

Auctions by the *Common Auction Platform*

April, May, June 2021

Auction platform: European Energy Exchange (EEX)

Member States: This report has been prepared on behalf of the following Member States participating in the joint action: Austria, Belgium, Bulgaria, Republic of Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Portugal, Romania, Slovakia, Slovenia, Spain and Sweden (participating Member States), and Poland.

Auction dates/reporting period:

General Allowances:

1, 6, 7(PL), 8, 12, 13, 14(PL), 15, 19, 20, 21(PL), 22, 26, 27, 28(PL), 29 April 2021;

4, 5(PL), 6, 10, 11, 12(PL), 17, 18, 19(PL), 20, 25, 26(PL), 27 May 2021;

1, 2(PL), 3, 7, 8, 9(PL), 10, 14, 15, 16(PL), 17, 21, 22, 23(PL), 24, 28, 29, 30(PL) June 2021;

Aviation Allowances:

14(PL) April 2021;

12 May 2021;

No auctions in June 2021;

Cancelled auctions:

No auctions in April 2021;

No auctions in May 2021;

No auctions in June 2021;

Auctioning is the default method of allocating allowances within the EU emissions trading system (EU ETS). Since the start of the *Third trading period* in 2013, over 6 billion allowances allocated under the EU ETS have been auctioned. Auctioning of emission allowances at that scale is unprecedented and delivers valuable experience for auction design in other carbon markets and for other environmental assets.

Auctioning is the most transparent and efficient method of allocating allowances and puts into practice the principle that the polluter should pay.

The auctions are conducted pursuant to the modalities stipulated in the *Auctioning Regulation*. The European Energy Exchange (EEX) in Leipzig is the common platform for the large majority of countries participating in the EU ETS. EEX also acts as Germany's auction platform. Poland may appoint an opt-out auction platform but is using for the time being the common auction platform. Allowances for Northern Ireland are also auctioned on EEX.

The numbers of *General Allowances* to be auctioned by each State on behalf of which they are auctioned are determined on the basis of their historical share of emissions from installations covered by the EU ETS.

At least half of auctioning revenues, or the equivalent in financial value, and all of the revenues from auctioning allowances to the aviation sector, should be used by the Member States to combat climate change in Europe or other countries.

For further information: http://ec.europa.eu/clima/policies/ets/cap/auctioning/index_en.htm

Editor's note:

This report has been prepared by the Commission on behalf of the participating Member States and Poland assembling for publication the information provided by the common auction platform on a monthly basis for those Member States, in accordance with Article 10(4) of the ETS Directive.

Methodology: For reasons of confidentiality and proper enforcement of the applicable rules, the report refers to reporting on the auctions held based on information provided by EEX. EEX is consulted before each publication. Any data not directly related to the auctions is based only on public reports.

The report is in accordance with the template agreed with the participating Member States.

Disclaimer: The authors have made every effort to ensure that the information provided is complete, correct and precise for the reporting period. Nevertheless, the report is based on limited information available to the authors in a market context where much information has to remain confidential. The authors did not actively verify the information and EEX's compliance with the specific rules and provisions applicable under European or national law. Therefore, the authors and the Member States on whose behalf this report was drafted deny any responsibility or liability whatsoever for its contents, regardless of the nature of such contents. Any reliance by any person or entity on the information provided in this report is solely at that person's or entity's own risk. Monthly averages provided are weighted by each auction's auction volume, unless otherwise indicated.

Glossary: terms and expressions written in *italics* are included in the glossary.

Introduction

The reports include data on the auctions performed by the *common auction platforms* on behalf of the *participating Member States* and Poland.

The auctions for the *participating Member States* were conducted by EEX in its capacity as *Common Auction Platform* appointed pursuant to Article 26(2) of the Auctioning Regulation (also referred to as transitional common auction platform or TCAP) until 18 August 2016 and since then by EEX appointed as *Common Auction Platform* pursuant to Article 26(1) of the Auctioning Regulation (also referred to as second common auction platform or CAP2). On 4 November 2020, the European Commission signed a five-year contract with EEX and its clearing system for the services of the third common auction platform (CAP3) under the EU Emissions Trading System (EU ETS).

In accordance with the second subparagraph of Article 30(7) of the Auctioning Regulation, pending the procurement, appointment and listing of its opt-out auction platform, Poland concluded in December 2020 an agreement with EEX to make use of the common auction platform to auction its share of allowances in the absence of listing of its auction platform.

The member states of the European Free Trade Association (EFTA) that are Party to the European Economic Area (EEA)¹ started on 3 June 2019 making use of the *Common Auction Platform* by aggregating their volumes to those auctioned on behalf of the *participating Member States*.

¹ Iceland, Liechtenstein and Norway.

Executive summary

In the reporting period, EEX, in its capacity as the *Common Auction Platform (CAP3)*, conducted auctions of *general allowances* and *aviation allowances* for the *fourth trading period* on behalf of the *participating Member States*. During this period, EEX held auctions for *general allowances* and *aviation allowances* on behalf of Poland.

All auctions were held successfully, in line with the Auctioning Regulation. No irregularities or deviations from the requirements were observed. The table below contains a summary of the information concerning the conducted auctions.

The April, May, June 2021 auctions at a glance:

	General Allowances			Aviation Allowances		
	Apr	May	Jun	Apr	May	Jun
General						
Number of auctions	16	13	18	1	1	-
Total volume auctioned	49 762 000	39 896 500	55 627 000	114 000	614 500	-
Amount raised from the auctions (€)	2 230 370 115	2 080 915 820	2 933 509 560	4 962 420	33 318 190	-
Average Auction Clearing Price (€/allowance)	44.82	52.16	52.74	43.53	54.22	-
Total bid volume	81 098 000	61 722 500	80 288 000	508 000	1 949 500	-
Average Cover ratio	1.6	1.5	1.4	4.5	3.2	-
Monthly HHI	1 516	1 726	1 164	7 979	2 500	-
Participation						
Number of eligible bidders	91	91	91	91	91	91
Number of participating bidders ⁽¹⁾	35	35	39	7	6	-
Number of successful bidders ⁽¹⁾	32	35	37	2	5	-
Average number of bidders per auction	25.3	24.0	26.1	7.0	6.0	-

Average number of successful bidders per auction		16.7	18.5	19.6		2.0	5.0	-
Auction data								
Average total volume bid per bidder per auction		201 640	199 572	173 524		72 571	324 917	-
Average bid size (volume per bid)		55 620	59 136	54 646		20 320	74 981	-
Average volume won per bidder per auction		193 896	171 028	161 071		57 000	122 900	-
Average range of bids (€)		4.63	13.60	12.28		0.73	0.78	-
Cancelled Auctions		0	0	0		0	0	-

(1): Number of unique individual bidders or unique successful bidders present in a whole month.

1. Results of the auctions

The total revenues from the auctions of general allowances accrued to the participating Member States and Poland from the start of the Third trading period auctions (November 2012) to June 2021 are EUR 60,583,642,435, and of aviation allowances EUR 544,416,500. Looking exclusively at the Fourth trading period (January 2021 - June 2021) the total revenues from the auctions of general allowances are EUR 11,499,907,080 and of aviation allowances EUR 64,028,160. Further data is provided in Annex 1.

Information on *general allowances'* auctions is provided in section 1.1, and on *aviation allowances* in section 1.2 hereafter. Detailed information per auction covered by the present report is available in the EEX website².

²<https://www.eex.com/en/market-data/environmental-markets/auction-market>

1.1. General allowances auctions

1.1.1. Clearing prices and participation - general allowances

An overview of the auction results for the *participating Member States* and Poland is provided in Table 1.

