Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 1]) would have known at the time the products to which each mid-price disclosure related: [DB Trader] (Deutsche Bank) said in interview the products they were discussing would have been '*quite obvious*' as he '*didn't even have to put the bonds down which I was talking about*'⁸⁴ and that '*[RBC Trader 1] would have been able to interpret them*'.⁸⁵

Chat extract table – 16:00:52 to 16:09:39

Timestamp (UTC)	Party (Key Individual) <i>Extract</i>
16:00:52	Deutsche Bank ([DB Trader])
16:01:46	<i>how you marking the curve?</i>
16:01:52	64.5
16:02:03	39.5
16:02:05	37.5
	?
16:07:31	RBC ([RBC Trader 1])
16:07:35	64.65
16:07:38	38.25
16:07:40	38.25
16:07:43	12.5
	15/15s
16:08:42	Deutsche Bank ([DB Trader])
	<i>14/15s is too steep in my opinion</i>
16:09:19	RBC ([RBC Trader 1])
16:09:33	<i>yes me too</i>
	<i>well just makes 2Ts vs 5 14 look completely wrong</i>

⁸² At 16:07:43 to 16:09:33. For instance, at 16:07:43, RBC ([RBC Trader 1]) referred to '15/15s', being a reference to a gilt switch consisting of 2015 gilts.

⁸³ [DB Trader] (Deutsche Bank) said in interview that the disclosures related to the '*yield-spread differentials*' between the '*midpoint*' of the relevant gilts (B-URN-000502070, page 161).

⁸⁴ B-URN-000502070, pages 159 and 160.

⁸⁵ B-URN-000502070, page 157.

Timestamp (UTC)	Party (Key Individual) <i>Extract</i>
16:09:39	Deutsche Bank ([DB Trader]) yes

Summary

- B.49 On 6 April 2010, Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 1]) engaged in the following **Trading Conduct** in the context of trading via brokers:
- (a) Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 1]) **coordinated their trading activity** for a gilt switch consisting of 2015 and 2019 gilts.
 - (b) In the context of RBC ([RBC Trader 1]) disclosing to Deutsche Bank ([DB Trader]) his recent trading activity, Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 1]) disclosed to each other their **current mid-prices** for 3.25% 2011 gilts.
 - (c) Deutsche Bank ([DB Trader]) then disclosed to RBC ([RBC Trader 1]) his **future trading price** for 4.25% 2011 gilts.

Coordination of trading activity for a gilt switch – 11:11:24 to 11:12:17

- B.50 At 11:11:24 to 11:11:47,⁸⁷ Deutsche Bank ([DB Trader]) disclosed that he was the dealer offering to trade a gilt switch consisting of 2015 and 2019 gilts at the trading price available via brokers (*'me in 4t15.3t19'*, *'both sides'*, *'yes'*).
- B.51 After Deutsche Bank ([DB Trader]) had disclosed this information, Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 1]) then **coordinated their trading activity** for that gilt switch: Deutsche Bank ([DB Trader]) instructed RBC ([RBC Trader 1]) to refrain from trading 4.75% 2015 gilts (*'4t15'*) with him via brokers because that would disrupt Deutsche Bank ([DB Trader])'s attempts to trade with another dealer (*'dont hit me in 4t15' 'i am tempting someone in'* at 11:11:52 and 11:11:57). In response, RBC ([RBC Trader 1]) confirmed he would refrain from trading with Deutsche Bank ([DB Trader]) via brokers in accordance with Deutsche Bank ([DB Trader])'s instruction (*'ok i wont'* at 11:12:00).

Chat extract table – 11:11:24 to 11:12:17

Timestamp (UTC)	Party (Key individual) <i>Extract</i>
11:11:24	Deutsche Bank ([DB Trader]) <i>me in 4t15.3t19</i>
11:11:43	RBC ([RBC Trader 1]) <i>8-)</i>

⁸⁶ A-URN-000152. RBC also produced a chat on this date between Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 1]), A-URN-003196.

⁸⁷ Timestamps from this chat are recorded in UTC, which was 1 hour behind UK time on that date (BST). Therefore, 11:11:24 should be read as 12:11:24.

Timestamp (UTC)	Party (Key individual) <i>Extract</i>
11:11:45	<i>both sides</i>
11:11:47 11:11:52 11:11:57	Deutsche Bank ([DB Trader]) <i>yes</i> <i>dont hit me in 4t15</i> <i>i am tempting someone in</i>
11:12:00 11:12:01 11:12:06	RBC ([RBC Trader 1]) <i>ahhah ok i wont</i> <i>hahahahahaha</i> <i>the box is so wrong</i>
11:12:17	Deutsche Bank ([DB Trader]) <i>i will fill them and then pick up 105 in hteir boat</i>

Disclosure of current mid-prices for 3.25% 2011 gilts – 14:05:39 to 14:06:49

- B.52 At 14:05:39,⁸⁸ RBC ([RBC Trader 1]) disclosed to Deutsche Bank ([DB Trader]) that he had traded the 3.25% 2011 gilts⁸⁹ (*'lifted in 3qs'*).
- B.53 In response, Deutsche Bank ([DB Trader]) disclosed his **current mid-price** for those gilts, saying *'thats stupid'* (14:05:51) and that he had a mid-price of '70' (*'i have a 70 mid'* at 14:05:59). In interview, [DB Trader] (Deutsche Bank) said that these timestamps related to a *'broker trade'* that was at a *'high'* price compared to his mid-price.⁹⁰
- B.54 At 14:06:23, RBC ([RBC Trader 1]) disclosed that he had the same **current mid-price** for the gilt, ie a mid-price of '70' (*'me tpo [too]'*).⁹¹

Disclosure of future trading price – 14:08:59 to 14:09:55

- B.55 RBC ([RBC Trader 1]) then referred to his position for 4.25% 2011 gilts (*'4qs'*) (*'i have 3qs 4qs'* at 14:08:59).
- B.56 Deutsche Bank ([DB Trader]) then disclosed his **future trading price** for one of the gilts that RBC ([RBC Trader 1]) had mentioned, ie 4.25% 2011 gilts: at 14:09:38, Deutsche Bank ([DB Trader]) disclosed that he *'will'* buy 4.25% 2011

⁸⁸ Timestamps from this chat are recorded in UTC, which was 1 hour behind UK time on that date (BST). Therefore, 14:05:39 should be read as 15:05:39.

⁸⁹ [DB Trader] (Deutsche Bank) said in interview that he was discussing '3Q11s', ie 3.25% 2011 gilt. [DB Trader] (Deutsche Bank) also said in interview that RBC ([RBC Trader 1]) was referring to a trade he had made via a broker (*'I would read that as he'd been lifted. So I -- and I believe that's a broker trade'*, B-URN-000502070, pages 169, 171 and 172).

⁹⁰ [DB Trader] (Deutsche Bank) said in interview that the timestamps related to *'a broker trade. Um, which obviously must have... been quite high to the middle. Um, so there's basically a broker trade.'* (B-URN-000502070, pages 166 and 167).

⁹¹ [DB Trader] (Deutsche Bank) said in interview that he *'would read'* RBC ([RBC Trader 1])'s response (*'me tpo [too]'*) as meaning that RBC ([RBC Trader 1]) had the same mid-price for the same product (B-URN-000502070, page 169).

gilts in the event that the price for a related gilt switch reach a price of '75bps' ('4q11 i will buy at 75bps' at 14:09:38).⁹²

Chat extract table – 14:05:39 to 14:09:55

Timestamp (UTC)	Party (Key Individual) <i>Extract</i>
14:05:39 14:05:41	RBC ([RBC Trader 1]) <i>lifted in 3qs</i> <i>wowo</i>
14:05:51 14:05:59 14:06:00	Deutsche Bank ([DB Trader]) <i>thats stupid</i> <i>i have a 70 mid</i> <i>haha</i>
14:06:23	RBC ([RBC Trader 1]) <i>me tpo</i>
14:06:36 14:06:49 14:07:30	Deutsche Bank ([DB Trader]) <i>i am fed up being short 3q11</i> <i>short 320m</i> <i>no idea how i get them back though</i>
14:08:59 14:09:09	RBC ([RBC Trader 1]) <i>i have 3qs 4qs</i> <i>wheres that spread going 25 on a rally max</i>
14:09:30 14:09:38	Deutsche Bank ([DB Trader]) <i>i'm just short</i> 4q11 i will buy at 75bps
14:09:47 14:09:55	RBC ([RBC Trader 1]) <i>yes .75 to .6 range</i> <i>mid range dull here</i>

⁹² [DB Trader] (Deutsche Bank) said in interview that 'I've sort of said to him if it gets to 75 basis points, I'll buy them' (B-URN-000502070, page 169).

Coordination of pricing for a gilt switch – 10:12:02 to 12:15:44

- B.57 At 10:12:02,⁹⁴ Deutsche Bank ([DB Trader]) asked RBC ([RBC Trader 1]) whether he was the dealer offering to trade a gilt switch consisting of 2014 gilts and 2015 gilts⁹⁵ at a price of '42.75' via brokers ('*you trading 42.75*'). In response, at 10:12:09, RBC ([RBC Trader 1]) responded 'yes', thereby confirming he was offering to trade at that price.
- B.58 In response to RBC ([RBC Trader 1]) disclosing his pricing information, at 10:12:15, Deutsche Bank ([DB Trader]) expressed his displeasure ('*you lemon*') and disclosed the price at which he wanted to trade for the same gilt switch at a price of '43' ('*i was trying to broke him into trading with me at 43*' at 10:12:27).
- B.59 Some three minutes later, following RBC ([RBC Trader 1]) disclosing his current trading price and Deutsche Bank ([DB Trader]) disclosing he was trying to trade the same product, RBC ([RBC Trader 1]) acknowledged that he and Deutsche Bank ([DB Trader]) were competing for the same gilt switch trade, saying '*get out of my way*' (10:15:01) and '*get off my lawn*' (10:15:16).⁹⁶
- B.60 The CMA infers that Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 1]) then **coordinated their pricing** with RBC ([RBC Trader 1]) agreeing that he would trade that gilt switch at the same price:
- (a) Deutsche Bank ([DB Trader]) said that he and RBC ([RBC Trader 1]) should '*not fight*' (10:15:10) and said that instead should both offer to trade at a price of '43', ie '***build the brick wall at 43***' at 10:15:34.
 - (b) RBC ([RBC Trader 1]) agreed he would do so by responding '***yes agreed***' (10:15:41).
- B.61 The CMA inference is consistent with [DB Trader] (Deutsche Bank)'s evidence in interview and by his and RBC ([RBC Trader 1])'s actions later in the same Bloomberg chat:

⁹³ A-URN-000154. RBC also produced a chat on this date between Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 1]), A-URN-003232.

⁹⁴ Timestamps from this chat are recorded in UTC, which was 1 hour behind UK time on that date (BST). Therefore, 10:12:02 should be read as 11:12:02.

⁹⁵ [DB Trader] (Deutsche Bank) in interview confirmed that the traders were discussing that product (B-URN-000502067, page 101).

⁹⁶ [DB Trader] (Deutsche Bank) in interview explained that at that timestamp (10:15:16) '*basically what he's saying, jokingly or not, he's saying, "No, I want to do this trade as well, you know. [...] get out of my way, I'm trying to do it"*' (B-URN-000502067, page 109).

- (a) [DB Trader] (Deutsche Bank)'s evidence in interview was that *'43 basis points [...] is the level at which [...] we'll be there to buy'*⁹⁷ and that he was specifically referring to both his and RBC ([RBC Trader 1])'s actions.⁹⁸
- (b) At 10:15:49, seconds after Deutsche Bank ([DB Trader])'s proposal, RBC ([RBC Trader 1]) said that he would trade a volume of *'100'* at a price of *'43'*,⁹⁹ which was a price in line with the price to which RBC ([RBC Trader 1]) had just *'agreed'*.
- (c) Some two hours later, at 12:14:37, Deutsche Bank ([DB Trader]) criticised RBC ([RBC Trader 1]) for offering to sell at a different price to that which RBC ([RBC Trader 1]) had *'agreed'* (*'you are killing me at 42.1'*). In response, RBC ([RBC Trader 1]) apologised and explained that it was inadvertent (*'that was a wrong price mate' 'sorry'* at 12:15:36 and 12:15:38). RBC ([RBC Trader 1]) then disclosed the price at which he would trade (*'42.9'* at 12:15:40),¹⁰⁰ being closer to the price to which RBC ([RBC Trader 1]) had just *'agreed'*. [DB Trader] (Deutsche Bank) said in interview that he was referring to RBC ([RBC Trader 1]) *'killing'* him because RBC ([RBC Trader 1])'s price of *'42.1'* was impacting his ability to trade at his preferred price of *'43'*.¹⁰¹ The CMA therefore infers that Deutsche Bank ([DB Trader]) was seeking to monitor whether RBC ([RBC Trader 1]) was acting in accordance with the agreed course of action, that RBC ([RBC Trader 1]) was apologising for – seemingly inadvertently – not adhering to their agreement, and that RBC ([RBC Trader 1]) disclosed he would adjust his price accordingly.

Chat extract table – 10:12:02 to 12:15:44

Timestamp (UTC)	Party (Key Individual) <i>Extract</i>
10:12:02	Deutsche Bank ([DB Trader]) <i>you trading 42.75</i>

⁹⁷ B-URN-000502067, page 109.

⁹⁸ [DB Trader] (Deutsche Bank) said in interview that it would be *'me and [ie RBC ([RBC Trader 1])]*' (B-URN-000502067, page 111).

⁹⁹ [DB Trader] (Deutsche Bank) in interview explained that at this timestamp RBC ([RBC Trader 1]) was also referring to a yield spread (ie price) of 43 (B-URN-000502067, page 112).

¹⁰⁰ [DB Trader] (Deutsche Bank) in interview explained in respect of that timestamp that *'he obviously traded at 42.1 having said that [...] he's got 100 million more to do for now at 43. He's traded at 42.1 but then he comes on to say, "that was a wrong price mate" "sorry" "42.9". So, he's obviously put the wrong price into the broker market.'* (B-URN-000502067, page 114).

¹⁰¹ [DB Trader] (Deutsche Bank) said in interview, *'I want to put this trade on and you're -- and you're move -- you know, you're moving away, you're moving away from me and not letting me get, get it on. So, you know, not ki -- you know, not literally killing me; it's just like I like this as a trade, you know I like this as a trade. I've said you -- you know, I want to put -- do a billion over it and you've just moved the price awa... the price away from me doing it.'* [...] *'you know, I've said to him, "I want to trade at 43" and, you know, whereby obviously, you know, the higher, the higher number I pick up, the better. So, effectively -- and then he's -- the next trade he's done, he knows I want to trade at 43. The next trade he's done is 42.1. So, it's -- it, it moves by 0.9 of a basis point. It really impacts, impacts my ability to do more at 43. So, that's why I -- I think that's -- I've said, "You're killing me" because I was doing more at 43.'* (B-URN-000502067, pages 118 and 119).

Timestamp (UTC)	Party (Key Individual) <i>Extract</i>
10:12:09	RBC ([RBC Trader 1]) yes
10:12:15	Deutsche Bank ([DB Trader]) you lemon
10:12:23 10:12:26 10:12:27	RBC ([RBC Trader 1]) mate I'm gonna do so many you'll be over the moon wait
10:12:27	Deutsche Bank ([DB Trader]) i was trying to broke him into trading with me at 43
10:12:34 10:12:36 10:12:38 10:12:41	RBC ([RBC Trader 1]) me too I made 43 -43.4 o [broker] got cut then you popped up
10:12:42	Deutsche Bank ([DB Trader]) i picked up
10:12:45	RBC ([RBC Trader 1]) i nknow
10:12:46	Deutsche Bank ([DB Trader]) on [broker]
10:12:47	RBC ([RBC Trader 1]) you goon
10:12:52 10:12:58 10:13:21	Deutsche Bank ([DB Trader]) its wrong i want to have it on in 1yard no balance shete issue until end of july
10:14:58 10:15:01	RBC ([RBC Trader 1]) hahahahahah get out of my way
10:15:05	Deutsche Bank ([DB Trader]) end of june
10:15:06	RBC ([RBC Trader 1]) get off my lawn
10:15:10	Deutsche Bank ([DB Trader]) lets not fight
10:15:16 10:15:20	RBC ([RBC Trader 1]) hahahahah i'm playing
10:15:34	Deutsche Bank ([DB Trader]) we'll ust build the brick wall at 43
10:15:41	RBC ([RBC Trader 1]) yes agreed
10:15:46	Deutsche Bank ([DB Trader]) will be below 38 at auction time
10:15:46 10:15:47 10:15:49	RBC ([RBC Trader 1]) i have 100 more to do for now but at 43

Timestamp (UTC)	Party (Key Individual) <i>Extract</i>
10:15:55 10:38:27 10:38:36 10:42:57	<i>got a client int too</i> <i>[expletive] sake</i> <i>3 enquiries now</i> <i>26.5 got lifted hahha</i>
10:45:27 12:14:37	Deutsche Bank ([DB Trader]) <i>i'm not chasing anything</i> <i>you are killing me at 42.1</i>
12:15:36 12:15:38 12:15:40 12:15:43	RBC ([RBC Trader 1]) <i>that was a wrong price mate</i> <i>sorry</i> <i>42.9</i> <i>got 3 hfs</i>
12:15:44	Deutsche Bank ([DB Trader]) <i>ok</i>

Disclosure of current mid-prices for two gilt switches – 08:12:40 to 08:24:49

- B.62 At 08:12:40 and 08:12:54, RBC ([RBC Trader 1]) asked Deutsche Bank ([DB Trader]) for his pricing information for the gilt switch consisting of 4.5% 2013 gilts ('4Hs') and 2.25% 2014 gilts ('2Qs') ('*where do you have 13s/14s' 4Hs vs 2Qs*' at 08:12:40 and 08:12:54).¹⁰³ In response, at 08:12:59, Deutsche Bank ([DB Trader]) disclosed his **current mid-price** for that gilt switch ('**43.8**'),¹⁰⁴ following which RBC ([RBC Trader 1]) thanked him ('*thanks*' at 08:13:04).
- B.63 Having already received Deutsche Bank ([DB Trader])'s mid-price for one gilt switch, shortly afterwards, RBC ([RBC Trader 1]) asked Deutsche Bank ([DB Trader]) for his mid-price for another gilt switch, this time consisting of 2013 and 2020 gilts ('*and 13s 20s where*' at 08:13:08).¹⁰⁵ RBC ([RBC Trader 1]) then stated a price '**219.2**' (08:13:11). The CMA infers that RBC ([RBC Trader 1]) was disclosing that his **current mid-price** for that gilt switch was '**219.2**'. That inference is consistent with [DB Trader] (Deutsche Bank)'s interpretation provided in interview, who said that although RBC ([RBC Trader 1]) may have been referring to a '*market middle*', he interpreted it as RBC ([RBC Trader 1])'s '*middle*'.¹⁰⁶
- B.64 Deutsche Bank ([DB Trader]) responded '**yes**' (08:24:49) to RBC ([RBC Trader 1])'s question, by which the CMA infers Deutsche Bank ([DB Trader]) was confirming that '**219.2**' was his **current mid-price** ('**219.2**').¹⁰⁷

Chat extract table – 08:12:40 to 08:24:49

Timestamp (GMT)	Party (Key Individual) Extract
08:12:40 08:12:54	RBC ([RBC Trader 1]) <i>where do you have 13s/14s 4Hs vs 2Qs</i>
08:12:59	Deutsche Bank ([DB Trader]) 43.8
	RBC ([RBC Trader 1])

¹⁰² A-URN-007642. RBC also produced a chat on this date between Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 1]), A-URN-003513.

¹⁰³ [DB Trader] (Deutsche Bank) confirmed in interview that this timestamp referred to a gilt switch including 2013 and 2014 gilts ('13s 14s') (B-URN-000502069, page 193).

¹⁰⁴ [DB Trader] (Deutsche Bank) said in interview that he was referring to Deutsche Bank's '*internal mid*' for the gilt switch (B-URN-000502069, page 193).

¹⁰⁵ [DB Trader] (Deutsche Bank) said in interview that this timestamp referred to the '*gilt yield spread between 13s and 20s*' (B-URN-000502069, page 193).

¹⁰⁶ [DB Trader] (Deutsche Bank) said in interview '*I would read that as his [ie RBC ([RBC Trader 1])'s middle. I mean, it may have been his middle, the market middle, you know*' and '*Erm, but yeah, I think that I read that as his middle*' (B-URN-000502069, page 194).

¹⁰⁷ [DB Trader] (Deutsche Bank) confirmed in interview that his '*middle was also [...] 219.2*' (B-URN-000502069, page 194).

Timestamp (GMT)	Party (Key Individual) <i>Extract</i>
08:13:04 08:13:08 08:13:11	<i>thanks</i> <i>and 13s 20s where</i> 219.2
08:24:49	Deutsche Bank ([DB Trader]) yes

Disclosure of current mid-prices for a gilt switch consisting of 5% 2014 and 2.75% 2015 gilts – 15:22:08 to 15:22:36

- B.65 At 15:22:08 to 15:22:12, RBC ([RBC Trader 1]) asked Deutsche Bank ([DB Trader]) for his mid-price for that gilt switch, ie the gilt switch consisting of the 5% 2014 gilt and the 2.75% 2015 gilt (*'where do you have 5 14 2t 1' '5' '10bp?'*).¹⁰⁹
- B.66 RBC ([RBC Trader 1]) then said '20.3' which the CMA infers to have been his **current mid-price** for that gilt switch (**'20.3'** at 15:22:27). Deutsche Bank ([DB Trader]) then disclosed his **current mid-price** for the same gilt switch (**'5 14 vs 2t15' '21.2'** at 15:22:28 and 15:22:36). The CMA's interpretation is consistent with [DB Trader] (Deutsche Bank)'s evidence in interview, in which he said he and RBC ([RBC Trader 1]) were referring to their *'middle[s]'* from their respective *'pricer[s]'*.¹¹⁰

Chat extract table – 15:22:08 to 15:22:36

Timestamp (UTC)	Party (Key Individual) <i>Extract</i>
15:22:08 15:22:09 15:22:12	RBC ([RBC Trader 1]) <i>where do you have 5 14 2t 1</i> <i>5</i> <i>10bp?</i>
15:22:21	Deutsche Bank ([DB Trader]) <i>haha</i>
15:22:27	RBC ([RBC Trader 1]) <i>hahaah 20.3</i>
15:22:28 15:22:36	Deutsche Bank ([DB Trader]) <i>5 14 vs 2t15</i> 21.2

¹⁰⁸ A-URN-000155. RBC also produced a chat on this date between Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 1]) A-URN-003568.

¹⁰⁹ [DB Trader] (Deutsche Bank) said in interview that RBC ([RBC Trader 1]) was *'just asking where do I have yields between-- between those two bonds'* (B-URN-000502070, page 191).

¹¹⁰ [DB Trader] (Deutsche Bank) said in interview that RBC ([RBC Trader 1]) *'gives his middle as 20—"20.3", whereas I say my middle is "21.2". That would be from my pricer, his from his pricer'* (B-URN-000502070, page 191).

Disclosure of current mid-prices for a gilt switch that included 5% 2025 gilt – 14:54:52 to 14:56:43

- B.67 In the context of various exchanges relating to Deutsche Bank ([DB Trader])'s comments on current trading activity via brokers, RBC ([RBC Trader 1]) disclosed to Deutsche Bank ([DB Trader]) his **current mid-price** ('51.7') for a gilt switch which included 5% 2025 gilts ('**51.7**' *'mid'* at 14:56:33 and 14:56:34). Deutsche Bank ([DB Trader]) then disclosed his **current mid-price** ('51.65') for the same gilt switch ('**51.65 here**' at 14:56:40).
- B.68 The CMA infers that the Parties were referring in these extracts related to a gilt switch that included 5% 2025 gilts because:
- (a) Deutsche Bank ([DB Trader]) referred to '25s' at 14:55:22 immediately before these disclosures;
 - (b) the 5% 2025 gilt was the only gilt maturing in 2025 in issue on this date;¹¹² and
 - (c) [DB Trader] (Deutsche Bank) said in interview that the prices at 14:56:33 and 14:56:40 were their respective *'mid[s]'* for a gilt switch that included '25s'.¹¹³

Chat extract table – 14:54:52 to 14:56:43

Timestamp (UTC)	Party (Key Individual) <i>Extract</i>
14:54:52 14:55:03	Deutsche Bank ([DB Trader]) <i>got hit in 1k gilts at 90</i>
14:55:12	RBC ([RBC Trader 1]) <i>yummy</i>
14:55:14 14:55:22	Deutsche Bank ([DB Trader]) <i>equivlane 25s too</i>
14:55:50	RBC ([RBC Trader 1]) <i>they're bid</i>
14:55:53 14:55:58 14:56:02 14:56:03 14:56:10	Deutsche Bank ([DB Trader]) <i>i know but no one lifting me at 51 hahah i'm short anywyas</i>

¹¹¹ A-URN-000241. RBC also produced a chat on this date between Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 1]), A-URN-003642.

¹¹² See B-URN-000500741, DMO, Gilt Market, 'Gilts in issue on 31 March 2011'.

¹¹³ Specifically, '25s against the ten-year benchmark' (B-URN-000502070, pages 208 and 209).

Timestamp (UTC)	Party (Key Individual) <i>Extract</i>
14:56:16	RBC ([RBC Trader 1]) <i>where</i>
14:56:20 14:56:28	Deutsche Bank ([DB Trader]) <i>[broker]</i> <i>i'm not the best offer</i>
14:56:33 14:56:34	RBC ([RBC Trader 1]) 51.7 mid
14:56:34 14:56:40	Deutsche Bank ([DB Trader]) <i>its not the best offer</i> 51.65 here
14:56:43	RBC ([RBC Trader 1]) <i>che be</i>

Disclosure of current mid-prices for a gilt switch – 14:28:37 to 14:48:31

B.69 In the context of Deutsche Bank ([DB Trader]) commenting on the prices available via brokers for the gilt switch consisting of 2.75% 2015 and 4% 2016 gilts,¹¹⁵ at 14:30:56,¹¹⁶ RBC ([RBC Trader 1]) disclosed to Deutsche Bank ([DB Trader]) his **current mid-price** ('47') for that gilt switch, stating '*i have 47 miod [mid]*'. At 14:30:59, Deutsche Bank ([DB Trader]) then disclosed his **current mid-price** ('46.75') for the same gilt switch, saying '*i has [have] 46.75*'. [DB Trader] (Deutsche Bank) confirmed in interview that he and RBC ([RBC Trader 1]) were referring to their respective '*internal mids*'.¹¹⁷

Chat extract table – 14:28:37 to 14:48:31

Timestamp (GMT)	Party (Key Individual) <i>Extract</i>
14:28:37	Deutsche Bank ([DB Trader]) <i>wow someone made those 2t15 vs 4 16 ow</i>
14:30:08	RBC ([RBC Trader 1]) <i>?</i>
14:30:19	Deutsche Bank ([DB Trader]) <i>low</i>
14:30:26	RBC ([RBC Trader 1]) <i>where</i>
14:30:30	Deutsche Bank ([DB Trader]) <i>[broker]</i>
14:30:40 14:30:43 14:30:43 14:30:47 14:30:48	RBC ([RBC Trader 1]) <i>?</i> <i>what level</i> <i>geez</i> <i>speak english</i> <i>to me</i>
14:30:50	Deutsche Bank ([DB Trader]) <i>46.5/46.25</i>
14:30:50 14:30:56	RBC ([RBC Trader 1]) <i>I'm [✂]</i> <i>i have 47 miod</i>
14:30:59	Deutsche Bank ([DB Trader]) <i>i has 46.75</i>
14:31:01	RBC ([RBC Trader 1]) <i>tell them to [expletive] off</i>

¹¹⁴ A-URN-007750. RBC also produced a chat on this date between Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 1]), A-URN-004012.

¹¹⁵ [DB Trader] (Deutsche Bank) confirmed in interview that in this chat the Parties were referring to '*a yield switch between two gilts*', namely '*2t15 and 4 per cent 16s*' (B-URN-000502070, page 213).

¹¹⁶ Timestamps from this chat are recorded in GMT, which was 1 hour behind UK time on that date (BST). Therefore, 14:10:48 should be read as 15:10:48.

¹¹⁷ B-URN-000502070, page 212.

Timestamp (GMT)	Party (Key Individual) <i>Extract</i>
14:48:31	Deutsche Bank ([DB Trader]) <i>bought some 16s then</i>

Disclosure of current 'fair value' (mid-price) for a gilt switch – 14:26:36 to 14:33:52

- B.70 At 14:26:36 to 14:33:52,¹¹⁹ Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 1]) shared views on the mid-price of a gilt switch consisting of 2016 gilts:¹²⁰
- (a) At 14:26:36, Deutsche Bank ([DB Trader]) asked RBC ([RBC Trader 1]) if he agreed that the **current mid-price** or '*fair value*' of that gilt switch was a price of '20' basis points ('*fair value in 16s vs wi around 20bps?*').
 - (b) In response, at 14:33:52, RBC ([RBC Trader 1]) said that he agreed with Deutsche Bank ([DB Trader])'s view ('*yh...*') and that he expected the gilt switch to trade at a price range of '10-14' basis points.¹²¹

Chat extract table – 14:26:36 to 14:33:52

Timestamp (GMT)	Party (Key Individual) <i>Extract</i>
14:26:36	Deutsche Bank ([DB Trader]) <i>fair value in 16s vs wi around 20bps?</i>
14:33:52	RBC ([RBC Trader 1]) <i>yh [...]</i>

¹¹⁸ A-URN-007758. RBC also produced a chat on this date between Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 1]), A-URN-004157.

¹¹⁹ Timestamps from this chat are recorded in GMT, which was 1 hour behind UK time on that date (BST). Therefore, 14:26:36 should be read as 15:26:36.

¹²⁰ Specifically, a gilt switch consisting of the 4% 2016 gilt and the soon-to-be issued 2% 2016 gilt. [DB Trader] (Deutsche Bank) confirmed in interview that he was referring to 'a switch trade between 16s and the new 16s that will become available in a week's time post the auction' (B-URN-000502068, page 84). The 2% 2016 gilt was due to be auctioned on 2 November 2010, a week after this chat (B-URN-000500740, DMO, 'Gilt Market Issuance calendar 2010-2011'). The only other gilt in issue on this date that matured in 2016 was the 4% 2016 gilt (B-URN-000500741, DMO, Gilt Market, 'Gilts in issue on 31 March 2011').

¹²¹ [DB Trader] (Deutsche Bank) said in interview that he thought RBC ([RBC Trader 1]) was referring to 'where he thinks, um, that' gilt switch 'will trade [...] that more just as the expectation that it won't get to fair value.' (B-URN-000502068, page 86).

Disclosure of future trading prices for 2% 2016 gilts – 09:30:54 to 09:31:37

- B.71 At 09:27:33, Deutsche Bank ([DB Trader]) disclosed that he was considering trading 2% 2016 gilts (as part of a gilt switch) at a point when that gilt switch was at the price of '10bps', ie 10 basis points ('*can fancy 2 16 at 10bps now*').¹²³
- B.72 At 09:31:07, RBC ([RBC Trader 1]) disclosed his **future trading price** for the same gilts, by stating that he intended to trade 2% 2016 gilts again in the event that it reached a price of '9.25' ('*will go again at 9.25*'). [DB Trader] (Deutsche Bank) said in interview that he interpreted this disclosure to mean that RBC ([RBC Trader 1]) planned to sell the gilts at a price of '9.25', as part of a gilt switch.¹²⁴
- B.73 Then, following RBC ([RBC Trader 1])'s disclosure, Deutsche Bank ([DB Trader]) disclosed information about his **future trading price** in relation to the same gilts, by saying that he would trade those gilts again either in the event that the related gilt switch reached a price of '9.5' or after an ongoing gilt auction ('*i'm waiting from 9.5 on*' '*or until post auction*'). [DB Trader] (Deutsche Bank) said in interview that he was referring to his intention to wait until the price reduced before he sold, or that he would sell after that day's gilt auction,¹²⁵ which was due to close approximately an hour later. The CMA infers from Deutsche Bank ([DB Trader]) saying that he was waiting for '9.5 on' (emphasis added) that, in this timestamp, Deutsche Bank ([DB Trader]) was disclosing that he intended to trade at a price of '9.5' and continue to trade as the price fell below '9.5'. Consistent with that inference, [DB Trader] (Deutsche Bank) also said in interview that the reference to 'on' meant he intended to continue to trade at basis point intervals.¹²⁶

Chat extract table – 09:27:33 to 09:31:37

Timestamp (GMT)	Party (Key Individual) <i>Extract</i>
09:27:33	Deutsche Bank ([DB Trader]) <i>can fancy 2 16 at 10bps now</i>

¹²² A-URN-007789. RBC also produced a chat on this date between Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 1]), A-URN-004402.

¹²³ [DB Trader] (Deutsche Bank) said in interview that he thought this comment related to a gilt switch including 2016 gilts and was made in the context of him observing a trade via brokers ('*broker trade*') between the 2% 2016 gilt and another gilt (B-URN-000502069, pages 197 and 198).

¹²⁴ [DB Trader] (Deutsche Bank) said in interview '*I think -- yeah, I think the same -- I think that refers back to the same switch at the top, which is where -- where he will, erm, sell the 2 16 again at 9 and a quarter.*' (B-URN-000502069, page 199).

¹²⁵ [DB Trader] (Deutsche Bank) said interview, '*I say, "I'm waiting from 9.5 on". So I'm waiting for them to go lower to sell, or post auction, so I think this might have been an auction day.*' (B-URN-000502069, page 197).

¹²⁶ [DB Trader] (Deutsche Bank) interpreted that timestamp as follows: '*As in probably 9.5 would be the first level I'd do it? So I might scale, I might do some at 9.5, I might do some more at 9, might do some more at 8 and a half. Erm, so just -- it, it -- the "on" to me means that maybe that would be the first level I would do it for. Maybe not my whole, whole size.*' (B-URN-000502069, pages 199 and 200).

Timestamp (GMT)	Party (Key Individual) <i>Extract</i>
09:30:54 09:30:59 09:31:02 09:31:07	RBC ([RBC Trader 1]) <i>yh bot 50 at 10</i> <i>short on back book on fly</i> <i>10s vs wings</i> <i>will go again at 9.25</i>
09:31:19 09:31:24	Deutsche Bank ([DB Trader]) <i>i'm waiting from 9.5 on</i> <i>or until post auction</i>
09:31:27 09:31:30 09:31:34 09:31:37	RBC ([RBC Trader 1]) <i>yh</i> <i>makes sense</i> <i>may get to 8.75</i> <i>but no tighter</i>

2011

DB-RBC, A-URN-007815,¹²⁷ 17 January 2011

Disclosure of current mid-price – 16:15:12 to 16:19:18

- B.74 Following a discussion in relation to recent trading activity via brokers for 2% 2016 gilts ('16s' at 16:15:12 and '2 16' at 16:18:09),¹²⁸ RBC ([RBC Trader 1]) disclosed to Deutsche Bank ([DB Trader]) his **current mid-price** for those same gilts ('*i have 96 middle*', 16:19:04).¹²⁹

Chat extract table – 16:15:12 to 16:19:18

Timestamp (GMT)	Party (Key Individual) <i>Extract</i>
16:15:12	Deutsche Bank ([DB Trader]) <i>sold 50m 16s</i>
16:17:49 16:17:51 16:17:52 16:17:53	RBC ([RBC Trader 1]) [...] [...] [...] [...]
16:17:55	Deutsche Bank ([DB Trader]) <i>to street</i>
16:18:00	RBC ([RBC Trader 1]) <i>what level</i>
16:18:07 16:18:09	Deutsche Bank ([DB Trader]) 96.99 2 16
16:19:04 16:19:06	RBC ([RBC Trader 1]) <i>i have 96 middle</i> <i>what screen</i>
16:19:18	Deutsche Bank ([DB Trader]) <i>[broker]</i>

¹²⁷ A-URN-007815. RBC also produced a chat on this date between Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 1]), A-URN-004532.