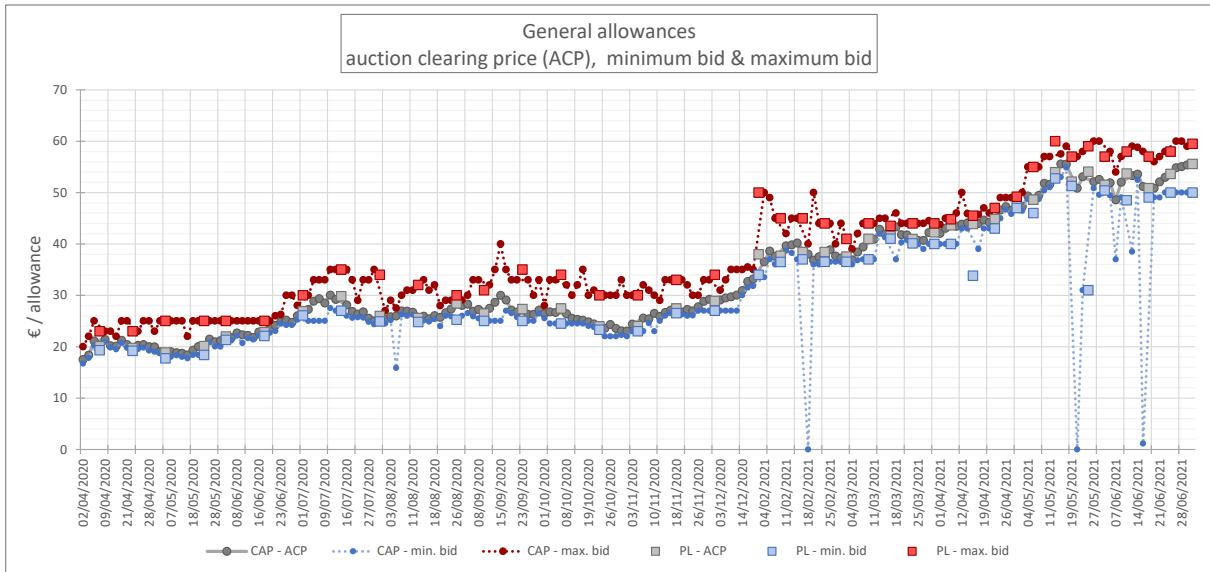
Table 1: General allowances - main statistics on the results of the auctions per month

Month	Total auction volume	Total bid volume	Total revenue (€)	Average Cover ratio[1]	Average number of bidders	Average number of successful bidders	Average auction clearing price (€)
Jun 21	55 627 000	80 288 000	2 933 509 560	1.4	26.1	19.6	52.74
May 21	39 896 500	61 722 500	2 080 915 820	1.5	24.0	18.5	52.16
Apr 21	49 762 000	81 098 000	2 230 370 115	1.6	25.3	16.7	44.82
Mar 21	58 915 500	101 135 000	2 384 370 530	1.7	24.5	17.8	40.47
Feb 21	49 762 000	86 028 000	1 870 741 055	1.7	26.7	20.4	37.59
Jan 21	-	-	-	-	-	-	-
Dec 20	30 115 500	45 640 500	890 427 730	1.5	24.9	19.6	29.57
Nov 20	64 166 500	98 183 000	1 680 636 490	1.5	26.8	20.0	26.19
Oct 20	64 172 500	102 287 000	1 617 594 100	1.6	27.2	21.1	25.21
Sep 20	60 221 000	97 108 000	1 652 727 680	1.6	27.1	20.2	27.44
Aug 20	27 002 500	53 053 500	717 255 960	2.0	22.7	18.5	26.56
Jul 20	57 456 000	88 777 000	1 572 416 810	1.5	21.4	16.3	27.37
Jun 20	45 985 000	73 944 000	1 062 777 700	1.6	20.6	14.3	23.11
May 20	35 117 000	56 002 000	684 921 430	1.6	21.9	15.6	19.50
Apr 20	43 271 000	76 593 500	866 904 870	1.8	21.5	15.9	20.03
2020 total	560 046 500	951 992 500	13 723 091 055	1.7	24.3	18.2	24.50
2019 total	460 978 500	906 546 500	11 357 236 835	2.0	24.1	17.2	24.64
2018 total	642 477 000	1 662 693 000	9 917 590 730	2.6	25.6	18.0	15.44
2017 total	648 415 500	1 761 212 000	3 744 838 845	2.7	21.2	14.6	5.78
2016 total	474 261 000	1 092 400 000	2 496 870 295	2.3	19.0	13.4	5.26
2015 total	413 874 000	1 337 010 500	3 154 940 925	3.2	18.3	13.3	7.62
2014 total	335 052 000	1 796 711 000	1 977 712 120	5.4	17.6	11.9	5.90
2013 total	530 488 000	1 761 639 500	2 349 853 340	3.3	18.4	13.2	4.43

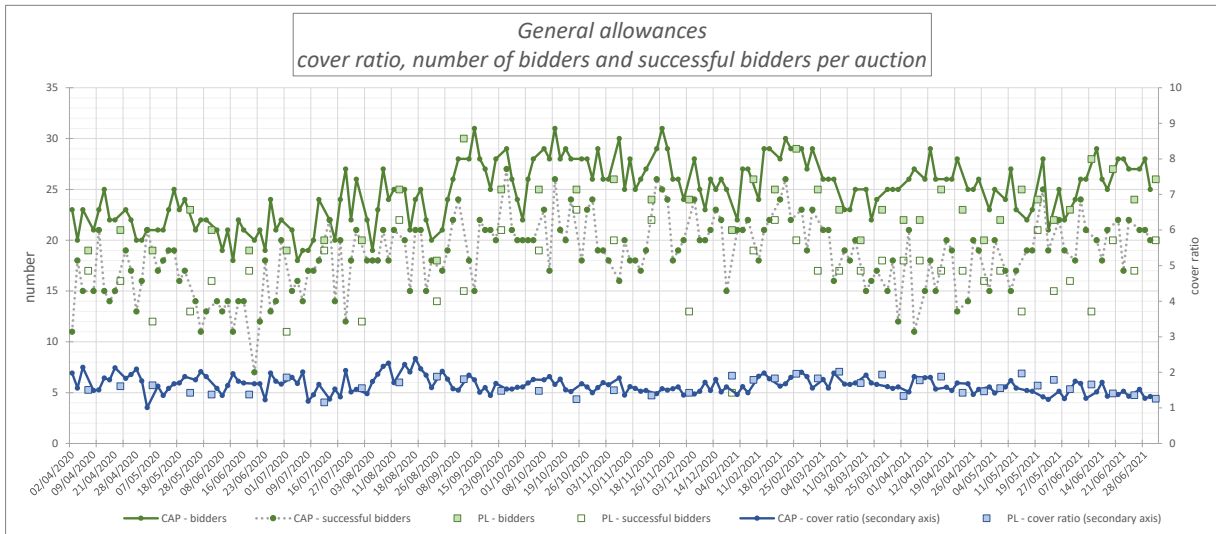
[1] The cover ratio is the ratio between the total bid volume and the auction volume.

During April, May, June 2021, the difference between the Auction Clearing Prices and the mean of the best-ask and best-bid prices on the EEX spot secondary market for general allowances at the closure of the auction bidding window was on average EUR 0.06, -0.14, -0.15 respectively, and this difference had a standard deviation of EUR 0.18, 0.16, 0.30 respectively.