¹²⁸ [DB Trader] (Deutsche Bank) said in interview that he interpreted this timestamp as him disclosing a recent trade he had made via brokers ('*Yeah, it just sounds like I've done a broker trade in a broker, which I have relayed to [RBC Trader 1], ...*' (B-URN-000502070, page 218).

¹²⁹ [DB Trader] (Deutsche Bank) confirmed in interview that he interpreted the Parties as '*talking about that same gilt*' (B-URN-000502070, page 219).

Disclosure of trading price parameters for a gilt fly – 14:15:14 to 14:33:07

- B.75 At 14:15:14,¹³¹ Deutsche Bank ([DB Trader]) said that he had received a request from a client (*'hf'*) for a price quote to trade a gilt fly consisting of 2021, 2034 and 2055 gilts (*'hf asking 21/34/55s fly'*).¹³² At 14:15:19, RBC ([RBC Trader 1]) disclosed that RBC had received the same request (*'same'*), and at 14:15:21 to 14:15:25, he indicated that his colleague was responding to the enquiry (*'right now'* *'[a RBC trader colleague] pricing'*).¹³³
- B.76 At 14:15:32 and 14:15:44, in the context of RBC determining its pricing to that client, Deutsche Bank ([DB Trader]) disclosed information on his **trading price parameters** for that gilt fly. Deutsche Bank ([DB Trader]) disclosed that he was offering to trade the gilt fly with that client at a spread of 1 basis point¹³⁴ (*'1bps wide'*) and he would not make that spread any smaller, ie *'tighter'*, than 1 basis point (*'yeah i made it 1bps wide' 'not making them any tighter than that...'* at 14:15:32 and 14:15:44).
- B.77 The CMA infers that, in disclosing that he would not make the spread *'tighter'*, he was disclosing information about his trading price parameters he was likely to charge a specific client in circumstances where that client was continuing to request quotes from dealers, including RBC. In particular, the CMA infers that:
- (a) In light of Deutsche Bank ([DB Trader])'s disclosure, if that client were to try to trade the same gilt fly again shortly afterwards, Deutsche Bank ([DB Trader]) was indicating he was likely to offer to trade at a spread of no smaller than 1 basis point.
 - (b) The client (*'hf'*) did in fact try to trade again because, in the minutes after Deutsche Bank ([DB Trader])'s disclosure of his trading price parameters, at 14:32:52 and 14:33:07, Deutsche Bank ([DB Trader]) disclosed that the client

¹³⁰ A-URN-007936. RBC also produced a chat on this date between Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 1]), A-URN-005236.

¹³¹ Timestamps from this chat are recorded in GMT, which was 1 hour behind UK time on that date (BST). Therefore, 14:15:14 should be read as 15:15:14.

¹³² [DB Trader] (Deutsche Bank) said in interview that *'It sounds like there's a hedge fund asking me a fl -- a gilt fly, which is just a fly -- it's where, you know, they're asking -- they're either buying or selling the belly in two times the amount as the wings. Erm, and through a hedge fund they'll-- and [RBC Trader 1] says that they're getting asked the same thing -- the same thing'* (B-URN-000502070, page 258).

¹³³ [DB Trader] (Deutsche Bank) said in interview that *'[a RBC trader colleague]'* was *'[a]nother trader at RBC'* (B-URN-000502070, page 260).

¹³⁴ [DB Trader] (Deutsche Bank) said in interview that he was referring specifically to *'[t]he fly'* ie the gilt fly (B-URN-000502070, page 261).

had traded the gilt fly with him again (*'hf lifts me in 34s' 'yes before thr remi'* at 14:32:52 and 14:33:07).¹³⁵

Chat extract table – 14:15:14 to 14:15:44

Timestamp (GMT)	Party (Key Individual) <i>Extract</i>
14:15:14	Deutsche Bank ([DB Trader]) <i>hf asking 21/34/55s fly</i>
14:15:19 14:15:21 14:15:25	RBC ([RBC Trader 1]) <i>same</i> <i>right now</i> <i>[a RBC trader colleague] pricing</i>
14:15:32 14:15:44	Deutsche Bank ([DB Trader]) <i>yeah i made it 1bps wide</i> <i>not making them any tighter than that [...]</i>

¹³⁵ Consistent with that inference, [DB Trader] (Deutsche Bank) said in interview that '*[t]he client traded with me twice. Erm, and, erm, because it makes sen -- reading further down, I say, I think, er, "he lifted me at 34s again".*' (B-URN-000502070, page 258).

2012

DR-RBC, A-URN-008131,¹³⁶ 12 January 2012

Disclosure of current mid-prices for gilt asset swaps – 11:14:54 and 11:15:28

- B.78 At 11:13:39, RBC ([RBC Trader 1]) asked Deutsche Bank ([DB Trader]) to *'talk to me'* about *'long spreads'* in the context of trading a gilt asset swap via brokers (11:13:39 and 11:13:41).
- B.79 At 11:14:54, RBC ([RBC Trader 1]) asked Deutsche Bank ([DB Trader]) whether he agreed with his assessment of the current mid-price for that gilt asset swap (*'13.5 mid here/?'*).¹³⁷
- B.80 In response to RBC ([RBC Trader 1])'s request, at 11:15:20 and 11:15:28, Deutsche Bank ([DB Trader]) disclosed his **current mid-prices** for two gilt asset swaps: Deutsche Bank ([DB Trader]) disclosed that his mid-prices were *'13'* and *'13.9'*, the first being for the same gilt asset swap that they had just discussed (*'30ry [30-year] spreads'*) and the other including the 2040 gilt (*'40s machthed [matched]'*) (*'i ahve 13 mid on 30ry spreads' 'but 40s machthed at 13.9'*).¹³⁸

Chat extract table – 11:13:39 to 11:15:28

Timestamp (GMT)	Party (Key Individual) <i>Extract</i>
11:13:39 11:13:41 11:13:46 11:13:47	RBC ([RBC Trader 1]) <i>long spreads</i> <i>talk to me</i> [...] [...]
11:13:56 11:14:07 11:14:18	Deutsche Bank ([DB Trader]) [...] [...] <i>is it gonna eb crowded though?</i>
11:14:48 11:14:54	RBC ([RBC Trader 1]) <i>yes but may not let everyone in</i> <i>13.5 mid here/?</i>
11:15:20 11:15:28	Deutsche Bank ([DB Trader]) <i>i ahve 13 mid on 30ry spreads</i> <i>but 40s machthed at 13.9</i>

¹³⁶ A-URN-008131. RBC also produced a chat on this date between Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 1]), A-URN-006493.

¹³⁷ [DB Trader] (Deutsche Bank) said in interview that he interpreted RBC ([RBC Trader 1]) to be disclosing *'his mid'* for a gilt asset swap, and that gilt asset swap would be *'one of the following two ones'* ie either *'30ry [30 year] spreads'* or *'40s machthed [matched]'* referred to at 11:15:20 and 11:15:28 (B-URN-000502071, page 52).

¹³⁸ [DB Trader] (Deutsche Bank) said in interview that *'he asked me, um, the mid, um, to which I give him a mid, my mid in, in 30 year spreads which would be on an [broker] screen and my mid in, um, 40s machthed which, maybe was the 30 year benchmark but to the actual machthed maturity of the bond.'* (B-URN-000502071, pages 51 and 52).

Disclosure of current mid-prices – 13:26:43 to 13:36:35

- B.81 At 13:36:14, RBC ([RBC Trader 1]) disclosed his **current mid-price** for a gilt switch via brokers including the 3.75% 2019 gilt (*'I have them at 53.4'*). At 13:36:35, Deutsche Bank ([DB Trader]) disclosed that he had the same **current mid-price** (*'yeah so do we'*). [DB Trader] (Deutsche Bank) confirmed in interview that he interpreted RBC ([RBC Trader 1]) to be disclosing his *'mid'*¹⁴⁰ and that Deutsche Bank had the same *'mid'*.¹⁴¹
- B.82 The CMA infers that Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 1]) were referring to their mid-prices in relation to the gilt switch including the 3.75% 2019 gilt in particular, because in the preceding minutes Deutsche Bank ([DB Trader]) disclosed that he had bought the 3.75% 2019 gilt via brokers¹⁴² (*'bought some 3t19'* at 13:26:43) and the price of that purchase (*'level?' '53'* at 13:31:06 to 13:33:59).¹⁴³ [DB Trader] (Deutsche Bank) said in interview that those disclosures related specifically to the gilt switch consisting of the 3.75% 2019 gilt and a gilt maturing in ten years.¹⁴⁴

Chat extract table – 13:26:43 to 13:36:35

Timestamp (GMT)	Party (Key Individual) <i>Extract</i>
13:26:43	Deutsche Bank ([DB Trader]) <i>bought some 3t19</i>
13:31:06	RBC ([RBC Trader 1]) <i>level?</i>
13:33:59	Deutsche Bank ([DB Trader]) <i>53</i>
13:36:09 13:36:14 13:36:19	RBC ([RBC Trader 1]) <i>good</i> <i>i have them at 53.4</i> <i>haha</i>
13:36:35	Deutsche Bank ([DB Trader]) <i>yeah so do we</i>

¹³⁹ A-URN-008188. RBC also produced a chat on this date between Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 1]), A-URN-006594.

¹⁴⁰ B-URN-000502070, page 320.

¹⁴¹ [DB Trader] (Deutsche Bank) said in interview *'I've said my mid -- I say in the last line, I said, "So do we". Around the level but I put, "So do we", so it's making me think that it's, kind of, agreed in the middle.'* (B-URN-000502070, page 321).

¹⁴² [DB Trader] (Deutsche Bank) said in interview that the trade was *'in the broker market'* (B-URN-000502070, page 320).

¹⁴³ [DB Trader] (Deutsche Bank) said in interview that this price disclosure was the price at which he traded that gilt (*'53 is where I've traded.'*, B-URN-000502070, page 321).

¹⁴⁴ [DB Trader] (Deutsche Bank) said in interview that the product was *'A switch. Switch against the 10 year benchmark, which would've been 21s or 22s.'* (B-URN-000502070, page 321).

Coordination of trading activity in relation to gilt basis – 11:43:47 to 11:47:48

- B.83 At 11:42:57 and 11:43:01, RBC ([RBC Trader 1]) commented on the price movement of gilt basis, saying that he intended to trade (ie 'sell') 'a bit' of gilt basis ('basis has done very well' 'going to sell a bit').
- B.84 At 11:43:20 and 11:43:38, Deutsche Bank ([DB Trader]) disclosed that he held a 'long' position in relation to gilt basis and the size ('50m quid') of that 'long' position ('i'm, long that' 'about 50m quid here').
- B.85 At 11:43:28, RBC ([RBC Trader 1]) then disclosed that he also had a long trading position in relation to gilt basis and the size ('25 quid') of that 'long' trading position ('i'm long 25 quid'). RBC ([RBC Trader 1]) then disclosed that via a broker ('on [broker]') he was offering to trade gilt basis at prices of '176' and '174' ('just flattening off' 'at 176 offer' '[broker]' '174 bid on [broker]' at 11:43:33, 11:43:37 and 11:43:43).
- B.86 Following those statements in relation to gilt basis, Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 1]) **coordinated their trading activity** in relation to gilt basis:
- (a) RBC ([RBC Trader 1]) told Deutsche Bank ([DB Trader]) that he would refrain from trading gilt basis via brokers to allow Deutsche Bank ([DB Trader]) to 'go first' and asked that Deutsche Bank ([DB Trader]) inform him once Deutsche Bank ([DB Trader]) had traded gilt basis, so that RBC ([RBC Trader 1]) could then trade it ('**you go first if you have it**' at 11:43:47).
 - (b) At 11:44:05 to 11:44:12, RBC ([RBC Trader 1]) repeated his current trading position and trading activity in relation to gilt basis and repeated his offer to refrain from trading: he said that the size of his long trading position was '25' and that he would trade that position ('hit down'), but again offered to refrain from trading at the same time as Deutsche Bank ([DB Trader]) ('I have 25' '**will hit down but after you if you like**' at 11:44:05 and 11:44:12).¹⁴⁶ RBC ([RBC Trader 1]) then disclosed that the reason for his offer to refrain from trading, by reference to his current trading position in 2022 gilts being one leg of a gilt basis trade ('I have 20mm 22s so not fussed' at 11:44:23).

¹⁴⁵ A-URN-000175. RBC also produced a chat on this date between Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 1]), A-URN-006691.

¹⁴⁶ [DB Trader] (Deutsche Bank)'s comments in interview are consistent with the CMA's interpretation. [DB Trader] (Deutsche Bank) said in interview that this was an offer by RBC ([RBC Trader 1]) to allow Deutsche Bank ([DB Trader]) to trade before him: 'He goes, "Will hit it down but after you, if you like", as in if you're going to hit the bid, I'll sell some but you do it first. And, so, he's sort of saying, you know, if you want to hit the bid you go first.' (B-URN-000502071, page 81).

- (c) At 11:45:02, Deutsche Bank ([DB Trader]) disclosed that he was intending to trade gilt basis in the event that the gilt basis reached a price of '175' and the gilt future reached a price of '51' (*'doing 175 vs 51' 'if it comes there'* at 11:45:02 and 11:45:08). In reaction to this disclosure, RBC ([RBC Trader 1]) reiterated his offer to allow Deutsche Bank ([DB Trader]) to trade first and that he would follow (*'yes let me know I'll go after'* at 11:45:16) to which Deutsche Bank ([DB Trader]) confirmed that he would do so (*'will do'* at 11:45:25). RBC ([RBC Trader 1]) reiterated his offer to Deutsche Bank ([DB Trader]) twice more stating *'when you're done let me know'* (at 11:46:57) and *'will hi down after you whne they come back'* (at 11:47:48).

B.87 [DB Trader] (Deutsche Bank)'s evidence in interview is consistent with the CMA's interpretation that the Parties were coordinating their trading activity: [DB Trader] (Deutsche Bank) said in interview that it *'sounds like'* RBC ([RBC Trader 1]) was *'agreeing'* to allow him to trade gilt basis before RBC ([RBC Trader 1]) did.¹⁴⁷

Chat extract table – 11:42:57 to 11:47:48

Timestamp (UTC)	Party (Key Individual) Extract
11:42:57 11:43:01	RBC ([RBC Trader 1]) <i>basis has done very well</i> <i>going to sell a bit</i>
11:43:20	Deutsche Bank ([DB Trader]) <i>i'm, long that</i>
11:43:28	RBC ([RBC Trader 1]) <i>I'm long 25 quid</i>
11:43:31	Deutsche Bank ([DB Trader]) <i>not out of cojopice</i>
11:43:33 11:43:37	RBC ([RBC Trader 1]) <i>just flattening off</i> <i>at 176 offer</i>
11:43:38	Deutsche Bank ([DB Trader]) <i>about 50m quid here</i>
11:43:43 11:43:47 11:43:57	RBC ([RBC Trader 1]) <i>174 bid on [broker]</i> <i>you go firstif you have it</i> <i>its just done better than 25s on the rally today</i>
11:44:00	Deutsche Bank ([DB Trader]) <i>i'll do some if it trades too</i>
11:44:03 11:44:05 11:44:12 11:44:23	RBC ([RBC Trader 1]) <i>buyback yudda</i> <i>I have 25</i> <i>will hit down but after you if you like</i> <i>I have 20mm 22s so not fussed</i>

¹⁴⁷ [DB Trader] (Deutsche Bank) said in interview *'it sounds like [RBC Trader 1]'s sort of saying, you know, "you can", it looks like he's agreeing that you can go first if you want to trade it'* (B-URN-000502071, page 78).

Timestamp (UTC)	Party (Key Individual) Extract
11:44:30 11:44:33	Deutsche Bank ([DB Trader]) <i>they havent showed me any better than 174 bid 172 bid</i>
11:44:35	RBC ([RBC Trader 1]) <i>yh 174 176</i>
11:44:42	Deutsche Bank ([DB Trader]) <i>oh they have now</i>
11:44:44	RBC ([RBC Trader 1]) <i>[broker] said 174</i>
11:44:50 11:44:53	Deutsche Bank ([DB Trader]) <i>just got it [expletive]</i>
11:44:54 11:44:56 11:44:58	RBC ([RBC Trader 1]) <i>cool haha hahahhahha</i>
11:45:02 11:45:08 11:45:12 11:45:15	Deutsche Bank ([DB Trader]) <i>doing 175 vs 51 if it coms there its expensive u r right</i>
11:45:16	RBC ([RBC Trader 1]) <i>yes let me know I'll go after</i>
11:45:25 11:46:41	Deutsche Bank ([DB Trader]) <i>will do did 174.5 in smalls... was where i had mid but [expletive] know in this stuff anymore</i>
11:46:48 11:46:53 11:46:57 11:47:01 11:47:09	RBC ([RBC Trader 1]) <i>agreed thye will come back into buyback when you're done let me know I'm really scrappy this is like Christmas season</i>
11:47:14	Deutsche Bank ([DB Trader]) <i>i only have 50m to do so not fussed if you want to get in</i>
11:47:14 11:47:16 11:47:27 11:47:40 11:47:48	RBC ([RBC Trader 1]) <i>what the [expletive] is everyone doing clients etc must pick up in April I'm 176 will hi down after you whne they come back</i>

Disclosure of current mid-price for a gilt fly – 08:44:35 to 08:46:00

- B.88 At 08:44:35,¹⁴⁹ Deutsche Bank ([DB Trader]) commented to RBC ([RBC Trader 2]) on the price via brokers of the gilt fly consisting of 2042, 2052 and 2060 gilts ('52s fly is stupid').¹⁵⁰
- B.89 Subsequently, at 08:46:00, Deutsche Bank ([DB Trader]) disclosed his **current mid-price** ('11.7') for the same gilt fly ('***i have a 11.7 middle***'). [DB Trader] (Deutsche Bank) said in interview that Deutsche Bank ([DB Trader]) was disclosing his 'middle' for that gilt fly ('*I've just given him my middle on the fly*').¹⁵¹

Chat extract table – 08:44:35 to 08:46:00

Timestamp (GMT)	Party (Key Individual) <i>Extract</i>
08:44:35 08:44:51	Deutsche Bank ([DB Trader]) <i>52s fly is stupid</i> <i>if people wanted to sell them why didnt they offer them y'day</i>
08:45:06 08:45:47	RBC ([RBC Trader 2]) <i>cos they are muppetts</i> <i>im picking 12 behind</i>
08:46:00	Deutsche Bank ([DB Trader]) <i>i have a 11.7 middle</i>

¹⁴⁸ A-URN-008268. RBC also produced a chat on this date between Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 2]), A-URN-002392.

¹⁴⁹ Timestamps from this chat are recorded in GMT, which was 1 hour behind UK time on that date (BST). Therefore, 08:44:35 should be read as 08:44:35.

¹⁵⁰ [DB Trader] (Deutsche Bank) said in interview that his comment referred to the price of the gilt fly consisting of 2042, 2052 and 2060 gilts ('*maybe there's a price in the broker market saying it's silly*' and '*[t]hat would've been the 42s 52s 60s gilt*', B-URN-000502069, page 217 and 218).

¹⁵¹ B-URN-000502069, page 218.

Summary

B.90 On 11 May 2012, Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 2]) engaged in the following **Trading Conduct** in the context of trading via brokers:

- (a) Over the course of the day, Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 2]) repeatedly disclosed their respective **current mid-prices** for the gilt fly consisting of 2042, 2052 and 2060 gilts (referred to as *'the fly'*).
- (a) Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 2]) also disclosed their respective **current mid-prices** for gilt switches related to *'the fly'* consisting of 2042 and 2049 gilts, 2042 and 2052 gilts and 2052 and 2060 gilts.

Disclosure of current mid-prices for *'the fly'* – 08:04:26 to 08:06:12¹⁵³

B.91 Following an earlier discussion about the gilt fly consisting of 2042, 2052 and 2060 gilts in the context of trading via brokers, the Parties each disclosed to the other information about their **current mid-prices** for *'the fly'*:

- (a) RBC ([RBC Trader 2]) said that he had not *'moved'* his **current mid-price** for the fly that day and that his current mid-price therefore was still *'12.9'* (*'i actually havent moved the fly today' 'just got all ultras worse' 'ok, i closed it at 12.9 and havent moved'* at 08:04:26 to 08:06:12).
- (b) Deutsche Bank ([DB Trader]) said that his **current mid-price** for *'the fly'* was *'13'* (*'but probably closed it at 12.7 y'day' 'got 13bps today'* at 08:05:57 to 08:06:10).

B.92 The CMA infers that Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 2]) were each referring to their respective mid-price specifically for the gilt fly consisting of 2042, 2052 and 2060 gilts, because:

- (a) The Parties used the term *'the fly'* throughout this Bloomberg chat to refer a specific gilt fly. In respect of later references to *'the fly'*, [DB Trader] (Deutsche Bank) and [RBC Trader 2] (RBC) each said in interview in respect of later timestamps that they were discussing that gilt fly in particular – see paragraphs B.93 to B.103 below.

¹⁵² A-URN-006829. Deutsche Bank also produced a chat on this date between Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 2]), A-URN-008279.

¹⁵³ Timestamps from this chat are recorded in UTC, which was 1 hour behind UK time on that date (BST). Therefore, 08:04:26 should be read as 09:04:26.

- (b) [RBC Trader 2] (RBC) said in interview that that gilt fly was at the time a recurring '*theme in the market*'¹⁵⁴ and separately that '*we're always talking about that fly*'.¹⁵⁵ [DB Trader] (Deutsche Bank) said in interview that the '52s fly' was '*talked about a lot*'.¹⁵⁶
- (c) [RBC Trader 2] (RBC) said in interview that the gilt fly under discussion consisted of gilts maturing in 2042, 2052 and 2060 ('*the 52s fly being 42s, 52s, 60s fly*').¹⁵⁷

Chat extract table – 08:04:26 to 08:06:12

Timestamp (UTC)	Party (Key Individual) <i>Extract</i>
08:04:26 08:04:30 08:05:08	RBC ([RBC Trader 2]) <i>i actually havent moved the fly today just got all ultras worse [...]</i>
08:05:45 08:05:57 08:06:10	Deutsche Bank ([DB Trader]) <i>i have the fly slightly worse but probably closed it at 12.7 y'day got 13bps today</i>
08:06:12	RBC ([RBC Trader 2]) <i>ok, i closed it at 12.9 and havent moved</i>

Disclosure of current mid-prices for 'the fly' – 14:35:49 to 14:37:55

- B.93 At 14:37:23, in the context of the Parties continuing to comment on the price of '*the fly*' in the context of trading via brokers, ie the gilt fly consisting of 2042, 2052 and 2060 gilts,¹⁵⁸ Deutsche Bank ([DB Trader]) disclosed his updated **current mid-price** ('*12.5 mid*') for '*the fly*' ('*i have a 12.5 mid*' at 14:37:23). In reaction, RBC ([RBC Trader 2]) disclosed that he had the '*same*' **current mid-price** and that he was adjusting ('*moving*') that current mid-price ('*same*' '*moving it now*' at 14:37:49 and 14:37:55).

Chat extract table – 14:35:49 to 14:37:55

Timestamp (UTC)	Party (Key Individual) <i>Extract</i>
14:35:49 14:35:57	RBC ([RBC Trader 2]) <i>the fly will be ok just not sure if it actually moves much</i>

¹⁵⁴ B-URN-000502076, page 49.

¹⁵⁵ B-URN-000502076, page 136.

¹⁵⁶ B-URN-000502068, page 162.

¹⁵⁷ B-URN-000502076, page 49.

¹⁵⁸ See for example 14:35:49: '*the fly will be ok*', and 14:37:03: '*fly still -12.75*'.

Timestamp (UTC)	Party (Key Individual) <i>Extract</i>
14:37:03	<i>fly still -12.75</i>
14:37:23 14:37:24	Deutsche Bank ([DB Trader]) <i>i have a 12.5 mid</i> <i>haha</i>
14:37:49 14:37:50 14:37:55	RBC ([RBC Trader 2]) <i>same</i> <i>haha#</i> <i>moving it now</i>

Disclosure of current mid-prices for ‘the fly’ – 15:08:49 to 15:09:06

- B.94 Approximately an hour later, the Parties continued to update each other on their respective mid-prices for ‘*the fly*’ in the context of trading via brokers, ie the gilt fly consisting of 2042, 2052 and 2060 gilts.
- B.95 At 15:08:49, Deutsche Bank ([DB Trader]) said to RBC ([RBC Trader 2]) ‘***i have the fly at like 12.1bps now***’. In reaction, RBC ([RBC Trader 2]) stated ‘***we have 12.45***’ (at 15:09:06). The CMA infers that the Parties were each referring to their respective **current mid-prices** (‘12.1bps’ and ‘12.45’) for ‘*the fly*’ and, for the reasons set out in paragraph B.92 above, ‘*the fly*’ referred again to the gilt fly consisting of 2042, 2052 and 2060 gilts.

Chat extract table – 15:08:49 to 15:09:06

Timestamp (UTC)	Party (Key Individual) <i>Extract</i>
15:08:49	Deutsche Bank ([DB Trader]) <i>i have the fly at like 12.1bps now</i>
15:08:55 15:09:06	RBC ([RBC Trader 2]) <i>that has saved me so mcuh money</i> <i>we have 12.45</i>

Disclosure of current mid-prices for gilt switches related to ‘the fly’ – 15:17:50 to 15:22:00

- B.96 Later that day, the Parties continued to disclose pricing information related to ‘*the fly*’, ie the gilt fly consisting of 2042, 2052 and 2060 gilts in the context of trading via brokers.
- B.97 At 15:17:50, Deutsche Bank ([DB Trader]) disclosed to RBC ([RBC Trader 2]) his **current mid-price** (‘12’) for ‘*the fly*’ (‘***got the fly at 12***’).¹⁵⁹ At 15:17:56 and

¹⁵⁹ [RBC Trader 2] (RBC) said in interview that he interpreted that timestamp as Deutsche Bank ([DB Trader]) having ‘*the fly at 12, which is the 52s fly being 42s, 52s, 60s fly*’ (B-URN-000502076, page 49).

15:17:58, Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 2]) each disclosed that he thought Deutsche Bank ([DB Trader])'s current mid-price (of '12') was wrong: RBC ([RBC Trader 2]) said '*haha*' and Deutsche Bank ([DB Trader]) said '*obviously wrong*'. [RBC Trader 2] said in interview that in laughing ('*haha*') he was '*saying to [Deutsche Bank ([DB Trader])], 'Yours is wrong'*'.¹⁶⁰

- B.98 After the Parties had each disclosed that they thought '12' was the '*wrong*' mid-price for '*the fly*', the Parties then discussed mid-prices for gilt switches related that gilt fly in order to assist in calculating the 'right' mid-price for '*the fly*'.
- B.99 At 15:20:46 and 15:20:49, RBC ([RBC Trader 2]) asked Deutsche Bank ([DB Trader]) for his mid-price for a gilt switch consisting of 2042 and 2049 gilts ('*where u have [...] 42s49s*').¹⁶¹ [DB Trader] (Deutsche Bank) said in interview that the gilt switch that RBC ([RBC Trader 2]) was asking about, ie the gilt switch consisting of 2042 and 2049 gilts, was related to the gilt fly consisting of 2042, 2052 and 2060 gilts.¹⁶² [DB Trader] (Deutsche Bank) also said in interview that he therefore thought the reason [RBC Trader 2] had asked for his mid-price for that particular gilt switch was '*because maybe he's trying to align his mid in the fly with the broker price*'.¹⁶³
- B.100 At 15:21:32, Deutsche Bank ([DB Trader]) disclosed his **current mid-price** ('**6.7**') for a gilt switch consisting of 2042 and 2049 gilts, and then at 15:21:35 he disclosed that that mid-price was '*probably wrong*'.¹⁶⁴
- B.101 At 15:21:39 to 15:22:00, RBC ([RBC Trader 2]) then disclosed to Deutsche Bank ([DB Trader]) his **current mid-prices** ('**6.85**'¹⁶⁵ '**9.75**' '**-2.75**') for three gilt switches consisting of, respectively, 2042 and 2049 gilts,¹⁶⁶ 2042 and 2052 gilts and, 2052 and 2060 gilts ('**have 6.85**' '**9.75 for 42/52**' '**and -2.75 for 52/60**'). Consistent with the CMA's interpretation, [RBC Trader 2] (RBC)'s evidence in interview was that

¹⁶⁰ [RBC Trader 2] (RBC) said in interview that '*I say, "Haha" because he knows that he needs to adjust his mid. He says, "Obviously wrong", and I say, "Haha", so we both know that he's wrong, and then I basically -- I guess I'm actually saying to him, "Yours is wrong"*' (B-URN-000502076, page 49).

¹⁶¹ [RBC Trader 2] (RBC) said in interview that he was '*probably*' referring to '*42s/49s*' (B-URN-000502076, page 44).

¹⁶² In interview, [DB Trader] (Deutsche Bank) described that gilt fly as '*52s against, erm, 42s and 60s.*' and that '*42s 49s makes up part of the fly because maybe 52s trade off 49s*' (B-URN-000502069, page 210).

Consistent with [DB Trader] (Deutsche Bank)'s evidence in interview, [RBC Trader 2] (RBC) also said in interview that '*42/49s*' was a '*component of the fly*' (B-URN-000502076, page 49).

¹⁶³ [DB Trader] (Deutsche Bank) said in interview '*so [ie RBC [RBC Trader 2]]'s asking me a middle, I think, whereby he's trying to reconcile, erm, the 52s fly that seems to have come up quite a lot of times. To reconcile how to mark it there versus what's trading in the broker market.*' (B-URN-000502069, page 209).

¹⁶⁴ [DB Trader] (Deutsche Bank) said in interview that in this extract he was disclosing his '*mid-price*' and that that mid-price was '*probably wrong*' (B-URN-000502069, pages 209 and 210).

[RBC Trader 2] (RBC) said in interview that [DB Trader] (Deutsche Bank) was disclosing '*where he's marking mid, but he knows he's wrong*' and that the '*mid*' was for the '*42/49s*' (B-URN-000502076, page 46).

¹⁶⁵ [RBC Trader 2] (RBC) confirmed in interview that this was the mid-price '*that [he has] in [his] pricer*' (B-URN-000502076, page 48).

¹⁶⁶ [DB Trader] (Deutsche Bank)'s evidence in interview is consistent with this interpretation: he said that [RBC Trader 2] (RBC) was disclosing '*his middles*' for '*42s 49s*' and that RBC ([RBC Trader 2]) was disclosing the '*42s 49s yield spread*' (B-URN-000502069, pages 209 and 210). [RBC Trader 2] (RBC) also said in interview that he was specifically referring to '*the mid-price*' for '*42/49s*' (B-URN-000502076, pages 48 and 49).

he *'guess[ed]'* the disclosure of '9.75' *'must be'* his mid-price from his pricer for the gilt switch consisting of 2042 and 2052 gilts.¹⁶⁷

- B.102 The CMA infers that RBC ([RBC Trader 2]) disclosed those three mid-prices in order to disclose how he had calculated his mid-price for *'the fly'*, and that such disclosures would have assisted Deutsche Bank ([DB Trader]) in recalculating his *'wrong'* mid-price for that gilt fly. That inference is consistent with the Key Individuals' comments in interview:
- (a) [DB Trader] (Deutsche Bank) said in interview that such disclosures would have allowed him to calculate (ie *'work out'*) RBC ([RBC Trader 2])'s *'mid for the fly'*, referring to RBC ([RBC Trader 2])'s mid-price for the gilt fly consisting of 2042, 2052 and 2060 gilts.¹⁶⁸
 - (b) [RBC Trader 2] (RBC) said in interview that *'it looks like I'm actually trying to help him out'*, because the gilt switches they were discussing were components of *'the fly'* (for which Deutsche Bank ([DB Trader]) had disclosed his current mid-price was *'obviously wrong'*) and that the mid-prices would have allowed Deutsche Bank ([DB Trader]) to work out that RBC ([RBC Trader 2]) *'think[s] the fly'* should be at a price of *'12.5'*.¹⁶⁹

Chat extract table – 15:17:50 to 15:22:00

Timestamp (UTC)	Party (Key Individual) <i>Extract</i>
15:17:50	Deutsche Bank ([DB Trader]) <i>got the fly at 12</i>
15:17:56	RBC ([RBC Trader 2]) <i>haha</i>
15:17:58	Deutsche Bank ([DB Trader]) <i>obviously wrong</i>
15:20:46 15:20:49	RBC ([RBC Trader 2]) <i>where u have 42s29s 42s49s</i>

¹⁶⁷ [RBC Trader 2] (RBC) confirmed in interview that the disclosed information he was *'guessing'* *'must be'* a reference to his *'mid from [his] pricer for a 42/52 gilt switch'* (B-URN-000502076, page 48).

¹⁶⁸ B-URN-000502069, page 214.

¹⁶⁹ [RBC Trader 2] (RBC) in interview provided the following explanation of his disclosures: *'it looks like I'm actually trying to help him out, but he, he already knows he's wrong anyway. Um, so then I've asked him where he's got one of the component parts of the fly, because there are lots of different bonds that trade within this fly. So, there were the 42s, there were the 46s, there was the 49s, there was the 52s, which is the belly of the fly, there was the 55s, and the 60s. So, you need to know the spreads of all those bonds to build the fly. Well, you don't need to know all of them, but, you know, it depends on how you're building the curve, basically. But I've asked him anyway a component of it, and he's told me 6.7, he's said it's wrong, so I've told him 6.85, and then I've given him -- that makes sense now why I've given him the, the two -- effectively the two spreads that make up the fly. So, you can work out where I've, where I think the fly is: 9.75 plus 2.75, which is 12.5'* (B-URN-000502076, pages 49 and 50).

[DB Trader] (Deutsche Bank) also said in interview that the disclosure of these prices by RBC ([RBC Trader 2]) would allow him to work out where RBC ([RBC Trader 2]) was pricing the fly trade (*'The first number I believe to be 42s 49s yield spread. Erm, second number, er, he -- well, he says it's 42s 52s. And the third number, he says 52s 60s. So from, from those three numbers, I could work out where he was -- where he had the fly.'*, B-URN-000502069, page 210).

Timestamp (UTC)	Party (Key Individual) <i>Extract</i>
15:21:32 15:21:35	Deutsche Bank ([DB Trader]) 6.7 <i>thats proabbly wrong</i>
15:21:39 15:21:51 15:22:00	RBC ([RBC Trader 2]) have 6.85 9.75 for 42/52 and -2.75 for 52/60

Disclosure of current mid-prices – 15:25:34 to 15:25:44

- B.103 At 15:25:34, Deutsche Bank ([DB Trader]) disclosed that his **current mid-price** for ‘the fly’¹⁷⁰ was ‘12.4’ (**‘so got 12.4 for that fly’**). In reaction, RBC ([RBC Trader 2]) disclosed that his **current mid-price** for the same gilt fly was ‘12.5’ (**‘ew have 12.5’** at 15:25:44).

Chat extract table – 15:25:34 to 15:25:44

Timestamp (UTC)	Party (Key Individual) <i>Extract</i>
15:25:34 15:25:38	Deutsche Bank ([DB Trader]) so got 12.4 for that fly <i>trading 12.6</i>
15:25:40 15:25:44	RBC ([RBC Trader 2]) <i>haha</i> ew have 12.5

¹⁷⁰ The CMA infers ‘the fly’ referred again to the gilt fly consisting of 2042, 2052 and 2060 gilts, for the reasons set out in paragraph B.92.