Graph 1: General allowances - auction clearing price (ACP), maximum bid & minimum bid

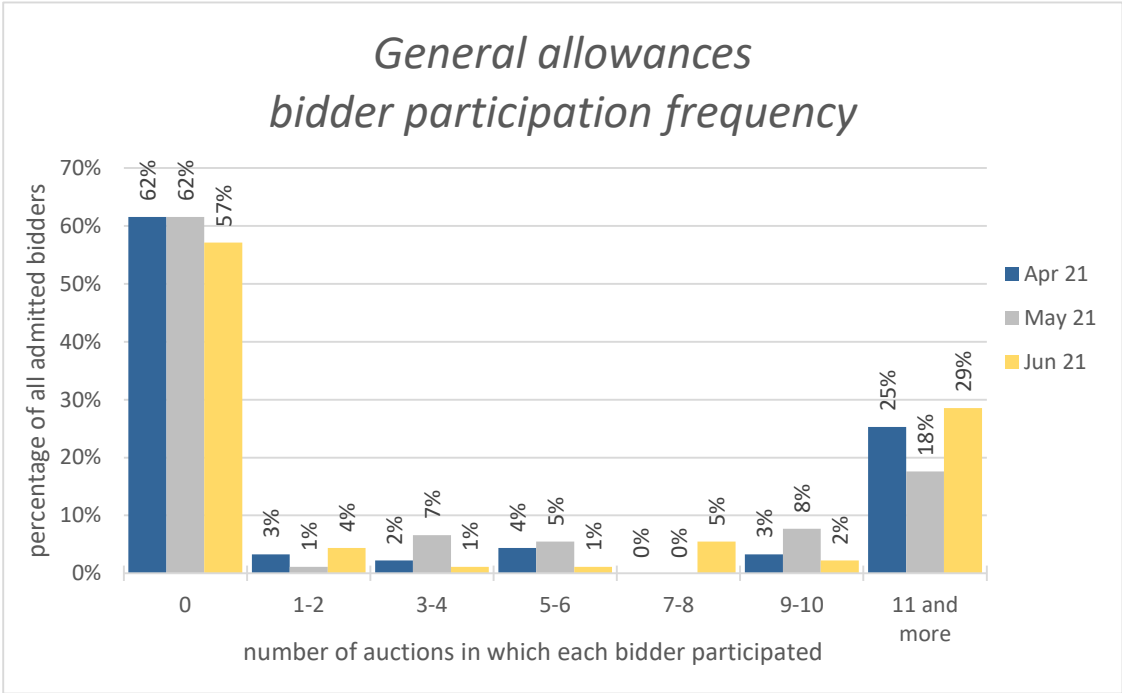


Graph 2: General allowances - cover ratio (left axis), number of bidders and successful bidders (right axis) per auction



The number of eligible bidders is provided in Section 2. Out of these 35, 35 and 39 different bidders participated in the auctions in respectively during the reporting period. Graph 3 indicates the participation frequency over these months.

Graph 3: General allowances -bidder participation frequency



1.1.2. Bidding behaviour - general allowances

Table 2 provides monthly data on the bids submitted over 15 months. See also Graph 4.

Table 2: General Allowances - monthly statistics on the submitted bids

Month	Nr of auctions	Nr of bidders ⁽¹⁾	Total volume of bids	Average total volume bid per bidder per auction[1]	Average total volume bid per bidder per auction over the month[2]	Standard deviation of total volume per bidder per auction over the month[3]	Total monthly nr of bids	Average nr. of bids per bidder per auction[4]	Average bid size[5]
Jun 21	18	39	80 288 000	173 524	171 190	291 658	1 487	3.2	54 646
May 21	13	35	61 722 500	199 572	198 465	340 064	1 049	3.4	59 136
Apr 21	16	35	81 098 000	201 640	201 236	334 619	1 460	3.6	55 620
Mar 21	19	38	101 135 000	219 296	217 963	320 113	1 662	3.6	60 872
Feb 21	16	40	86 028 000	203 245	201 944	300 469	1 508	3.5	57 512
Jan 21	-	-	-	-	-	-	-	-	-
Dec 20	7	33	45 640 500	272 617	260 803	411 236	674	3.9	68 921
Nov 20	15	38	98 183 000	254 149	243 027	394 064	1 404	3.5	72 130
Oct 20	15	35	102 287 000	259 306	249 480	397 654	1 430	3.5	73 311
Sep 20	14	39	97 108 000	266 879	256 222	457 614	1 298	3.4	76 570
Aug 20	14	37	53 053 500	172 502	166 312	255 369	1 073	3.4	50 628
Jul 20	16	33	88 777 000	280 052	258 825	452 807	1 145	3.3	82 137
Jun 20	15	29	73 944 000	253 535	237 762	338 289	877	2.8	88 162
May 20	11	29	56 002 000	257 521	230 461	340 214	751	3.1	77 226
Apr 20	14	32	76 593 500	274 245	251 952	292 851	1 052	3.5	75 611

(1): Number of unique individual bidders or unique successful bidders present in a whole month.

[1] Monthly weighted average of the average bid volume per bidder in each auction (total bid volume in each auction divided by number of bidders participating in that auction), weighted by volume auctioned in each auction.

[2] Average over the whole month of the volume bid by bidders each time they are present in an auction (computed as total volume bid for the month / sum over whole month of number of bidders present in each auction).

[3] Standard deviation of total volume bid per bidder in each auction over the month

[4] Monthly simple average of the average number of bids per bidder in each auction (total number of bids in each auction divided by number of bidders participating in that auction).

[5] Monthly weighted average of the average bid size per bidder in each auction (total bid volume in each auction divided by number of bids in that auction), weighted by volume auctioned in each auction

Table 3 provides monthly data on successful bids over 15 months. See also Graph 4.

Table 3: General Allowances - monthly statistics on successful bids

Month	Nr of auctions	Nr of successful bidders ⁽¹⁾	Total auction volume	Average volume won per bidder per auction[1]	Average volume won per bidder per auction over the month[2]	Standard deviation of volume won per bidder per auction over the month[3]	Total monthly nr of successful bids
Jun 21	18	37	55 627 000	161 071	158 934	251 871	716
May 21	13	35	39 896 500	171 028	166 931	291 217	489
Apr 21	16	32	49 762 000	193 896	185 679	294 286	564
Mar 21	19	34	58 915 500	180 245	174 823	237 097	710
Feb 21	16	36	49 762 000	170 363	154 062	233 780	645
Jan 21	-	-	-	-	-	-	-
Dec 20	7	28	30 115 500	251 273	213 585	337 965	325
Nov 20	15	35	64 166 500	224 324	214 604	340 736	590
Oct 20	15	33	64 172 500	213 031	202 437	332 633	597
Sep 20	14	34	60 221 000	230 019	210 563	332 460	592
Aug 20	14	34	27 002 500	109 953	104 257	144 589	506
Jul 20	16	31	57 456 000	252 224	217 636	331 763	555
Jun 20	15	28	45 985 000	237 237	218 976	301 271	368
May 20	11	26	35 117 000	245 553	198 401	321 182	325
Apr 20	14	30	43 271 000	213 328	194 914	254 656	368

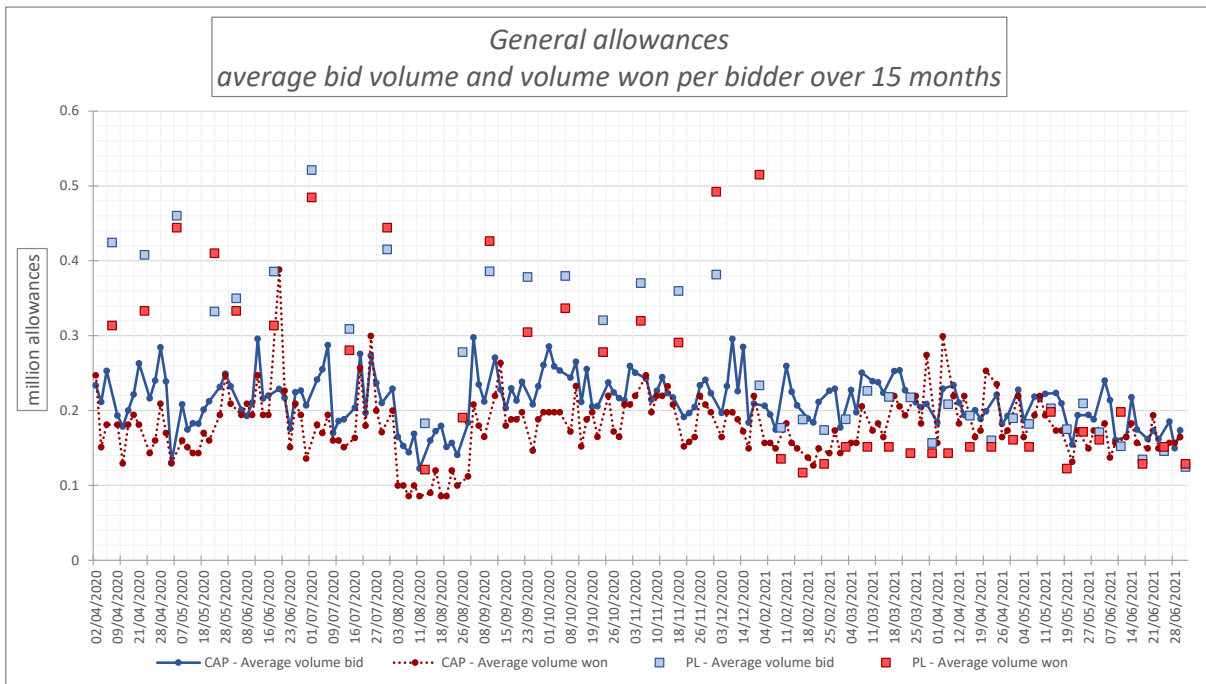
(1): Number of unique individual bidders or unique successful bidders present in a whole month.