Summary

B.104 On 14 May 2012, Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 2]) engaged in the following **Trading Conduct**:

- (a) Over the course of the day, Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 2]) repeatedly shared with each other their respective **current mid-prices** for a gilt fly consisting of 2042, 2052 and 2060 gilts (referred to as '*the fly*').
- (b) Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 2]) also disclosed to each other their respective **current mid-prices** for a gilt switch consisting of 2042 and 2052 gilts.
- (c) During their ongoing disclosures relating to '*the fly*' Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 2]) also disclosed to each other their respective **current mid-prices** for a gilt switch consisting of 2042 and 2049 gilts.

Disclosures of current mid-prices for a gilt fly – 07:14:26 to 07:17:58

B.105 At 07:14:26,¹⁷² Deutsche Bank ([DB Trader]) disclosed information on his current mid-prices, saying that he had observed a price for 2060 gilts ('60s') and he was having a '*bit of a struggl[...]*' aligning that price with his mid-price ('*bit of a strugglwe getting these 60s below 60*' at 07:14:26). [DB Trader] (Deutsche Bank) confirmed in interview that was referring to a price on a '*broker screen*' that he could not align that price with '*[his] mid*'.¹⁷³

B.106 The Parties then each disclosed to the other their views on the relationship between, on the one hand, prices they were observing via brokers for '*the fly*' (ie the gilt fly consisting of 2042, 2052 and 2060 gilts) and for related gilts (ie 2060 gilts),¹⁷⁴ and on the other hand, their current mid-prices for those products: RBC

¹⁷¹ A-URN-006832. Deutsche Bank also produced a chat on this date between Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 2]), A-URN-008281.

¹⁷² Timestamps from this chat are recorded in UTC, which was 1 hour behind UK time on that date (BST). Therefore, 07:14:26 should be read as 08:14:26.

¹⁷³ [DB Trader] (Deutsche Bank) said in interview that '*there must be a price on the broker screen which I believe is -- is on a 4% 2060. [...] sounds like it'd be an outright [...] cash offer for the bond, erm, because clearly, I can't align my mid with how cheaply it's offered*' (B-URN-000502068, pages 151 and 152).

[DB Trader] (Deutsche Bank)'s interpretation is consistent with [RBC Trader 2] (RBC)'s comments in interview, who said that '*So I'm guessing that there was a seller of the 4s of 60 gilt at a price of big figure spot 60, in the market. And [DB Trader]'s trying to mark the bonds to get in line ie update the market*' (B-URN-000502076, page 99).

¹⁷⁴ [DB Trader] (Deutsche Bank) said in interview, in relation to 2060 gilts, which was one of the three constituent gilts of the gilt fly, that the price of the gilt fly and the 2060 gilt were directly related ('*if I moved the 60s in isolation, like, er, lower in price, higher in yield, then the fly price would look wrong as well. So, erm, I think that's the kind of discussion. So, because it feeds into the fly, that would affect -- it*', B-URN-000502068, page 152).

([RBC Trader 2]) disclosed to Deutsche Bank ([DB Trader]) that he thought prices he was observing via brokers for *'the fly'*, ie the gilt fly consisting of 2042, 2052 and 2060 gilts,¹⁷⁵ were too *'close'* to his mid-price (*'that -12.25 on the fly looks close to me'* at 07:17:22).¹⁷⁶ Deutsche Bank ([DB Trader]) reacted by disclosing that he had the same view as RBC ([RBC Trader 2]) had (*'yeah same'* at 07:17:58).

- B.107 Having discussed their views on mid-prices, the Parties then disclosed further information about their mid-prices for *'the fly'* and other related products.
- B.108 At 07:18:03, Deutsche Bank ([DB Trader]) disclosed that his **current mid-price** for *'the fly'* was *'12.15' ('have 12.15')*.¹⁷⁷ In reaction, RBC ([RBC Trader 2]) disclosed that his **current mid-price** for the same gilt fly was *'12.35'*,¹⁷⁸ and that he had just adjusted his mid-price from *'12.15'* to *'12.35'* (*'thats what i had but moved it to 12.35'* at 07:18:20).¹⁷⁹ [DB Trader] (Deutsche Bank) said in interview that his mid-price (ie where *'was marked'*) in relation to *'the fly'* had been *'too aggressive'* relative to trading he was observing via brokers.¹⁸⁰
- B.109 At 07:18:50 and 07:18:54, Deutsche Bank ([DB Trader]) then disclosed information about his **current mid-price** of a gilt switch related to *'the fly'*.¹⁸¹ he disclosed that he had adjusted his mid-price for a gilt switch consisting of 2042 and 2049 gilts by *'0.1'* basis points (*'yeah i have just adjusted 42/49s by 0.1'*). In light of the

¹⁷⁵ [DB Trader] (Deutsche Bank) said in interview that the gilt fly (*'the fly'*) referred to consisted of 2042, 2052 and 2060 gilts (*'the fly discussed here is 42s, 52s, 60s, which seem to be discussed quite a lot in a fair few of these chats'*, B-URN-000502068, page 152).

[RBC Trader 2] (RBC) said in interview that the product was *'42 52 60, yeah.'* (B-URN-000502076, page 105). [RBC Trader 2] (RBC) also said in interview that this timestamp related to the *'52s fly, I'm guessing'* (B-URN-000502076, page 99).

¹⁷⁶ [RBC Trader 2] (RBC) said in interview *"looks close to me" as in it's very close to mid'* (B-URN-000502076, page 99).

¹⁷⁷ [DB Trader] (Deutsche Bank) said in interview that in this extract he *'gave [RBC ([RBC Trader 2])] my mid on [...] the fly'* and *'[t]hat was what my internal pricer would have been producing.'* (B-URN-000502068, page 152 and 155).

[RBC Trader 2] (RBC) said in interview that Deutsche Bank ([DB Trader]) was referring to *'his mid'* and that *'[DB Trader]'s mid is 12.15'* (B-URN-000502076, page 99 and 101).

¹⁷⁸ [DB Trader] (Deutsche Bank) said in interview that in this extract RBC ([RBC Trader 2]) *'shares his mid on the fly'*. [DB Trader] (Deutsche Bank) then confirmed in interview that RBC ([RBC Trader 2])'s comment at 07:18:20 referred to RBC ([RBC Trader 2])'s *'mid on [...] the fly'* (B-URN-000502068, page 152 and 155).

[RBC Trader 2] (RBC) said in interview that *'I've just told him, you know, I think it's a 12.35'* (B-URN-000502076, page 101).

¹⁷⁹ [RBC Trader 2] (RBC) said in interview that he interpreted this timestamp as him having moved his mid-price *'on the back of'* the 12.25 price that he and [DB Trader] (Deutsche Bank) had observed (B-URN-000502076, page 100).

¹⁸⁰ [DB Trader] (Deutsche Bank) said in interview that *'there was obviously a price in the broker market that was at 12.25, so which would suggest my internal pricer, erm, wasn't, erm -- well, I was marked too -- I was marked too aggressively in the 52s versus the, er, broker by -- but only by 0.1 of a basis point which is probably about a couple of cents. So, it's not - not in a huge amount.'* (B-URN-000502068, page 155).

¹⁸¹ [DB Trader] (Deutsche Bank) explained in interview that the yield of the gilt switch consisting of the 2042 and 2049 gilts was one of the inputs he used in calculating the price of the 2052 fly (*'It was, erm ... you know, so -- but the way that I'd work it out would be I would, I would literally look at the yield. So, I think that fly I had -- the way I had my curve built at the time, I had 42s, 49s as one yield spread, 49s, 52s as another yield spread. [...] Then I had -- and I had, erm, 42s against 60s as a third yield spread. Now, so I had three yield spreads. So, effectively what I'd have to do to work out the fly price is I would have to add up the 42s, 49s and 49 52s to give me a yield spread of 42s, 52s and then I'd also have the yield spread of 42s 60s and effectively, so -- So, then I'd have a yiel -- then I'd have a yield -- a yield on 42s, have a yield on 52s and I'd have a yield on 60s.'* (B-URN-000502068, pages 162 and 163).

context of the extract and the Key Individuals' comments in interview,¹⁸² the CMA infers that, in disclosing his mid-price adjustments for that gilt switch, Deutsche Bank ([DB Trader]) was also disclosing to RBC ([RBC Trader 2]) that he was adjusting his mid-price in the gilt fly. For example, [DB Trader] (Deutsche Bank) said in interview that he made these adjustments in order to align his mid-price for the gilt fly with the price he had observed via brokers.¹⁸³

Chat extract table – 07:14:26 to 07:18:54

Timestamp (UTC)	Party (Key Individual) <i>Extract</i>
07:14:26	Deutsche Bank ([DB Trader]) <i>bit of a strugglwe getting these 60s below 60</i>
07:17:07 07:17:22	RBC ([RBC Trader 2]) <i>yeah</i> <i>that -12.25 on the fly looks close to me</i>
07:17:58 07:18:03	Deutsche Bank ([DB Trader]) <i>yeah same</i> have 12.15
07:18:09 07:18:20	RBC ([RBC Trader 2]) <i>haha</i> thats what i had but moved it to 12.35
07:18:50 07:18:54	Deutsche Bank ([DB Trader]) yeah i have just adjusted 42/49s by 0.1 <i>does the trick</i>

¹⁸² [DB Trader] (Deutsche Bank) said in interview regarding that timestamp that 'I have adjusted 42s 49s to get the fly in line with the bro ... the offer in the broker market.' (B-URN-000502068, page 156). [DB Trader] (Deutsche Bank) also said in interview that RBC ([RBC Trader 2]) 'should have known that moving 42s 49s by 0.1 would move the fly 0.2 higher. Erm, it seems that's quite intuitive.' (B-URN-000502068, page 165).

[RBC Trader 2] (RBC) said in interview that 'by adjusting it 0.1 he'll just about -- you know, he's getting closer to the real mid. He knows that he's wrong and I've just told him, you know, I think it's a 12.35 based off the 12 and a quarter' (B-URN-000502076, page 101).

¹⁸³ [DB Trader] (Deutsche Bank) said in interview: 'that's just me saying that I've adjusted my ... so, 52s will be priced at ... this is -- so, 52s are priced at 49s. So, if I -- if I adjust ... 42s 49s by 0.1, by default I would have moved 52s cheaper. So, that's my kind of way of saying that I have adjusted 42s, 49s to get the fly in line with the bro ... the offer in the broker market' (B-URN-000502068, page 156).

[DB Trader] (Deutsche Bank) further explained that '12.15 which looks wrong when there ... when there's someone willing to drop 12 and a quarter in the broker market. ... So, what I've done to fix that is I've moved my 42s 49s by 0.1. [...] That would have moved the fly 0.2 higher because it's two times the belly.' (B-URN-000502068, pages 164).

Consistent with [DB Trader] (Deutsche Bank)'s explanation, [RBC Trader 2] (RBC) said in interview that Deutsche Bank ([DB Trader]) 'makes an adjustment' in order to adjust his pricing so that it is closer to the 'real mid', ie mid-price (B-URN-000502076, page 101).

Disclosure of current mid-price for 'the fly' – 08:46:55 to 08:52:43

- B.110 At 08:48:06, RBC ([RBC Trader 2]) disclosed to Deutsche Bank ([DB Trader]) that the prices he had observed via brokers for a gilt switch consisting of 2052 and 2060 gilts was '*wrong*' ('*52s60s is so wrong*').¹⁸⁴
- B.111 At 08:52:43, RBC ([RBC Trader 2]) disclosed to Deutsche Bank ([DB Trader]) his **current mid-price**¹⁸⁵ ('12.3') for '*the fly*', ie the gilt fly consisting of 2042, 2052 and 2060 gilts¹⁸⁶ ('*i have the fly at 12.3 now*').

Chat extract table – 08:47:22 to 08:52:43

Timestamp (UTC)	Party (Key Individual) <i>Extract</i>
08:47:22 08:47:28	RBC ([RBC Trader 2]) [...] the 60s [...]
08:47:49	Deutsche Bank ([DB Trader]) [...]
08:48:06	RBC ([RBC Trader 2]) <i>52s60s is so wrong</i>
08:48:10	Deutsche Bank ([DB Trader]) [...] 55/60
08:48:26	RBC ([RBC Trader 2]) [...] 52s60s
08:48:43 08:48:49	Deutsche Bank ([DB Trader]) [...] [...]
08:48:56	RBC ([RBC Trader 2]) [...]
08:49:03	Deutsche Bank ([DB Trader]) [...]
08:49:08 08:49:15	RBC ([RBC Trader 2]) [...] [...]
08:49:59 08:50:05	Deutsche Bank ([DB Trader]) [...] 52/60s [...]

¹⁸⁴ [RBC Trader 2] (RBC) said in interview that he was referring to his '*opinion on the spread, I think it's too flat*' (B-URN-000502076, page 104).

[DB Trader] (Deutsche Bank) said in interview that he interpreted RBC ([RBC Trader 2]) as referring to the '*scenario whereby the 60s are really offered but -- on an outright basis, but then it's not seen to be reflected [...] in a lot of the [...] yield spreads between the bonds [ie the price of the gilt switch]*' (B-URN-000502068, page 166).

¹⁸⁵ [DB Trader] (Deutsche Bank) said in interview that he '*suspect[ed]*' that this timestamp referred to RBC ([RBC Trader 2])'s mid-price ('*I suspect that's his mid*') (B-URN-000502068, page 170).

¹⁸⁶ [DB Trader] (Deutsche Bank)'s and [RBC Trader 2] (RBC)'s respective evidence in interview was that this related to the gilt fly involving 2042, 2052 and 2060 gilts.

[RBC Trader 2] (RBC) said in interview that this timestamp related specifically to the '*42 52 60*' gilt fly (B-URN-000502076, page 105).

[DB Trader] (Deutsche Bank) confirmed in interview that he interpreted this timestamp as referring to the '*same fly*' the Parties had been discussing previously, ie the gilt fly consisting of 2042, 2052 and 2060 gilts (B-URN-000502068, page 170).

Timestamp (UTC)	Party (Key Individual) <i>Extract</i>
08:50:12	RBC ([RBC Trader 2]) <i>[...]</i>
08:50:18	Deutsche Bank ([DB Trader]) <i>52s [...]</i>
08:52:43	RBC ([RBC Trader 2]) <i>i have the fly at 12.3 now</i>

Disclosure of current mid-price for a gilt switch related to ‘the fly’ – 12:11:35 to 12:11:57

- B.112 At 12:11:35 to 12:11:44, Deutsche Bank ([DB Trader]) asked RBC ([RBC Trader 2]) for his mid-price for the gilt switch consisting of 2042 and 2052 gilts (*‘where do u have 42/52s’*)¹⁸⁷ and then Deutsche Bank ([DB Trader]) disclosed his own **current mid-price** (*‘10.3’ or wider*). [DB Trader] (Deutsche Bank) said in interview that he could not be sure whether he was referring to *‘my mid [...] or not’*.¹⁸⁸ However, the CMA infers that Deutsche Bank ([DB Trader]) was disclosing his own mid-price, in light of:
- (a) [RBC Trader 2] (RBC)’s evidence in interview was that he interpreted Deutsche Bank ([DB Trader]) as disclosing his *‘mid’*;¹⁸⁹ and
 - (b) [DB Trader] (Deutsche Bank)’s explanation in interview that the context to his question was *‘I think this is [...] trying to reconcile and align my price with everything that’s going on in the broker market.’*¹⁹⁰ That explanation indicates that Deutsche Bank ([DB Trader]) was considering his own mid-price and in particular if, and how, to adjust it.
- B.113 At 12:11:57, in response to Deutsche Bank ([DB Trader])’s question, RBC ([RBC Trader 2]) disclosed his **current mid-price** for the gilt switch (*‘10.3’*)¹⁹¹ in reaction to which Deutsche Bank ([DB Trader]) stated *‘cool’* (at 12:12:01).

¹⁸⁷ [DB Trader] (Deutsche Bank) said in interview that he was asking RBC ([RBC Trader 2]) *‘where he’s got mid on [...] 42s and 52s yield spread’* (B-URN-000502068, page 172).

¹⁸⁸ [DB Trader] (Deutsche Bank) said in interview, *‘I say 12.3 or wider. Er, it could be my mid but it’s not 100% obvious from here whether it’s my mid or not.’* (B-URN-000502068, pages 172 to 173).

¹⁸⁹ [RBC Trader 2] (RBC) said in interview, *‘Okay, we agree mids. We’ve already have both the same mid’* (B-URN-000502076, page 107).

¹⁹⁰ B-URN-000502068, page 172.

¹⁹¹ [RBC Trader 2] (RBC) confirmed in interview that he was disclosing his mid-price for the gilt switch (*‘Okay, we agree mids. We’ve already have both the same mid’*, B-URN-000502076, page 107). [DB Trader] (Deutsche Bank) also said in interview that RBC ([RBC Trader 2]) had *‘given me his mid at 12.3’*. In interview, when referring to this Bloomberg chat, [DB Trader] (Deutsche Bank) and the CMA referred to *‘12.3’* which the CMA understands to have been an erroneous reference to the figure of 10.3 indicated in the Bloomberg chat (B-URN-000502068, page 172).