[1] Monthly weighted average of the average volume won per bidder in each auction (total volume won in each auction divided by the number of successful bidders in that auction), weighted by volume auctioned in each auction.

[2] Average over the whole month of the volume won per bidder each time they are successful in an auction (computed as total volume auctioned for the month / sum over whole month of number of bidders successful in each auction).

[3] Standard deviation of volume won per bidder in each auction over the month

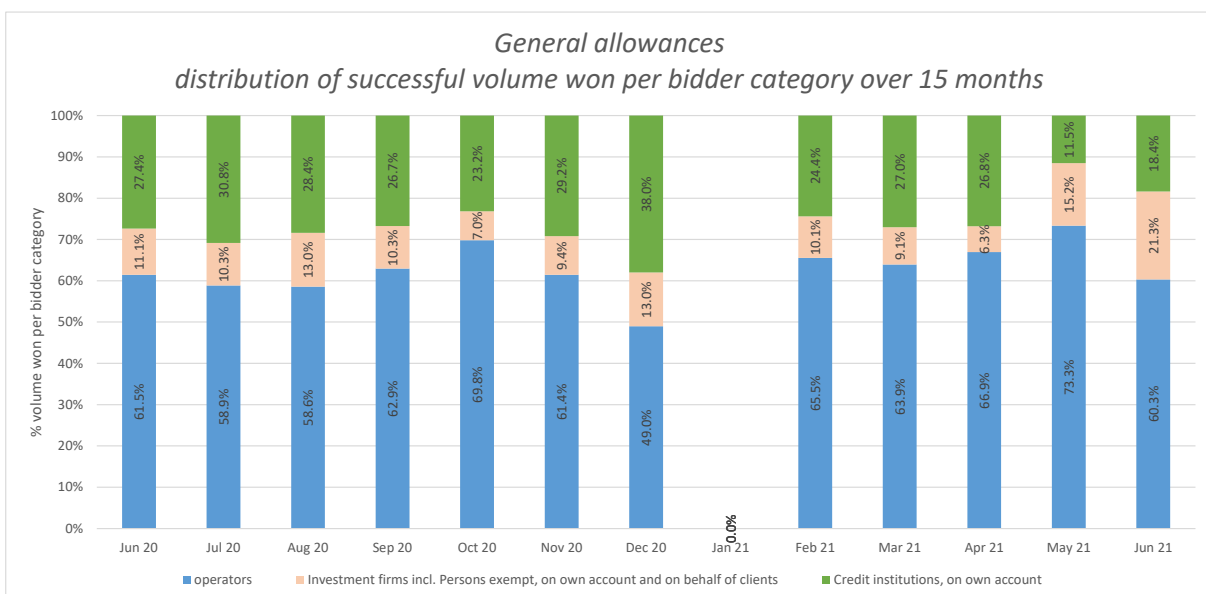
Graph 4: General allowances - average bid volume and volume won per bidder over 15 months



1.1.3. Type of bidders - general allowances

The volume submitted by intermediaries on behalf of a client³ during the reporting period was respectively 0%, 0% and 0%, the remaining volume bid was done on own account. The shares in the total successful bid volume per bidder category are indicated in Graph 5 and in Table 4.

Graph 5: General allowances - distribution of successful won volume per bidder category over 15 months



³ The data related to bidding on behalf of clients reflects the self-assessment of the respective trader.

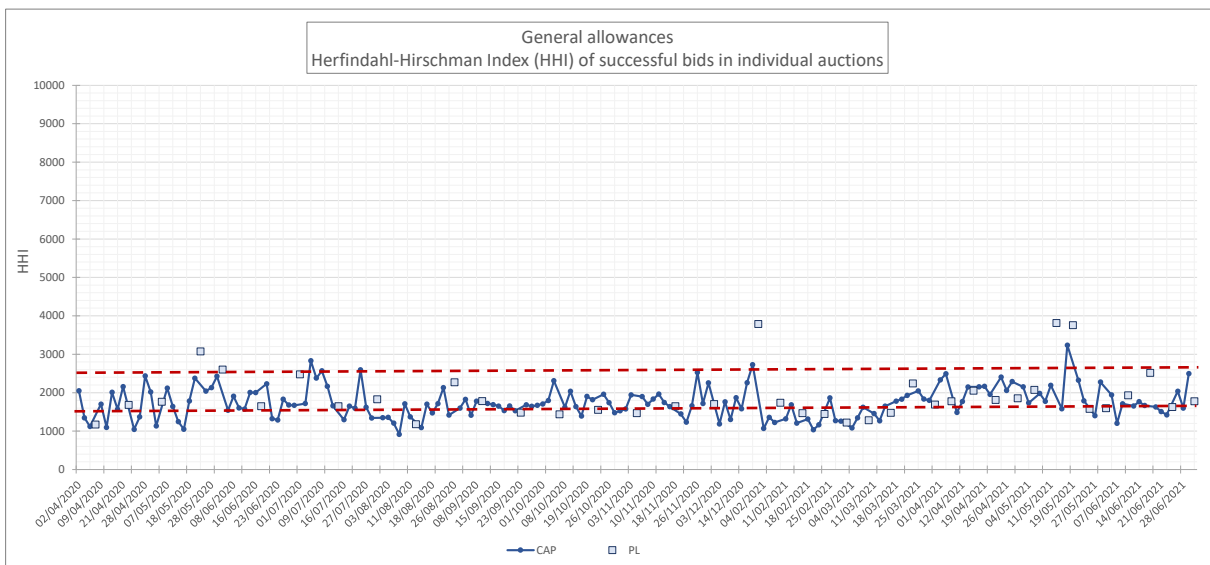
Table 4: General allowances – distribution of volume won per bidder category and their standard deviations

Month	% volume won coming from bidding on behalf of a client	Bidder category	% volume won	Standard deviation of % of volume won
Apr 21	0%	Operators (including Business groupings)	66.94%	17.0% points
		Investment firms (including persons exempt)	6.26%	4.6% points
		Credit institutions	26.79%	15.4% points
May 21	0%	Operators (including Business groupings)	73.33%	11.7% points
		Investment firms (including persons exempt)	15.18%	11.3% points
		Credit institutions	11.49%	7.8% points
Jun 21	0%	Operators (including Business groupings)	60.31%	16.3% points
		Investment firms (including persons exempt)	21.29%	10.2% points
		Credit institutions	18.40%	12.9% points