Chat extract table – 12:11:35 to 12:11:57

Timestamp (UTC)	Party (Key Individual) Extract
12:11:35 12:11:41 12:11:44	Deutsche Bank ([DB Trader]) <i>where do u have 42/52s</i> 10.3 <i>or wider</i>
12:11:57	RBC ([RBC Trader 2]) 10.3
12:12:01	Deutsche Bank ([DB Trader]) <i>cool</i>

Disclosure of current mid-prices for ‘the fly’ and a related gilt switch – 13:37:28 to 13:38:48

- B.114 In the context of RBC ([RBC Trader 2]) disclosing that he was having problems reconciling his mid-prices with prices he was observing via brokers, Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 2]) disclosed pricing information in relation to *‘the fly’* and a related gilt switch.
- B.115 At 13:37:28 to 13:37:42, RBC ([RBC Trader 2]) disclosed to Deutsche Bank ([DB Trader]) information on his mid-price for *‘ultras’*, saying that he could not reconcile a price he had seen via brokers with his own mid-prices for *‘ultras’*, ie gilts with a maturity of 35 years or more (*‘something is wrong’ ‘cant get everything to fit’ ‘in ultras’*). Deutsche Bank ([DB Trader]) then questioned *‘what doesnt fit’* (at 13:37:51). RBC ([RBC Trader 2]) then provided more information on his difficulties: he said that there was a price via brokers¹⁹² of *‘-12.4’* in *‘the fly’*, a product that included ultras¹⁹³ (*‘fly still -12.4’* at 13:38:05), but that his **current mid-price** for *‘the fly’* was *‘12.2’* (***‘have it 12.2’*** at 13:38:08).
- B.116 In reaction, Deutsche Bank ([DB Trader]) disclosed his **current mid-price** (*‘12.25’*) for the same gilt fly (***‘got 12.25 here’*** at 13:38:24).¹⁹⁴ Deutsche Bank ([DB Trader]) then disclosed his **current mid-price** (*‘7.3’*) for a related gilt switch consisting of 2042 and 2049 gilts (***‘and thats with 42/49s at 7.3’*** at 13:38:48).¹⁹⁵ [DB Trader]

¹⁹² [DB Trader] (Deutsche Bank) said in interview that *‘negative 12.4’* was *‘obviously a reference to a broker price’*. (B-URN-000502068, page 173). [RBC Trader 2] (RBC) said in interview that it was a *‘price off the brokers’* and the *‘-12.4’* figure *‘is the price of the brokers, I’m observing’* (B-URN-000502076, page 108).

¹⁹³ [DB Trader] (Deutsche Bank) said in interview that the timestamps related to the *‘same fly’*. The gilt fly consisting of 2042, 2052 and 2060 gilts that the Parties had discussed throughout the same Bloomberg chat. (B-URN-000502068, page 176). [RBC Trader 2] (RBC) said in interview that he was referring to *‘42s 52s 60.’* (B-URN-000502076, page 109).

¹⁹⁴ [DB Trader] (Deutsche Bank) said in interview that his disclosure was his *‘middle’* (B-URN-000502068, page 173). [RBC Trader 2] (RBC) said in interview that the two disclosures by the traders show that *‘our mids are very close’*, the CMA therefore infers that these price disclosures are mid-prices (B-URN-000502076, page 108).

¹⁹⁵ [DB Trader] (Deutsche Bank) said in interview that his comment at this timestamp was his *‘middle’*. [DB Trader] (Deutsche Bank) said *‘7.3’* was *‘my middle of 42 49s at 7.3’* (B-URN-000502068, page 173). [RBC Trader 2] (RBC) said in interview that *‘7.3’* will be *‘where he has mid on 42/49s’*. [RBC Trader 2] (RBC) said in interview in relation to these timestamps that his and Deutsche Bank ([DB Trader])’s *‘mids are very close’*, from which the CMA infers that [RBC Trader 2] (RBC) interpreted both he and Deutsche Bank ([DB Trader]) to have disclosed their mid-prices (B-URN-000502076, page 108).

(Deutsche Bank) said in interview that he disclosed his mid-price for the gilt switch as it was related to how he would have determined his mid-price for *'the fly'*.¹⁹⁶

B.117 The evidence of [DB Trader] (Deutsche Bank) and [RBC Trader 2] (RBC) in interview was that that they were struggling to align their mid-prices with observed trading prices via brokers. [DB Trader] (Deutsche Bank) said in interview that in these timestamps RBC ([RBC Trader 2]) was *'trying to get everything to fit on his [...] gilt pricer [...] and what they produce in terms of fly level is different to what's in the broker market'*.¹⁹⁷ [DB Trader] (Deutsche Bank) also said in interview that he was also unable to *'reconcile'* his mid-price with prices available via brokers.¹⁹⁸ [RBC Trader 2] (RBC) said in interview that *'we know that something's not right because there's a price at 12.4'*.¹⁹⁹

Chat extract table – 13:37:28 to 13:38:48

Timestamp (UTC)	Party (Key Individual) <i>Extract</i>
13:37:28 13:37:39 13:37:42	RBC ([RBC Trader 2]) <i>something is wrong cant get everything to fit in ultras</i>
13:37:51	Deutsche Bank ([DB Trader]) <i>what doesnt fit</i>
13:38:05 13:38:08	RBC ([RBC Trader 2]) <i>fly still -12.4 have it 12.2</i>
13:38:24 13:38:27 13:38:48	Deutsche Bank ([DB Trader]) <i>got 12.25 here [expletive] knows and thats with 42/49s at 7.3</i>

¹⁹⁶ [DB Trader] (Deutsche Bank) said in interview, *'So, obviously that's one small -- that's like how I, how I get -- how I would get to -- get to the 52s fly'* (B-URN-000502068, page 173).

¹⁹⁷ B-URN-000502068. This is consistent with the evidence of [RBC Trader 2] (RBC) who said in interview that there was a discrepancy between his and Deutsche Bank ([DB Trader])'s mid-prices and prices in the market, which was then resolved (B-URN-000502076, pages 108 to 109).

¹⁹⁸ [DB Trader] (Deutsche Bank) said in interview *'I can't reconcile it either.'* (B-URN-000502068, page 173).

¹⁹⁹ B-URN-000502076, page 108.

Disclosure of current mid-price – 08:58:11 to 08:58:33

- B.118 Deutsche Bank ([DB Trader]) disclosed to RBC ([RBC Trader 2]) that he was offering to trade the gilt fly consisting of 2042, 2050 and 2060 gilts via brokers²⁰¹ (*'i'm bidding for fly'* at 08:58:11²⁰²).
- B.119 Deutsche Bank ([DB Trader]) then disclosed his **current mid-price** for the same gilt fly (**'12.35 mid'** at 08:58:33). [DB Trader] (Deutsche Bank) said in interview that *'middle'*, ie that mid-price of *'12.35'*, was *'Deutsche Bank internal'*.²⁰³

Chat extract table – 08:58:11 to 08:58:33

Timestamp (UTC)	Party (Key Individual) <i>Extract</i>
08:58:11 08:58:13	Deutsche Bank ([DB Trader]) <i>i'm bidding for fly</i> <i>obviously</i>
08:58:21	RBC ([RBC Trader 2]) <i>yeah surprised there is no drop</i>
08:58:28 08:58:33	Deutsche Bank ([DB Trader]) <i>12</i> 12.35 mid

²⁰⁰ A-URN-006846. Deutsche Bank also produced a chat on this date between Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 2]), A-URN-000272.

²⁰¹ [DB Trader] (Deutsche Bank) said in interview that he would have been referring to trading the gilt fly *'in the IDB brokers for that fly'* (B-URN-000502069, page 222).

²⁰² Timestamps from this chat are recorded in UTC, which was 1 hour behind UK time on that date (BST). Therefore, 08:58:11 should be read as 09:58:11.

²⁰³ [DB Trader] (Deutsche Bank) said in interview *'I give him "12.35 middle". Erm, so I'm giving him my middle, which is Deutsche Bank internal middle at 12.35'* (B-URN-000502069, page 222). [RBC Trader 2] (RBC) said in interview that Deutsche Bank ([DB Trader]) had said *'where he has mid'* (B-URN-000502076, page 136).

Disclosure of current mid-prices for various gilt switches – 14:06:57 to 14:09:01

- B.120 At 14:06:57 to 14:07:26,²⁰⁵ Deutsche Bank ([DB Trader]) asked RBC ([RBC Trader 2]) to disclose his mid-prices (*'where do u have them'*) for three gilt switches for trading via brokers consisting of 2042 gilts (*'42s'*) and respectively 2046, 2049 and 2052 gilts (*'46s 49s and 52s'*) (*'everyone must be marked 46s 49s and 52s quite funny' 'where do u have them' 'vs 42s?' 'yeah'*). At 14:07:26, Deutsche Bank ([DB Trader]) explained to RBC ([RBC Trader 2]) the reason for his request, by stating that his mid-prices for those three gilt switches were *'low'* compared to related prices on [electronic trading platform] (*'cos i look so low to [electronic trading platform]'*).²⁰⁶
- B.121 In response, at 14:08:02, RBC ([RBC Trader 2]) disclosed his **current mid-prices** (***'5.4, 8.85, 12.4'***) for the three gilt switches.²⁰⁷ [RBC Trader 2] (RBC) said in interview that each figure related to a separate gilt switch, explaining *'5.4 would be the 42/46s, 8.85 would be the 42/49s, 12.4 would be 42/52s'*.²⁰⁸
- B.122 In response to RBC ([RBC Trader 2]) asking if he had similar mid-prices (*'u have similar?'* at 14:08:20),²⁰⁹ Deutsche Bank ([DB Trader]) also disclosed his **current mid-prices** for the same gilt switches (***'i had' '5.5/8.9/12.45'*** at 14:08:33 and 14:08:41).²¹⁰
- B.123 [DB Trader] (Deutsche Bank) said in interview that he wanted to check mid-prices with RBC ([RBC Trader 2]) as a *'sanity check'*²¹¹ in the context of his pricing for

²⁰⁴ A-URN-008324. RBC also produced a chat on this date between Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 2]), A-URN-006897.

²⁰⁵ Timestamps from this chat are recorded in GMT, which was 1 hour behind UK time on that date (BST). Therefore, 14:06:57 should be read as 15:06:57.

²⁰⁶ [DB Trader] (Deutsche Bank) in interview explained that in this chat he was *"...questioning, erm, the composite mi... - basically, the composite mid."* (B-URN-000502069, pages 212 and 213). Similarly, [RBC Trader 2] (RBC) said in interview that *'so he's obviously comparing, as we always do, his mids to [electronic trading platform]'* (B-URN-000502076, page 55).

²⁰⁷ [DB Trader] (Deutsche Bank) said in interview that in this extract *'[RBC Trader 2] puts his middles [ie mid-prices] down'* (B-URN-000502069, page 213).

²⁰⁸ B-URN-000502076, page 55.

²⁰⁹ [RBC Trader 2] (RBC) said in interview that he was asking Deutsche Bank ([DB Trader]) if he *'has similar mids to 5.4, 8.85, and 12.4'*, ie the mid-prices RBC ([RBC Trader 2]) had just disclosed (B-URN-000502076, page 56).

²¹⁰ [DB Trader] (Deutsche Bank) said in interview that in this extract *'I put my middles [ie mid-prices]'* and his *'equivalent middles'* (B-URN-000502069, pages 213 and 214).

[RBC Trader 2] (RBC)'s evidence in interview was that Deutsche Bank ([DB Trader]) disclosed his mid-prices for the same products (*'And then he gives me his. So, "5.5, 8.9, 12.45"'*, B-URN-000502076, page 55).

²¹¹ [DB Trader] (Deutsche Bank) said in interview, *'I am questioning, erm, the composite mi... -- basically, the composite mid [...] my mids -- maybe my mids flashing up like I explained the other day whereby I look, you know, out versus the [electronic trading platform] mid or the DMO mid [...] so there's obviously a price in the broker screen and then I -- I'm trying to align all my prices to get -- to make sense against that price in the broker screen. But then by aligning all my prices, then I look very low versus [electronic trading platform]. So I'm, kind of, just questioning with [RBC Trader 2] where he has them. So to almost give it a san... -- sanity check for myself.'* (B-URN-000502069, pages 212 and 213).

the related gilt fly consisting of 2042, 2052 and 2060 gilts.²¹² [RBC Trader 2] (RBC) also said in interview that *'you could argue this is a sense check right here [...] and I think [DB Trader] is questioning at this point in time, um, the [electronic trading platform] mid'*.²¹³

Chat extract table – 14:06:57 to 14:09:01

Timestamp (GMT)	Party (Key Individual) <i>Extract</i>
14:06:57 14:07:02	Deutsche Bank ([DB Trader]) <i>everyone must be marked 46s 49s and 52s quite funny where do u have them</i>
14:07:14	RBC ([RBC Trader 2]) <i>vs 42s?</i>
14:07:19 14:07:26	Deutsche Bank ([DB Trader]) <i>yeah cos i look so low to [electronic trading platform]</i>
14:08:02	RBC ([RBC Trader 2]) <i>5.4, 8.85, 12.4</i>
14:08:14	Deutsche Bank ([DB Trader]) <i>cool</i>
14:08:20	RBC ([RBC Trader 2]) <i>u have similar?</i>
14:08:33 14:08:41	Deutsche Bank ([DB Trader]) <i>i had 5.5/8.9/12.45</i>
14:08:45	RBC ([RBC Trader 2]) <i>k</i>
14:09:01	Deutsche Bank ([DB Trader]) <i>just to get inside that 12.35 drop</i>

²¹² [DB Trader] (Deutsche Bank) said in interview that *'I explained to him my middles are "to get inside that 12.35 drop" [...] for the 52s fly'* and that for the *'52s fly' '12.35'* was a *'price in the broker market and I am moving my screen, erm, to - essentially, to rationalise that price that, you know, so that it makes sense'* (B-URN-000502069, page 214).

²¹³ B-URN-000502076, page 57.

Disclosure of current mid-price for a gilt switch – 09:17:32 to 09:19:31

- B.124 At 09:51:14, Deutsche Bank ([DB Trader]) asked RBC ([RBC Trader 2]) about his mid-price for a gilt switch including 2042 and 2046 gilts (*'where do u think 42/46s are'*).²¹⁵ In response, RBC ([RBC Trader 2]) disclosed his **current mid-price** ('6.6') for that gilt switch (***'marking them 6.6'***).
- B.125 Deutsche Bank ([DB Trader]) then expressed doubt about the mid-price that RBC ([RBC Trader 2]) had disclosed: he said he *'cant belivee'* that the correct mid-price would be *'that wide'* (*'I persoanlyl cant belivee they can be that wide'* at 09:53:19). The CMA infers that in doing so Deutsche Bank ([DB Trader]) was also disclosing that he had a lower mid-price for that gilt switch than RBC ([RBC Trader 2]) had. Consistent with that inference, [DB Trader] (Deutsche Bank) said in interview that he inferred from his expressions of doubt that the mid-price for that gilt switch was lower.²¹⁶

Chat extract table – 09:51:14 to 09:54:26

Timestamp (UTC)	Party (Key Individual) Extract
09:51:14	Deutsche Bank ([DB Trader]) <i>where do u think 42/46s are</i>
09:53:03	RBC ([RBC Trader 2]) <i>marking them 6.6</i>
09:53:19	Deutsche Bank ([DB Trader]) <i>I persoanlyl cant belivee they can be that wide</i>
09:54:26	RBC ([RBC Trader 2]) <i>join the club</i>

²¹⁴ A-URN-006927. Deutsche Bank also produced a chat on this date between Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 2]), A-URN-008336.

²¹⁵ [DB Trader] (Deutsche Bank) said in interview, *'I've asked [RBC Trader 2] where 42s 46s yield spread between the two bonds is'* and that he interpreted RBC ([RBC Trader 2]) as responding with his *'internal yield spread between the two bonds.'* (B-URN-000502068, page 215).

²¹⁶ [DB Trader] (Deutsche Bank) said in interview that he inferred he had a lower mid-price because I say, *'I personally can't believe they can be that wide', which would make me think it's lower than 6.6.'* (B-URN-000502068, page 216).

Disclosure of future trading prices for 1.75% 2022 gilts – 08:24:17 to 08:28:59

- B.126 At 08:24:17 to 08:24:21,²¹⁸ Deutsche Bank ([DB Trader]) asked RBC ([RBC Trader 1]) whether ‘18bps?’ was the ‘right’ price to start ‘shorting’ 1.75% 2022 gilts (‘when do u start shorting 1t22’ ‘18bps?’).
- B.127 Deutsche Bank ([DB Trader]) then disclosed that he predicted that the yield of the 1.75% 2022 gilts would fall to ‘19bps’²¹⁹ the following week (‘i should be over 19bps next week i reckon’ at 08:24:38).
- B.128 At 08:28:01 to 08:28:09, in response, RBC ([RBC Trader 1]) also predicted how the price of the 1.75% 2022 gilts would change in the coming week (‘yh 3 more auctions’²²⁰ ‘I think you get good terms next week’ ‘as a lot of CBs see them roll into their <10yr basket as of 1st Oct’). He then disclosed, based on that prediction, his **future trading price** for those gilts, by saying that he ‘for sure’ would ‘look to sell’ that gilt at a price of ‘18’ (‘I would look to sell if they get to 18 for sure’).

Chat extract table – 08:24:17 to 08:28:59

Timestamp (GMT)	Party (Key Individual) Extract
08:24:17 08:24:21 08:24:38	Deutsche Bank ([DB Trader]) <i>when do u start shorting 1t22</i> <i>18bps?</i> <i>i should be over 19bps next week i reckon</i>
08:28:01 08:28:09 08:28:27 08:28:59	RBC ([RBC Trader 1]) <i>yh 3 more auctions</i> <i>I think you get good terms next week</i> <i>as a lot of CBs see them roll into their <10yr basket as of 1st Oct</i> <i>I would look to sell if they get to 18 for sure</i>

²¹⁷ A-URN-008406. RBC also produced a chat on this date between Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 1]), A-URN-007032.

²¹⁸ Timestamps from this chat are recorded in GMT, which was 1 hour behind UK time on that date (BST). Therefore, 08:24:21 should be read as 09:24:21.

²¹⁹ ie the price would rise.

²²⁰ The DMO auctioned 1.75% 2022 gilts on 2 October 2012, 6 November 2012 and 11 December 2012 (B-URN-000500744, DMO, ‘Gilt Market Issuance calendar 2012-2013’).

2013

DB-RBC, A-URN-000192,²²¹ 10 January 2013

Disclosure of current mid-price for a gilt switch consisting of 2032 and 2034 gilts – 11:32:14 to 11:34:41

- B.129 At 11:32:14 and 11:32:20,²²² RBC ([RBC Trader 2]) commented on price movement via brokers of a gilt switch consisting of 2032 and 2034 gilts (*'love the way 32s34s just gaps'*²²³ *'such a pony market'*).²²⁴ In response, Deutsche Bank ([DB Trader]) stated that he had not yet changed (ie *'moved'*) his mid-price, despite those price movements (*'has it gapped'* *'dont think i have moved it'* *'oops'* at 11:33:35 to 11:33:43). Deutsche Bank ([DB Trader]) then disclosed his **current mid-price** (*'12.9'*)²²⁵ for the gilt switch (*'still have 12.9 mid'* at 11:33:46).
- B.130 During further discussion of recent trading prices for a gilt switch consisting of 2032 and 2036 gilts, at 11:34:29, RBC ([RBC Trader 2]) disclosed his **current mid-price** (*'20.35'*) for the same gilt switch (*'i have them 20.35'*).²²⁶

Chat extract table – 11:32:14 to 11:34:41

Timestamp (EST)	Party (Key Individual) <i>Extract</i>
11:32:14 11:32:20	RBC ([RBC Trader 2]) <i>love the way 32s34s just gaps</i> <i>such a pony market</i>
11:33:35 11:33:41 11:33:43 11:33:46	Deutsche Bank ([DB Trader]) <i>has it gapped</i> <i>dont think i have moved it</i> <i>oops</i> <i>still have 12.9 mid</i>
11:33:51	RBC ([RBC Trader 2]) <i>ha</i>

²²¹ A-URN-000192. RBC also produced a chat on this date between Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 2]), A-URN-007149.

²²² Timestamps from this chat are recorded in EST, which was 5 hours behind UK time on that date (GMT). Therefore, 11:32:14 should be read as 16:32:14.

²²³ [RBC Trader 2] (RBC) said in interview that *'gaps'* referred to a *'change in price'* (B-URN-000502076, page 77).

²²⁴ [RBC Trader 2] (RBC) said in interview that he was *'complaining [...] about, um, some price action'* in the gilt switch and that it sounded *'like a trade in that spread, 32/34s, has just happened in the broker market'* (B-URN-000502076, page 77).

²²⁵ [DB Trader] (Deutsche Bank) said in interview that he had given RBC ([RBC Trader 2]) *'my middle'* for the *'yield spread between the 2032 and 2034 gilts'*, and that he believes that *'middle'* was *'internal'* (B-URN-000502068, pages 136 and 137).

[RBC Trader 2] (RBC) said in interview that *'he's saying he still has a 12.9 mid, but he knows it's wrong, because he said "oops", so, the market has obviously just gapped and he hasn't updated his mid yet [...] to reflect the market'* (B-URN-000502076, page 78).

²²⁶ [DB Trader] (Deutsche Bank) said in interview that he interpreted RBC ([RBC Trader 2]) as referring to *'his middle of that same switch which I just traded at 20 basis point, so 32s against 36s, his yield spread'* (B-URN-000502068, page 137).

Timestamp (EST)	Party (Key Individual) <i>Extract</i>
11:34:05 11:34:16	Deutsche Bank ([DB Trader]) <i>i hit 20bps in 32/36s</i> <i>just cos i think curve is steepening</i>
11:34:18	RBC ([RBC Trader 2]) <i>what</i>
11:34:18	Deutsche Bank ([DB Trader]) <i>[expletive] all size</i>
11:34:24 11:34:26	RBC ([RBC Trader 2]) <i>i didnt even see that</i> <i>20bp pu?</i>
11:34:29	Deutsche Bank ([DB Trader]) <i>yeah</i>
11:34:29	RBC ([RBC Trader 2]) <i>i have them 20.35</i>
11:34:31	Deutsche Bank ([DB Trader]) <i>5er</i>
11:34:33	RBC ([RBC Trader 2]) <i>just now?</i>
11:34:38	Deutsche Bank ([DB Trader]) <i>nah little while ago</i>
11:34:41	RBC ([RBC Trader 2]) <i>ok</i>

Summary

- B.131 On 8 February 2013, Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 2]) engaged in the following **Trading Conduct**:
- (a) In the context of Deutsche Bank ([DB Trader]) trying to reconcile his pricer with a price observed via brokers, RBC ([RBC Trader 2]) disclosed to Deutsche Bank ([DB Trader]) his **current mid-price** for the gilt switch consisting of 2042 and 2060 gilts.
 - (b) RBC ([RBC Trader 2]) then asked Deutsche Bank ([DB Trader]) for his mid-price for a gilt switch via brokers consisting of 2027 and 2028 gilts to which Deutsche Bank ([DB Trader]) responded by disclosing to RBC ([RBC Trader 2]) his **current mid-price** for that gilt switch.

Disclosure of current mid-price for gilt switch – 10:01:26 to 10:01:52

- B.132 At 10:01:26 to 10:01:32, Deutsche Bank ([DB Trader]) asked RBC ([RBC Trader 2]) for his mid-price for a gilt switch consisting of 2042 and 2060 gilts, in the context of considering his price for a related gilt switch ie '22/60s' ('where do u have 42/60s' 'just looking at that 22/60s trade'). [DB Trader] (Deutsche Bank) said in interview that he would have asked the question in the context of 'trying to align and reconcile' a 'price in the broker market [...] with my mids'.^{228 229}
- B.133 RBC ([RBC Trader 2]) responded by disclosing his **current mid-price**²³⁰ ('9.75') for that gilt switch, ie the gilt switch consisting of 2042 and 2060 gilts ('have it 9.75' at 10:01:52).

Chat extract table – 10:01:26 to 10:01:52

Timestamp (UTC)	Party (Key Individual) <i>Extract</i>
10:01:26 10:01:32	Deutsche Bank ([DB Trader]) <i>where do u have 42/60s</i> <i>just looking at that 22/60s trade</i>

²²⁷ A-URN-007186. Deutsche Bank also produced a chat on this date between Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 2]), A-URN-008547.

²²⁸ B-URN-000502068, page 201.

²²⁹ [DB Trader] (Deutsche Bank) also said interview that he 'asked [RBC Trader 2], "Where do you have 42 60s?" because of the relationship between the gilt switch consisting of 2022 and 2042 gilts and the gilt switch consisting of 2042 and 2060 gilts, ie 'Because that's - of how I would've built the 22 60s, that's one of the two legs. The two legs being 22 42s, the second leg being 42 60s.' (B-URN-000502068, page 201).

²³⁰ [DB Trader] (Deutsche Bank) said in interview that RBC ([RBC Trader 2]) had disclosed his 'mid on 42 60s' (B-URN-000502068, pages 201 and 202).

[RBC Trader 2] (RBC) said in interview that the timestamp related to the '42/60s switch' (B-URN-000502076, pages 87 and 88).

Timestamp (UTC)	Party (Key Individual) <i>Extract</i>
10:01:40	<i>wonder whether its cos longs bad too</i>
10:01:52	RBC ([RBC Trader 2]) <i>have it 9.75</i>

Disclosure of current mid-prices for gilt switches – 10:51:03 to 10:55:06

- B.134 At 10:51:03 and 10:51:19, RBC ([RBC Trader 2]) asked Deutsche Bank ([DB Trader]) about his price for a gilt switch consisting of 2027 and 2028 gilts, in the context of 2028 gilts becoming cheaper ie being '*decimated*'²³¹ ('*where are you marking 27s28s*'²³² '*i think 28s have just been decimated*'). In response, at 10:54:40, Deutsche Bank ([DB Trader]) disclosed his **current mid-price ('0.5')** for that gilt switch.²³³
- B.135 RBC ([RBC Trader 2]) then disclosed his **current mid-price ('0.9')** for the same gilt switch ('*i have them 0.9*' at 10:54:50),²³⁴ and his reasons for that mid-price, by comparing his mid-price to a price for another gilt switch, '28s30s', ie the gilt switch consisting of 2028 and 2030 gilts ('*which i think is right*' '*look at that 28s30s*' '*pick*' at 10:54:57 to 10:55:06).²³⁵

Chat extract table – 10:51:03 to 10:55:06

Timestamp (UTC)	Party (Key Individual) <i>Extract</i>
10:51:03 10:51:19	RBC ([RBC Trader 2]) <i>where are you marking 27s28s</i> <i>i think 28s have just been decimated</i>
10:54:40	Deutsche Bank ([DB Trader]) 0.5
10:54:50 10:54:57 10:55:04 10:55:06	RBC ([RBC Trader 2]) <i>i have them 0.9</i> <i>which i think is right</i> <i>look at that 28s30s</i> <i>pick</i>

²³¹ [RBC Trader 2] (RBC) said in interview that by '*decimated*' he meant the gilt was '*getting cheaper*' (B-URN-000502076, page 90).

²³² [RBC Trader 2] (RBC) said in interview that the products being discussed were '*gilt switches*' (B-URN-000502076, page 87 and 88).

²³³ [DB Trader] (Deutsche Bank) said in interview that he was referring to where '*I've got them*', which the CMA infers to mean his mid-price for the gilt switch (B-URN-000502068, page 203).

²³⁴ [DB Trader] (Deutsche Bank) said in interview that '*0.9*' referred to RBC ([RBC Trader 2])'s '*middle*' ('*he's got a 0.9 middle*') (B-URN-000502068, page 203).

²³⁵ [RBC Trader 2] (RBC) said in interview that he was observing '*someone buying 30s out of 28s*' in the '*broker market*' (B-URN-000502076, pages 90 and 91).

Disclosure of current mid-prices for a gilt switch – 14:27:45 to 14:28:51

- B.136 At 14:27:45, Deutsche Bank ([DB Trader]) asked RBC ([RBC Trader 2]) for his mid-price for a gilt switch via brokers consisting of 2042 and 2055 gilts (*'where do u h[ave] [have] 42/55s'*).²³⁷ In response, at 14:27:50, RBC ([RBC Trader 2]) disclosed his **current mid-price** (**'10.75'**) for that gilt switch.²³⁸
- B.137 At 14:28:03, RBC ([RBC Trader 2]) then commented on the price of a gilt switch consisting of 2042 and 2049 gilts that he had observed via brokers (*'42s49s went down at 10.5'*).²³⁹ Deutsche Bank ([DB Trader]) said that, because of the *'10.5'* price,²⁴⁰ the correct mid-price for the gilt switch consisting of 2042 and 2055 gilts must be higher (ie *'wider'*) than that which RBC ([RBC Trader 2]) had disclosed (*'must be wider surely' '49s/55s cant be at 0.25'*, 14:28:07 and 14:28:13).²⁴¹
- B.138 At 14:28:34, in response to Deutsche Bank ([DB Trader]) disclosing his views on RBC ([RBC Trader 2])'s mid-price, RBC ([RBC Trader 2]) then asked Deutsche Bank ([DB Trader]) for his mid-price for the same gilt switch, ie the gilt switch consisting of 2042 and 2055 gilts (*'where u think it is'*). In response, at 14:28:41, Deutsche Bank ([DB Trader]) disclosed his **current mid-price** (**'10.85'**) for that gilt switch.²⁴²
- B.139 At 14:28:51, following Deutsche Bank ([DB Trader])'s mid-price disclosure, RBC ([RBC Trader 2]) then disclosed further information about his **mid-price**, by saying that he had adjusted (ie *'moved'*) his mid-price for the same gilt switch (*'k moved mine out'*).
- B.140 [DB Trader] (Deutsche Bank) said in interview that he interpreted RBC ([RBC Trader 2])'s statement at this timestamp to mean that RBC ([RBC Trader 2]) had *'moved'* his mid-price for the gilt switch in order *'to adjust to mine. So obviously [...] he's agreed with me.'*²⁴³ [RBC Trader 2] (RBC) said in interview that he would

²³⁶ A-URN-000201, RBC did not produce copy of this chat on this date between Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 2]).

²³⁷ [DB Trader] (Deutsche Bank) said in interview that he was *'asking [RBC Trader 2] where a middle is'* and described the extract as *'just a bit of a mid discussion'* (B-URN-000502069, page 223).

²³⁸ [RBC Trader 2] (RBC) confirmed in interview that *'10.75'* referred to *'a mid relating to [...] 42 55s'* (B-URN-000502076, pages 137 and 138).

[DB Trader] (Deutsche Bank) said in interview that *'10.75'* referred to RBC ([RBC Trader 2])'s *'middle'* for *'42/55s'* (B-URN-000502069, pages 224 and 225).

²³⁹ [DB Trader] (Deutsche Bank) said in interview that he understood RBC ([RBC Trader 2]) as follows: *'[RBC Trader 2] tells me the level that something traded, "42s 49s", erm, traded – "went down at 10 and a half"'* (B-URN-000502069, page 223).

²⁴⁰ Referred to by RBC ([RBC Trader 2]) at 14:28:03.

²⁴¹ [DB Trader] (Deutsche Bank) said in interview that at this timestamp he was *'making an assumption that [RBC Trader 2] would move his' mid-price*, because *'if something traded in the broker market, our mids would reflect that trade. Not always, but generally it would do'* (B-URN-000502069, page 225).

²⁴² [DB Trader] (Deutsche Bank) said in interview that when saying *'10.85'* he was *'giving him [[RBC Trader 2] (RBC)] my middle there'* and that it was *'my mid for the 42s 55s'* (B-URN-000502069, pages 223 and 225).

²⁴³ B-URN-000502069, page 226.

'never' change his mid-price based on what Deutsche Bank ([DB Trader]) had disclosed to him,²⁴⁴ and that he may have been 'humouring' Deutsche Bank ([DB Trader]).²⁴⁵

- B.141 Notwithstanding [RBC Trader 2] (RBC)'s evidence in interview, the CMA infers that RBC ([RBC Trader 2]) adjusted his mid-price taking into account the information that Deutsche Bank ([DB Trader]) had disclosed to him. That inference is consistent with the interpretation that [DB Trader] (Deutsche Bank) provided in interview. In addition, the CMA's interpretation is consistent with the contemporaneous evidence, ie the Bloomberg chat, in which RBC ([RBC Trader 2]) specifically asked Deutsche Bank ([DB Trader]) to disclose his mid-price for a gilt switch and then, shortly after Deutsche Bank ([DB Trader]) disclosed his mid-price, said he had 'moved' his mid-price for the same gilt switch. Nor is there any indication from that contemporaneous evidence that RBC ([RBC Trader 2]) was joking with or 'humouring' Deutsche Bank ([DB Trader]).

Chat extract table – 14:27:45 to 14:28:51

Timestamp (UTC)	Party (Key Individual) <i>Extract</i>
14:27:45	Deutsche Bank ([DB Trader]) <i>where do u hjaive 42/55s</i>
14:27:50	RBC ([RBC Trader 2]) 10.75
14:27:53	Deutsche Bank ([DB Trader]) <i>i was just on call and all traded down i think</i>
14:28:03	RBC ([RBC Trader 2]) <i>42s49s went down at 10.5</i>
14:28:07 14:28:13	Deutsche Bank ([DB Trader]) <i>must be wider surely</i> <i>49/55s cant be at 0.25</i>
14:28:34	RBC ([RBC Trader 2]) <i>where u think it is</i>
14:28:41	Deutsche Bank ([DB Trader]) 10.85
14:28:51	RBC ([RBC Trader 2]) <i>k moved mine out</i>
14:28:51	Deutsche Bank ([DB Trader]) <i>and i thnk i am being conservative</i>

²⁴⁴ [RBC Trader 2] (RBC) said in interview, 'I mean I would never do that just based on what he's saying' (B-URN-000502076, pages 138 and 139).

²⁴⁵ B-URN-000502076, page 138.

Disclosure of current mid-prices for 2032 gilt – 14:25:11 to 14:27:38

B.142 Following a discussion between RBC ([RBC Trader 2]) and Deutsche Bank ([DB Trader]) in relation to demand for gilts maturing in 20 years ie 2032 gilts, Deutsche Bank ([DB Trader]) disclosed to RBC ([RBC Trader 2]) that his **current mid-price** for 2032 gilts was '60' (*'i am marked at 60 on 32s'* at 14:27:26).²⁴⁷ In response, RBC ([RBC Trader 2]) disclosed that his **current mid-price** for the same gilts was '588' (*'i am 588'* at 14:27:33).²⁴⁸

Chat extract table – 14:25:11 - 14:27:38

Timestamp (UTC)	Party (Key Individual) <i>Extract</i>
14:25:11 14:25:30	RBC ([RBC Trader 2]) <i>20yr is [...]</i> <i>[...]</i>
14:25:47 14:25:57 14:26:13 14:26:15 14:26:28 14:26:32 14:26:36 14:26:44	Deutsche Bank ([DB Trader]) <i>[...]</i> <i>[...] in 20yr</i> <i>[...]</i> <i>[...]</i> <i>[...] 32s</i> <i>[...]</i> <i>[...]</i> <i>[...] in 20yr</i>
14:26:44	RBC ([RBC Trader 2]) <i>[...]</i>
14:26:51	Deutsche Bank ([DB Trader]) <i>[...] 32/42</i>
14:26:56 14:27:00 14:27:05	RBC ([RBC Trader 2]) <i>[...] 32s [...]</i> <i>[...]</i> <i>[...]</i>
14:27:10 14:27:11 14:27:26 14:27:27	Deutsche Bank ([DB Trader]) <i>[...]</i> <i>[...]</i> <i>i am marked at 60 on 32s</i> <i>though</i>

²⁴⁶ A-URN-007251. Deutsche Bank also produced a chat on this date between Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 2]), A-URN-008602.

²⁴⁷ [DB Trader] (Deutsche Bank) said in interview that the extract related to 'a bit of mid sharing outright' in 2032 gilts ie 'in the 32s' and that he was disclosing his 'mid on that bond' (B-URN-000502068, pages 143 and 144). [RBC Trader 2] (RBC) said in interview that this disclosure was Deutsche Bank's ([DB Trader]'s) 'mid, but he's [...]' saying he's marked high' (B-URN-000502076, page 74).

²⁴⁸ [DB Trader] (Deutsche Bank) said in interview that [RBC Trader 2] (RBC) was disclosing 'his mid for that same bond' (B-URN-000502068, page 144).

[RBC Trader 2] (RBC) said in interview that 'that's where I, I have mid, I'm guessing' (B-URN-000502076, page 74).