1.1.4. Concentration - general allowances

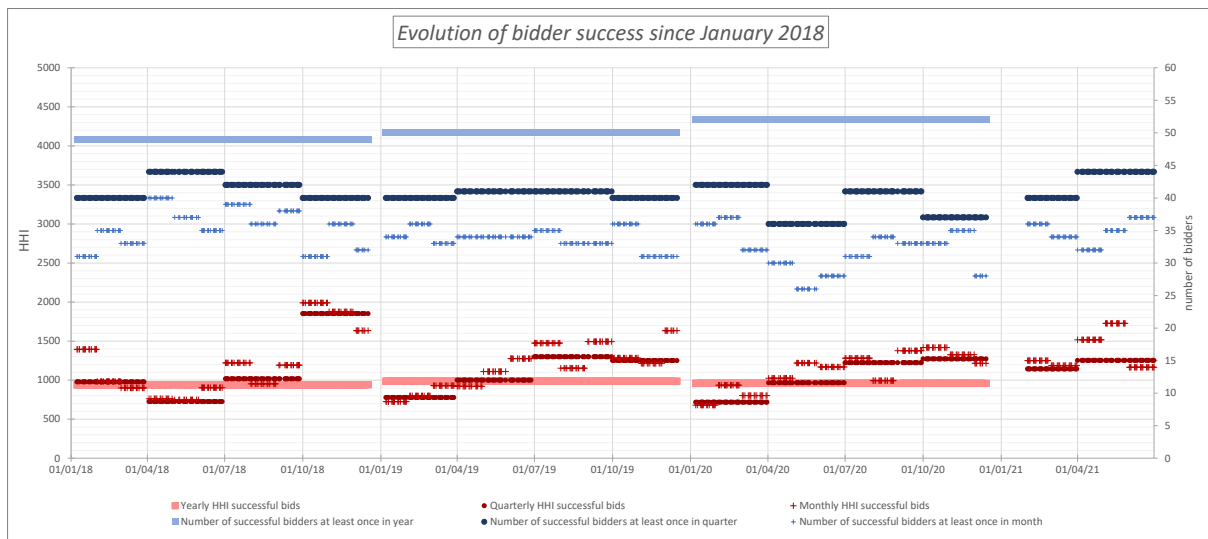
The Herfindahl-Hirschman Index (HHI) of successful bids is used to measure market concentration⁴. The HHI ranges from a value of 0 (perfect competition) to 10 000 (a single buyer). A common interpretation of the HHI is that a score below 1 500 is 'not-concentrated', between 1 500 and 2 500 is 'moderately concentrated,' and above 2 500 is 'highly concentrated' – these thresholds are indicated in Graphs 6 and 7. Graph 6 indicates the HHI of the individual auctions. Graph 7 indicates the monthly and quarterly HHI and successful bidder participation (number of bidders successful at least once in the period of interest) so as to show the variation over different periods, due to the turnover of participants in the auctions.

Graph 6: General allowances - Herfindahl-Hirschman Index of successful bids in individual auctions over 15 months



⁴ The HHI is calculated as the sum of the squares of all successful bidders' shares (in percentage points) of the total auctioned volume over the period of interest.

Graph 7: General allowances - Herfindahl-Hirschman Index of successful bids and successful bidder participation at monthly, quarterly and yearly level



1.2 Aviation allowances auctions

The auctioning of *aviation allowances* restarted as of November 2014⁵. Pursuant to the published *auction calendar*, only *aviation allowances* for the calendar year 2012 were auctioned in 2014⁶; the *aviation allowances* for the calendar years 2013-2015 were auctioned in 2015, in accordance with the published 2015 *auction calendar*. Poland decided to aggregate the *aviation allowances* for the calendar years 2012 to 2015 in a single auction held in May 2015.

1.2.1 Clearing prices and participation – aviation allowances

An overview of the auction results is provided in Table 5.

Table 5: Aviation allowances – main statistics on the results of the auctions per month

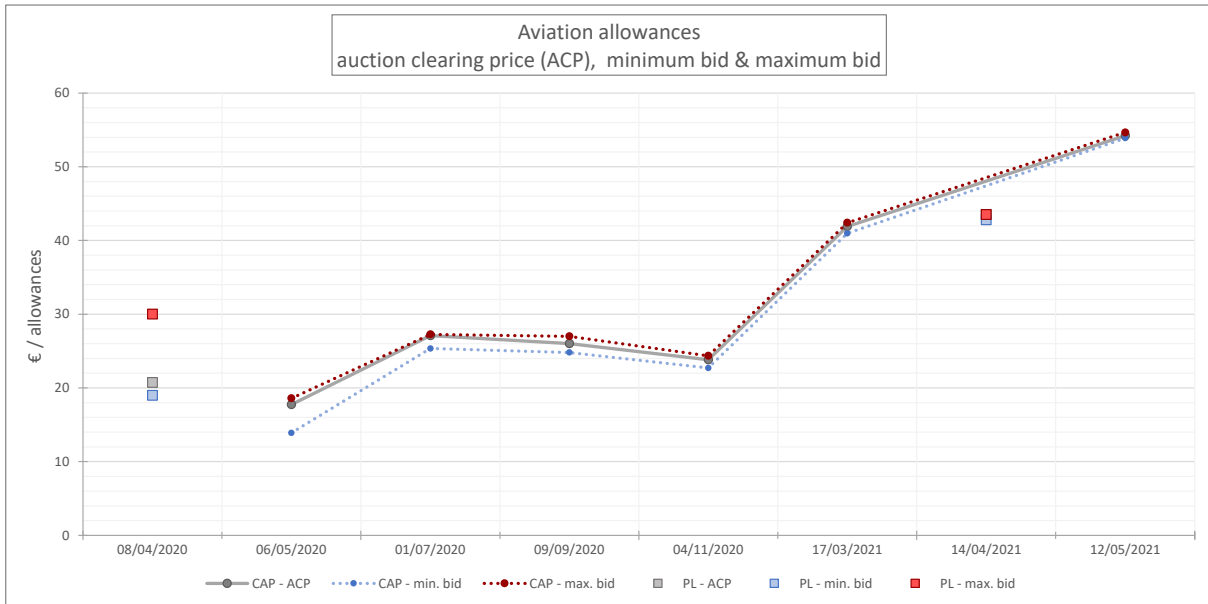
Month	Total auction volume	Total bid volume	Total revenue (€)	Average Cover ratio[1]	Average number of bidders	Average number of successful bidders	Average auction clearing price (€)
Jun 21	-	-	-	-	-	-	-
May 21	614 500	1 949 500	33 318 190	3.2	6.0	5.0	54.22
Apr 21	114 000	508 000	4 962 420	4.5	7.0	2.0	43.53
Mar 21	614 500	1 104 500	25 747 550	1.8	7.0	6.0	41.90
Feb 21	-	-	-	-	-	-	-
Jan 21	-	-	-	-	-	-	-
Dec 20	-	-	-	-	-	-	-
Nov 20	891 500	2 026 000	21 244 445	2.3	10.0	6.0	23.83
Oct 20	-	-	-	-	-	-	-
Sep 20	810 500	1 868 000	21 089 210	2.3	10.0	8.0	26.02
Aug 20	-	-	-	-	-	-	-
Jul 20	810 500	2 453 500	21 964 550	3.0	8.0	4.0	27.10
Jun 20	-	-	-	-	-	-	-
May 20	810 500	1 729 500	14 386 375	2.1	6.0	4.0	17.75
Apr 20	105 500	422 000	2 188 070	4	7.0	4.0	20.74
2020 total	5 049 500	13 474 500	119 509 185	2.7	8.0	5.0	23.67
2019 total	4 701 000	13 172 500	119 584 255	2.8	8.7	5.9	25.44
2018 total	3 941 000	10 830 000	73 956 020	2.7	8.8	6.1	18.77
2017 total	3 329 500	10 300 000	23 771 460	3.1	7.5	6.5	7.14
2016 total	4 219 000	17 973 500	22 266 205	4.3	10.4	4.6	5.28
2015 total	11 641 000	39 026 000	81 846 705	3.4	11.0	7.5	7.03
2014 total	6 570 500	28 201 500	39 454 510	4.3	13.0	8.0	6.00

[1] The cover ratio is the ratio between the total bid volume and the auction volume.

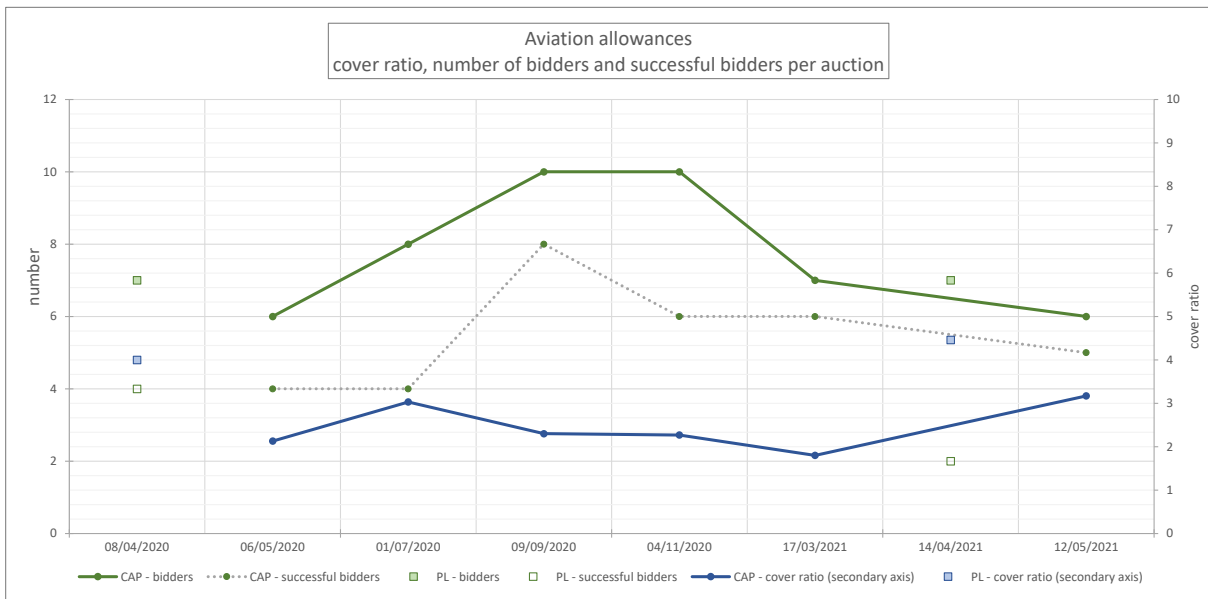
⁵ The auctions were suspended end 2012, see the Regulatory update published by the Commission on 16 November 2012 http://ec.europa.eu/clima/news/articles/news_2012111601_en.htm.

⁶ See also the regulatory update published by the Commission on 29 July 2014: http://ec.europa.eu/clima/news/articles/news_2014072901_en.htm.

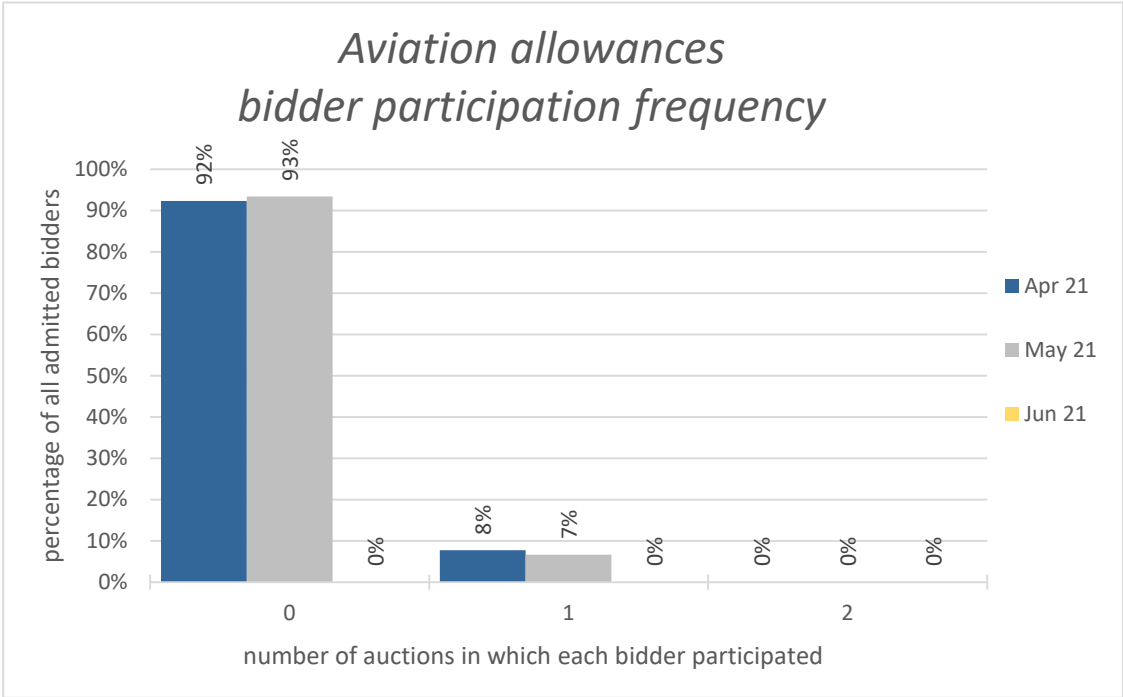
Graph 8: Aviation allowances - auction clearing price (ACP) & maximum prices bid & minimum prices bid



Graph 9: Aviation allowances - cover ratio (left axis), number of bidders and successful bidders (right axis) per auction



Graph 10: Aviation allowances – bidder participation frequency



1.2.2 Bidding behaviour – aviation allowances

Table 6 provides monthly data on the bids submitted over 15 months. See also Graph 11.

Table 6: Aviation allowances – monthly statistics on the submitted bids

Month	Nr of auctions	Nr of bidders ⁽¹⁾	Total volume of bids	Average total volume bid per bidder per auction[1]	Average total volume bid per bidder per auction over the month[2]	standard deviation of total volume bid per bidder per auction over the month [3]	Total monthly nr of bids	Average nr. of bids per bidder per auction[4]	Average bid size[5]
Jun 21	-	-	-	-	-	-	-	-	-
May 21	1	6	1 949 500	324 917	324 917	213 955	26	4.3	74 981
Apr 21	1	7	508 000	72 571	72 571	48 341	25	3.6	20 320
Mar 21	1	7	1 104 500	157 786	157 786	195 077	29	4.1	38 086
Feb 21	-	-	-	-	-	-	-	-	-
Jan 21	-	-	-	-	-	-	-	-	-
Dec 20	-	-	-	-	-	-	-	-	-
Nov 20	1	10	2 026 000	202 600	202 600	246 771	34	3.4	59 588
Oct 20	-	-	-	-	-	-	-	-	-
Sep 20	1	10	1 868 000	186 800	186 800	226 053	31	3.1	60 258
Aug 20	-	-	-	-	-	-	-	-	-
Jul 20	1	8	2 453 500	306 688	306 688	259 914	28	3.5	87 625
Jun 20	-	-	-	-	-	-	-	-	-
May 20	1	6	1 729 500	288 250	288 250	253 121	17	2.8	101 735
Apr 20	1	7	422 000	60 286	60 286	41 562	20	2.9	21 100

(1): Number of unique individual bidders or unique successful bidders present in a whole month.

[1] Monthly weighted average of the average bid volume per bidder in each auction (total bid volume in each auction divided by number of bidders participating in that auction), weighted by volume auctioned in each auction.

[2] Average over the whole month of the volume bid by bidders each time they are present in an auction (computed as total volume bid for the month / sum over whole month of number of bidders present in each auction).

[3] Standard deviation of total volume bid per bidder in each auction over the month

[4] Monthly simple average of the average number of bids per bidder in each auction (total number of bids in each auction divided by number of bidders participating in that auction).

[5] Monthly weighted average of the average bid size per bidder in each auction (total bid volume in each auction divided by number of bids in that auction), weighted by volume auctioned in each auction

Table 7 provides monthly data on successful bids over 15 months. See also Graph 11.