Timestamp (UTC)	Party (Key Individual) <i>Extract</i>
14:27:33	RBC ([RBC Trader 2]) <i>i am 588</i>
14:27:38	Deutsche Bank ([DB Trader]) <i>[electronic trading platform] 53/63</i>

Disclosure of current mid-prices for gilt switches – 13:56:15 to 13:57:40

- B.143 At 13:56:15 to 13:56:20,²⁵⁰ RBC ([RBC Trader 2]) disclosed to Deutsche Bank ([DB Trader]) information about his mid-prices for ultra-long gilts via brokers, ie gilts maturing in 35 or more years, by saying they were particularly high compared to other observable trading prices, ie the ‘street’²⁵¹ (*‘i look so high to street in ultras’ ‘but dont think i am’*).²⁵²
- B.144 Deutsche Bank ([DB Trader]) responded to RBC ([RBC Trader 2]) by disclosing his current mid-prices for related gilt switches. At 13:56:39, Deutsche Bank ([DB Trader]) said that he did not think ‘the street’ was far from being correct (*‘i don’t think the street are midles [miles] off’*) and at 13:56:47 to 13:56:53, Deutsche Bank ([DB Trader]) then disclosed his **current mid-prices** (*‘13’ and ‘11’*) relating to two gilt switches consisting of 2042 gilts and respectively 2052 and 2055 gilts (***‘got 13 for 42/52s’ ‘11 for 42/55s’***).²⁵³
- B.145 RBC ([RBC Trader 2]) then disclosed his **current mid-prices** (*‘12.95 and 10.9’*) for the same gilt switches (*‘i have 12.95 and 10.9’* at 13:57:01)²⁵⁴ and information about his **current mid-price** for a gilt switch consisting of 2052 and 2055 gilts, by saying that his mid-price for that gilt switch was *‘2.05 or 2.01’* (***‘52s55s is 2.05 or 2.1’*** at 13:57:10).²⁵⁵

Chat extract table – 13:56:15 to 13:57:40

Timestamp (UTC)	Party (Key Individual) Extract
13:56:15 13:56:20	RBC ([RBC Trader 2]) <i>i look so high to street in ultras but dont think i am</i>
13:56:39 13:56:47	Deutsche Bank ([DB Trader]) <i>i dont think the street are midles off got 13 for 42/52s</i>

²⁴⁹ A-URN-007273. Deutsche Bank also produced two chats on this date between Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 2]), A-URN-008613 and A-URN-008614.

²⁵⁰ Timestamps from this chat are recorded in UTC, which was 1 hour behind UK time on that date (BST). Therefore, 13:56:15 should be read as 14:56:15.

²⁵¹ [DB Trader] (Deutsche Bank)’s evidence in interview was that his reference to ‘the street’ was to composite mid-prices (B-URN-000502068, pages 194 to 195). [RBC Trader 2] (RBC) in interview said that the ‘street’ referred ‘to the market as a whole, yeah, so, [electronic trading platform]’ (B-URN-000502076, pages 130 and 131).

²⁵² [DB Trader] (Deutsche Bank) said in interview that ‘ultras’ were gilts with a maturity of ‘[t]hirty-five years plus’ (B-URN-000502068, page 193).

²⁵³ [DB Trader] (Deutsche Bank) said in interview that he disclosed his mid-prices for these products (*‘I’ve shared two mids [...] “13 for 42s/52s” and “11 for 42s/55s”*’, B-URN-000502068, pages 192 to 193).

²⁵⁴ [RBC Trader 2] (RBC) said in interview that in this extract he and Deutsche Bank ([DB Trader]) were ‘comparing mids’ and that those ‘mids’ were ‘very close to each other’ (B-URN-000502076, page 130).

[DB Trader] (Deutsche Bank) said in interview that ‘[RBC Trader 2]’s given me his mids’ (B-URN-000502068, page 193).

²⁵⁵ [RBC Trader 2] (RBC) said in interview that he was ‘guessing’ that his mid-price was one of those two figures, ‘based on something that’s trading in the market or wherever it -- wherever the prices are in the market’ (B-URN-000502076, page 130).

Timestamp (UTC)	Party (Key Individual) <i>Extract</i>
13:56:53	11 for 42/55s
13:57:01 13:57:10	RBC ([RBC Trader 2]) <i>i have 12.95 and 10.9</i> 52s55s is 2.05 or 2.1
13:57:16 13:57:26 13:57:35	Deutsche Bank ([DB Trader]) <i>i bought 55s at 11.1</i> <i>not long ago</i> <i>on [broker]</i>
13:57:40	RBC ([RBC Trader 2]) <i>yeah but 42s49s on the move</i>

Summary

B.146 On 9 April 2013, Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 2]) engaged in the following **Trading Conduct**:

- (a) In the context of discussing prices observed via brokers for gilts maturing in 20 years, Deutsche Bank ([DB Trader]) disclosed to RBC ([RBC Trader 2]) his **current mid-price** for a related gilt switch consisting of 2032 and 2042 gilts. RBC ([RBC Trader 2]) then disclosed to Deutsche Bank ([DB Trader]) his **current mid-price** for another related product, a gilt fly consisting of 2022, 2032 and 2042 gilts, to which Deutsche Bank ([DB Trader]) responded to RBC ([RBC Trader 2]) to disclose his **current mid-price** for that same fly. Finally, Deutsche Bank ([DB Trader]) disclosed to RBC ([RBC Trader 2]) his current mid-price for 'longs' (a gilt switch consisting of gilts maturing in ten and 30 years).
- (b) Later that day, RBC ([RBC Trader 2]) disclosed to Deutsche Bank ([DB Trader]) his **current mid-price** for 'longs' to which Deutsche Bank ([DB Trader]) responded by disclosing to RBC ([RBC Trader 2]) his **current mid-price** for the same product.

Disclosure of current mid-prices – 07:51:52 to 07:53:17

- B.147 At 07:51:52 and 07:52:11,²⁵⁷ RBC ([RBC Trader 2]) disclosed that his prices for gilts maturing in 20 years were 'high' relative to prices observable via [electronic trading platform] ('*electronic trading platform*'), and that he could not understand why ('*i look so high in 20yr vs [electronic trading platform]*') 'cant see why' at 07:51:52 and 07:52:11).
- B.148 At 07:52:04 and 07:52:22, Deutsche Bank ([DB Trader]) disclosed that his prices were also 'high' and his **current mid-price** ('35.9') for a related gilt switch, ie a gilt switch consisting of 2032 and 2042²⁵⁸ gilts ('*yeah i am high too*' '***i'm marking 32/42s at 35.9***').
- B.149 RBC ([RBC Trader 2]) disclosed then his **current mid-price** ('70.9') for a related product, ie the gilt fly consisting of 2022, 2032 and 2042 gilts ('***marking 22/32/42 at 70.9***' at 07:52:24). At 07:52:59, Deutsche Bank ([DB Trader]) then disclosed his **current mid-price** ('71.3') for the same gilt fly ('***i have 71.3 for that***').

²⁵⁶ A-URN-008619/A-URN-008621. RBC also produced a chat on this date between Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 2]), A-URN-007283.

²⁵⁷ Timestamps from this chat are recorded in GMT, which was 1 hour behind UK time on that date (BST). Therefore, 07:51:52 should be read as 08:51:52.

²⁵⁸ Being a gilt maturing in approximately 20 years.

B.150 Deutsche Bank ([DB Trader]) also disclosed his **current mid-price** for a further related product, 'long[s]' ('**btu [but] i have long at 143.1**'). The CMA infers from the context of the Bloomberg chat that 'longs' referred to a gilt switch consisting of gilts maturing in ten and 30 years, and that in any event the Parties would have known at the time to which product they were referring, given RBC ([RBC Trader 2]) did not seek clarification from Deutsche Bank ([DB Trader]) and instead later disclosed his own mid-price for the same product (see below).

Chat extract table – 07:51:52 to 07:53:17

Timestamp (GMT)	Party (Key Individual) <i>Extract</i>
07:51:52	RBC ([RBC Trader 2]) <i>i look so high in 20yr vs [electronic trading platform]</i>
07:52:04	Deutsche Bank ([DB Trader]) <i>yeah i am high too</i>
07:52:11	RBC ([RBC Trader 2]) <i>cant see why</i>
07:52:22	Deutsche Bank ([DB Trader]) <i>i'm marking 32/42s at 35.9</i>
07:52:24	RBC ([RBC Trader 2]) <i>marking 22/32/42 at 70.9</i>
07:52:59 07:53:17	Deutsche Bank ([DB Trader]) <i>i have 71.3 for that</i> <i>btu i have long at 143.1</i>

Disclosure of current mid-prices – 10:24:20 to 10:26:29

B.151 Some hours later, at 10:26:18, RBC ([RBC Trader 2]) disclosed his **current mid-price** ('143.15') for 'longs' ('**i mark them 143.15**'). Deutsche Bank ([DB Trader]) then disclosed his **current mid-price** ('143') for the same product ('**i have 143**'). As explained in paragraph B.150 above, the CMA infers that 'longs' referred to a gilt switch that consisted of gilts maturing in ten and 30 years, and that in any event the Parties knew at the time to which product they were referring.

Chat extract table – 10:24:20 to 10:26:29

Timestamp (GMT)	Party (Key Individual) <i>Extract</i>
10:24:20	RBC ([RBC Trader 2]) <i>longs are so choppy</i>
10:24:42	Deutsche Bank ([DB Trader]) <i>Ridiculous</i>
10:24:53 10:26:14 10:26:18	RBC ([RBC Trader 2]) <i>deal related i think</i> <i>longs trade 143</i> <i>i mark them 143.15</i>

Timestamp (GMT)	Party (Key Individual) <i>Extract</i>
10:26:22 10:26:25	<i>and im 5 cents high to [electronic trading platform]</i>
10:26:27	Deutsche Bank ([DB Trader]) <i>Haha</i>
10:26:27	RBC ([RBC Trader 2]) <i>[expletive]</i>
10:26:29	Deutsche Bank ([DB Trader]) <i>i have 143</i>

Disclosure of current mid-prices – 13:26:24 to 13:28:05

- B.152 At 13:26:24,²⁶⁰ in the context of composite mid-prices being observed via [electronic trading platform], RBC ([RBC Trader 2]) asked Deutsche Bank ([DB Trader]) for his mid-price for a gilt switch consisting of 2032 and 2036 gilts (*'where u marking 32/36'*).²⁶¹ In response, at 13:27:07, Deutsche Bank ([DB Trader]) disclosed to RBC ([RBC Trader 2]) that his **current mid-price** for that gilt switch was **'19'**.²⁶² Deutsche Bank ([DB Trader]) then further disclosed that mid-price might be *'wrong'* (*'if that wrong#'* at 13:27:20).
- B.153 RBC ([RBC Trader 2]) replied that he had the same **current mid-price** for the gilt switch, ie a mid-price of **'19'** (***'no i have same'*** at 13:27:58), but that mid-price *'look[ed] high'* compared to prices observed elsewhere (*'but i look high'* at 13:28:05).²⁶³

Chat extract table – 13:26:24 to 13:28:05

Timestamp (UTC)	Party (Key Individual) <i>Extract</i>
13:26:24	RBC ([RBC Trader 2]) <i>where u marking 32/36</i>
13:27:07 13:27:20	Deutsche Bank ([DB Trader]) 19 <i>if that wrong#</i>
13:27:58 13:28:05	RBC ([RBC Trader 2]) <i>no i have same</i> <i>but i look high</i>

²⁵⁹ A-URN-007285. Deutsche Bank also produced a chat on this date between Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 2]), A-URN-008624.

²⁶⁰ Timestamps from this chat are recorded in UTC, which was 1 hour behind UK time on that date (BST). Therefore, 13:26:24 should be read as 14:26:24.

²⁶¹ [RBC Trader 2] (RBC) confirmed in interview that '32/36' was a reference to the '32/36 gilt switch trade' (B-URN-000502076, page 85).

[DB Trader] (Deutsche Bank) said in interview that at this timestamp RBC ([RBC Trader 2]) was asking him *'where I've got the mid between two gilts, the 32s and the 36s'* (B-URN-000502068, page 146).

²⁶² [DB Trader] (Deutsche Bank) confirmed in interview that this was his *'mid'* for that gilt switch (B-URN-000502068, page 146).

²⁶³ [RBC Trader 2] (RBC) said in interview that both he and Deutsche Bank ([DB Trader]) *'both have the same mid'* and that, when he was saying *'i look high'*, *'I guess I'm talking about [electronic trading platform]'*, ie the [electronic trading platform] composite mid-price (B-URN-000502076, page 85). [RBC Trader 2] (RBC) also said that *'I guess I was having a sense check. But as I said before, you know, we use multiple sources to check'* (B-URN-000502076, page 87).

[DB Trader] (Deutsche Bank) said in interview *'when he says he looks high, he -- he'll mean he looks high versus his [electronic trading platform] composite middle'* (B-URN-000502068, page 146).

Disclosure of current mid-prices for a gilt switch – 03:32:44 to 03:52:13

- B.154 At 03:32:44 and 03:32:56,²⁶⁵ RBC ([RBC Trader 2]) commented that he thought prices he was observing in relation to 2027 and 2028 gilts via brokers looked ‘*high*’ relative to – the CMA infers – his mid-prices (*‘is everyone long 27s and 28s or something?’ ‘always looks high to me’*).²⁶⁶
- B.155 In response, Deutsche Bank ([DB Trader]) disclosed information about his **current mid-price** for a gilt switch consisting of 2022 gilts and one of the gilts RBC ([RBC Trader 2]) had mentioned:²⁶⁷ Deutsche Bank ([DB Trader]) disclosed that his mid-price for that gilt switch was ‘*in [the] middle*’ of ‘75.5’ and ‘75’, ie at or approximately 75.25²⁶⁸ (***‘was 75.5/75’ ‘so i have marked in middle’*** at 03:33:59 and 03:34:05).
- B.156 RBC ([RBC Trader 2]) then disclosed that his **current mid-price** was ‘.4’, which the CMA infers to have related to the same gilt switch and to have meant ‘75.4’ (***‘i have them .4’*** at 03:34:16).²⁶⁹
- B.157 Deutsche Bank ([DB Trader]) then updated the disclosure he had made earlier, by saying that he had the same **current mid-price** (‘.4’) for the gilt switch²⁷⁰ as RBC ([RBC Trader 2]) (***‘oops... has them marked at .4’*** at 03:52:13).²⁷¹

²⁶⁴ A-URN-008625. RBC also produced a chat on this date between Deutsche Bank ([DB Trader]) and RBC ([RBC Trader 2]), A-URN-007287.

²⁶⁵ Timestamps from this chat are recorded in EDT, which was 5 hours behind UK time on that date (BST). Therefore, 03:32:44 should be read as 08:32:44.

²⁶⁶ The Key Individuals’ evidence in interview is consistent with the CMA’s interpretation:

[RBC Trader 2] (RBC) said in interview that he was referring to the ‘*[electronic trading platform] mid always looking high*’ (B-URN-000502076, page 131).

[DB Trader] (Deutsche Bank) said in interview that he understood RBC ([RBC Trader 2]) to be stating that the DMO or [electronic trading platform] composite mid-prices observable looked ‘*high*’ relative to where RBC ([RBC Trader 2]) had them ‘*marked*’ (*‘By that I think he’s saying that the DMO [...] mid or [electronic trading platform] mid looks high versus where he’s got them marked’* B-URN-000502068, page 195).

²⁶⁷ [DB Trader] (Deutsche Bank) said in interview that he ‘*must*’ in that timestamp have been referring to the 2022 gilt being traded alongside the either ‘27s or 28s’ (*‘must be 22’s against either – 22s either against 27s or 28s, I can’t tell which one it was. I’m just giving him what was the broker price in, in one of those bonds. I think probably 27s.’*, B-URN-000502068, page 195). The CMA considers that the gilt switch to which Deutsche Bank ([DB Trader]) was referring would have been clear to the Parties at the time of this Bloomberg chat, given RBC ([RBC Trader 2]) did not seek clarification from Deutsche Bank ([DB Trader]) but instead responded with his own mid-price for the same product.

²⁶⁸ [DB Trader] (Deutsche Bank) said in interview that these timestamps referred to ‘*mid price*’ of ‘75.25 or 75.3’ (B-URN-000502068, page 197).

[RBC Trader 2] (RBC) said in interview that Deutsche Bank ([DB Trader]) was referring to having ‘*his mid in the middle at 75 and a quarter.*’ (B-URN-000502076, page 131).

²⁶⁹ Consistent with the CMA’s interpretation, [DB Trader] (Deutsche Bank) confirmed in interview that he interpreted this timestamp to refer to RBC ([RBC Trader 2])’s ‘*mid*’ and to ‘75.4’. (B-URN-000502068, page 197).

²⁷⁰ [DB Trader] (Deutsche Bank) said in interview that he was referring to the same product as earlier in the extract (*‘I think I’m still talking about the same thing. I think I’m talking about the same thing the whole time.’* B-URN-000502068, page 197).

²⁷¹ [DB Trader] (Deutsche Bank) said in interview that he must have ‘*looked at the wrong mid*’ and that ‘*I thought I had them marked in the middle but like I had them 0.4*’ (B-URN-000502068, page 196).

[RBC Trader 2] (RBC) said in interview that this disclosure by Deutsche Bank ([DB Trader]) shows that he has ‘*got the same mid as me*’ (B-URN-000502076, page 132).

Chat extract table – 03:32:44 to 03:52:13

Timestamp (EDT)	Party (Key Individual) Extract
03:32:44 03:32:56	RBC ([RBC Trader 2]) <i>is everyone long 27s and 28s or something?</i> <i>always looks high to me</i>
03:33:59 03:34:05	Deutsche Bank ([DB Trader]) <i>was 75.5/75</i> <i>so i have marked in middle</i>
03:34:16 03:34:24 03:50:22	RBC ([RBC Trader 2]) <i>i have them .4</i> <i>guess we will find out</i> <i>27s gonna get drilled</i>
03:52:13	Deutsche Bank ([DB Trader]) <i>oops... has them marked at .4</i>