Table 7: Aviation Allowances – Monthly statistics on successful bids

Month	Nr of auctions	Nr of successful bidders ⁽¹⁾	Total auction volume	Average volume won per bidder per auction[1]	Average volume won per bidder per auction over the month[2]	Standard deviation of volume won per bidder per auction over the month [3]	Total monthly nr of successful bids
Jun 21	-	-	-	-	-	-	-
May 21	1	5	614 500	122 900	122 900	61 471	9
Apr 21	1	2	114 000	57 000	57 000	44 000	2
Mar 21	1	6	614 500	102 417	102 417	74 683	11
Feb 21	-	-	-	-	-	-	-
Jan 21	-	-	-	-	-	-	-
Dec 20	-	-	-	-	-	-	-
Nov 20	1	6	891 500	148 583	148 583	156 098	15
Oct 20	-	-	-	-	-	-	-
Sep 20	1	8	810 500	101 313	101 313	81 322	17
Aug 20	-	-	-	-	-	-	-
Jul 20	1	4	810 500	202 625	202 625	219 071	7
Jun 20	-	-	-	-	-	-	-
May 20	1	4	810 500	202 625	202 625	112 786	7
Apr 20	1	4	105 500	26 375	26 375	15 497	5

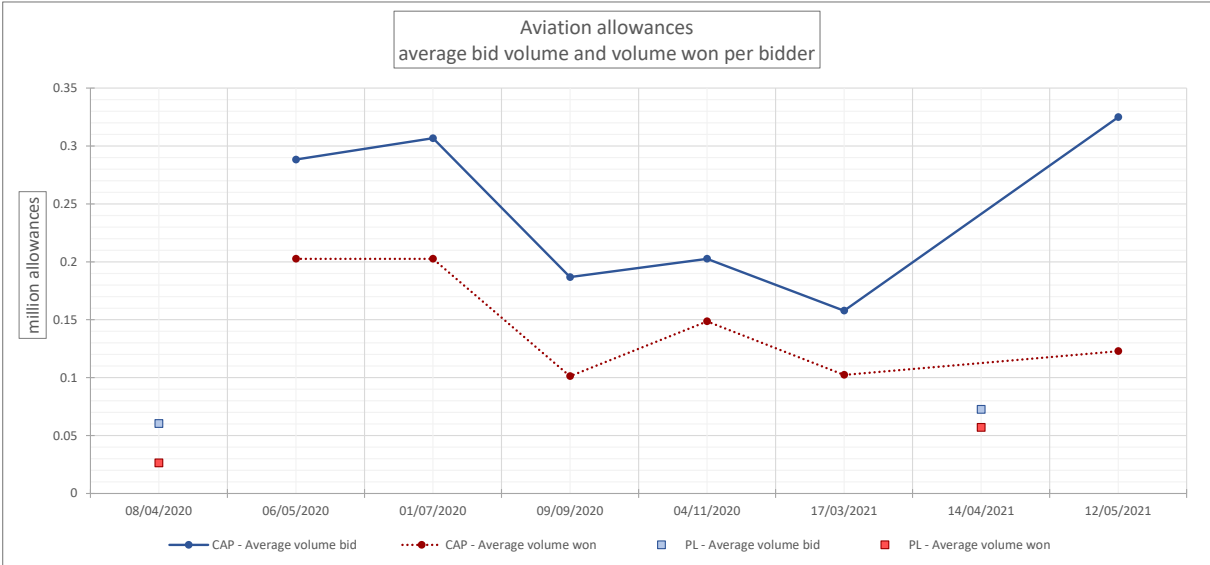
(1): Number of unique individual bidders or unique successful bidders present in a whole month.

[1] Monthly weighted average of the average volume won per bidder in each auction (total volume won in each auction divided by the number of successful bidders in that auction), weighted by volume auctioned in each auction.

[2] Average over the whole month of the volume won per bidder each time they are successful in an auction (computed as total volume auctioned for the month / sum over whole month of number of bidders successful in each auction).

[3] Standard deviation of volume won per bidder in each auction over the month

Graph 11: Aviation allowances - average bid volume and volume won per bidder



1.2.3 Type of bidders – aviation allowances

The volume submitted by intermediaries on behalf of a client⁷ during the reporting period was respectively 0, 0 and -, the remaining volume bid was done on own account.

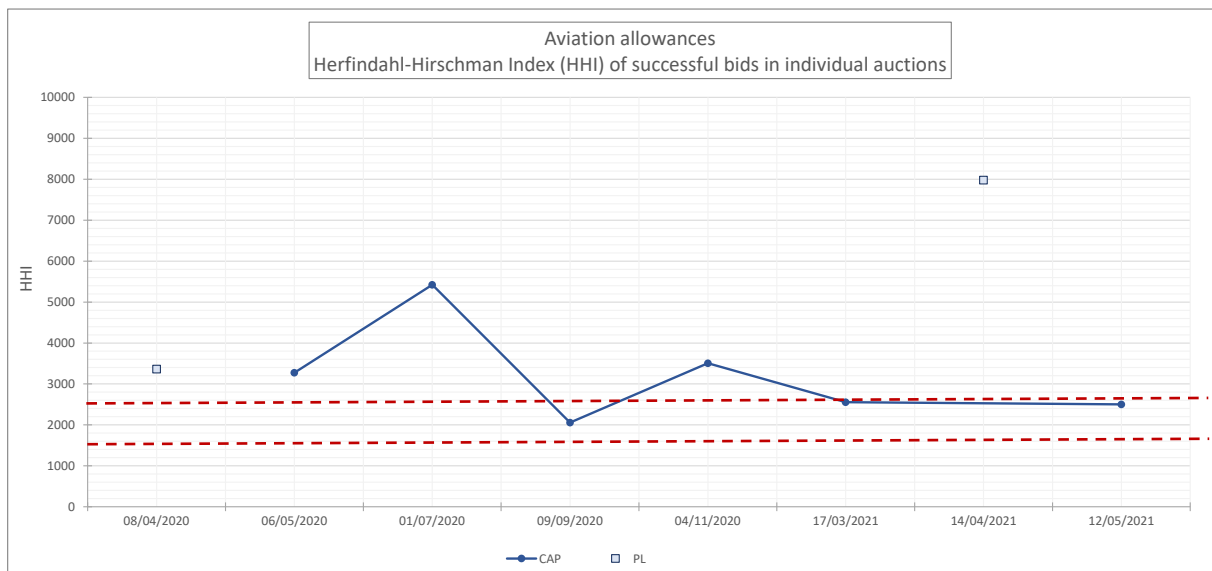
1.2.4 Concentration – aviation allowances

The HHI of successful bids is used to measure market concentration⁸. The HHI ranges from a value of 0 (perfect competition) to 10 000 (a single buyer). A common interpretation of the HHI is that a score below 1 500 is ‘not-concentrated’, between 1 500 and 2 500 is ‘moderately concentrated,’ and above 2 500 is ‘highly concentrated’. Graph 12 indicates the HHI of the individual auctions.

Graph 12: Aviation allowances - Herfindahl-Hirschman index of successful bids in individual auctions

⁷ The data related to bidding on behalf of clients reflects the self-assessment of the respective trader.

⁸ The HHI is calculated as the sum of the squares of all successful bidders’ shares (in percentage points) of the total auctioned volume over the period of interest.



Implementation of and compliance with the applicable rules

Fair and open access

EEX verified that each auction participant belonged to one of the categories of eligible bidders set out in Article 18 of the *Auctioning Regulation*. Table 9 presents the number of eligible bidders under each category in the reporting months.

Most of the active participants in the secondary carbon market are assumed to also have been admitted to bid in the auctions⁹.

Table 8: Eligible participants to the auctions by category

Number of participants		Operator		Investment firm	Credit Institution	Business grouping	Person exempt from MiFID requirements	Total
		Stationary	Aircraft					
Participants admitted to EEX's emissions spot secondary market	Apr 21	-	-	-	-	-	-	149
	May 21	-	-	-	-	-	-	149
	Jun 21	-	-	-	-	-	-	151
Participants eligible to bid in the auctions	Apr 21	65	1	11	4	-	10	91
	May 21	65	1	11	4	-	10	91
	Jun 21	65	1	11	4	-	10	91
(Of which:) Participants eligible to bid in the auctions on behalf of clients	Apr 21	-	-	3	2	-	3	8
	May 21	-	-	3	2	-	3	8
	Jun 21	-	-	3	2	-	3	8
(Of which:) Auction-only access	Apr 21	2	-	-	-	-	1	3
	May 21	2	-	-	-	-	1	3
	Jun 21	2	-	-	-	-	1	3

⁹ This assessment is based on the auction participants' activity in EEX's secondary market and general market knowledge of EEX.

No irregularities or deviations from the admission and access requirements were found.

Transparency

Information on the auctions was published by EEX in accordance with Chapter XVI of the *Auctioning Regulation*.

No infringements of the confidentiality requirements were identified.

Technical and operational aspects

With regard to the operational performance of the auctions, no irregularities or deviations from the requirements were found.

EEX's Market Surveillance department surveyed all auctions with a view to detecting any *market abuse*, money laundering, terrorist financing or other criminal activities. No such wrongdoing was publicly reported.

Other aspects

No other problems or issues were identified.

2. Overview of, and any updates on breaches of provisions or ongoing proceedings

No breaches or problems of non-conformity were reported. There were no proceedings on such breaches or problems of non-conformity dating from before the reporting period.

Comments of the auction platform on the draft of this report

EEX reviewed the auction data presented in the report.

Date of publication: 6/10/2021

Glossary

Auction calendar	Document setting out the <i>bidding windows</i> , individual volumes and auction dates of the auctions in a given calendar year. See Articles 11, 13 and 32 of the <i>Auctioning Regulation</i> .
Auction Clearing Price	Price determined upon closure of the <i>bidding window</i> .
Auction-only access	Access to the auctions without becoming a member of or participant in other markets organised by the auction platform.
Auctioning Regulation	Commission Regulation (EU) No 1031/2010 — Timing, administration and other aspects of auctioning of greenhouse gas emission allowances pursuant to Directive 2003/87/EC of the European Parliament and of the Council establishing a scheme for greenhouse gas emission allowances trading within the Community, Official Journal L 302, 18.11.2010, p. 1, as subsequently amended. See: http://ec.europa.eu/clima/policies/ets/cap/auctioning/documentation_en.htm .
Auctioneer	Entity appointed by a Member State that offers the allowances to be auctioned to the auction platform and receives the auction proceeds due to the appointing Member State. See Articles 22 and 23 of the <i>Auctioning Regulation</i> .
Best-bid and best-ask prices	The best-bid price is the highest price any buyer is willing to pay and the best-ask price is the lowest price any seller is willing to accept.
Business groupings	Groupings of operators or aircraft operators. See Article 18(1)(d) of the <i>Auctioning Regulation</i> .
Bidding window	Time during which bidders can submit bids. See Article 8(1) of the <i>Auctioning Regulation</i> .
Clearing	Processes preceding the opening of the <i>Bidding window</i> , during the <i>Bidding window</i> and following the closure of the <i>Bidding window</i> until <i>Settlement</i> , involving the management of any risks arising during that interval including margining, netting or novation or any other services carried out possibly by a <i>Clearing</i> or <i>Settlement</i> system. See Article 3(31) of the <i>Auctioning Regulation</i> .
Common auction platform	The auction platform appointed pursuant to Article 26(1) of the <i>Auctioning Regulation</i> . The <i>common auction platform</i> referred to as the third common auction platform, or CAP3, was appointed pursuant to Article 26(1) of the <i>Auctioning Regulation</i> , on 4 November 2020 for a period of 5 years.
Cover ratio	Total bid volume divided by the available volume in the auction.
Credit institution	Credit institution as defined in EU legislation on credit institutions (Article 4(1) of Directive 2006/48/EC).

ETS Directive	Directive 2003/87/EC of the European Parliament and of the Council of 13 October 2003 establishing a scheme for greenhouse gas emission allowance trading within the Community and amending Council Directive 96/61/EC, OJ L 275, 25.10.2003, p. 32, as subsequently amended. See: http://ec.europa.eu/clima/policies/ets/documentation_en.htm .
Fourth trading period	The period 2021-2030.
General Allowance	Allowance to emit one tonne of CO ₂ -equivalent, see Article 3(a) of the <i>ETS Directive</i> , also referred to as <i>EUA</i> .
Aviation Allowance	Allowance to emit one tonne of CO ₂ -equivalent that can be used by aircraft operators, also referred to as <i>EUA</i> . See Article 12(2a) and (3) of the <i>ETS Directive</i> .
Investment firms	Investment firms as defined in EU financial markets legislation (point (1) of Article 4(1) of Directive 2004/39/EC).
Market abuse	Insider dealing and market manipulation. See Article 36 of the <i>Auctioning Regulation</i> and Article 1 of Directive 2003/6/EC ('Market Abuse Directive').
Participating Member States	All EU Member States except Germany and Poland, which decided to opt out from the joint procurement of a common auction platform pursuant to Article 30 of the <i>Auctioning Regulation</i> .
Persons exempt from MiFID	Natural or legal persons exempt from the authorisation requirements in EU financial law because their trading and investment services activities are only ancillary to their main business (Article 2(1)(i) of Directive 2004/39/EC) and that have been authorised under national legislation implementing the rules laid down in the <i>Auctioning Regulation</i> to bid for allowances in the auctions. See Article 18(2) of the <i>Auctioning Regulation</i> .
Secondary market	Market in which persons buy or sell allowances either before or after they are allocated, either free of charge or through auctioning. To be distinguished from the 'primary market', consisting of the auctions of allowances.
Settlement	Payment on delivery of the allowances. See Article 3(34) of the <i>Auctioning Regulation</i> .
Spot secondary market	<i>Secondary market</i> for allowances with delivery within 5 days from the transaction.
Third trading period	The period 2013-2020, including the allowances referred to in Article 10(1) of the <i>Auctioning Regulation</i> auctioned in 2012. Allowances are valid during a given period without distinction as regards the year within that period. See Article 13 of the <i>ETS Directive</i> .

Annex 1a Auction revenues per Member State and for Poland from 12 November 2012 to the end of Quarter 2 2021 (reported in euros)

(The data used in this annex can also be obtained directly from the EEX website.)

<i>Cumulated Revenues since November 2012 (start of Phase III)</i>	General allowances	Aviation allowances	General and aviation allowances
Austria	1 046 939 000	14 060 085	1 060 999 085
Belgium	1 931 420 660	17 130 255	1 948 550 915
Bulgaria	2 070 540 415	5 320 195	2 075 860 610
Croatia	397 976 320	3 364 090	401 340 410
Cyprus	129 896 125	7 660 390	137 556 515
Czech Republic	2 783 200 060	6 984 205	2 790 184 265
Denmark	944 059 420	16 074 385	960 133 805
Estonia	645 229 265	982 185	646 211 450
Finland	1 273 315 930	12 597 425	1 285 913 355
France	4 219 478 690	76 868 725	4 296 347 415
Greece	2 803 921 445	28 933 745	2 832 855 190
Hungary	1 191 352 585	5 782 490	1 197 135 075
Iceland	61 545 125	5 361 235	66 906 360
Innovation Fund	2 195 671 265	-	2 195 671 265
Ireland	674 835 695	12 589 285	687 424 980
Italy	7 440 439 145	83 574 445	7 524 013 590
Latvia	213 904 275	3 083 955	216 988 230
Liechtenstein	1 456 385	-	1 456 385
Lithuania	408 846 520	1 758 910	410 605 430
Luxembourg	84 419 985	1 949 775	86 369 760
Malta	81 957 735	3 278 430	85 236 165
Modernisation Fund	1 495 042 900	-	1 495 042 900
The Netherlands	2 581 337 260	26 302 700	2 607 639 960
Norway	1 278 533 735	48 511 090	1 327 044 825
Poland	10 605 322 270	15 873 915	10 621 196 185
Portugal	1 418 527 895	18 002 585	1 436 530 480
Romania	3 421 931 615	9 344 325	3 431 275 940
Slovak Republic	1 211 050 195	1 082 895	1 212 133 090
Slovenia	360 258 675	801 970	361 060 645
Spain	6 918 575 565	95 939 800	7 014 515 365
Sweden	692 656 280	21 203 010	713 859 290
TOTAL	60 583 642 435	544 416 500	61 128 058 935

Annex 1b Auction revenues per Member State and for Poland from 12 November 2012 to the end of Quarter 2 2021 (reported in euros)

(The data used in this annex can also be obtained directly from the EEX website.)

<i>Cumulated Revenues since January 2021 (start of Phase IV)</i>	General allowances	Aviation allowances	General and aviation allowances
Austria	143 415 880	1 537 920	144 953 800
Belgium	246 242 360	2 114 640	248 357 000
Bulgaria	369 363 540	720 900	370 084 440
Croatia	50 060 260	576 720	50 636 980
Cyprus	33 824 500	528 660	34 353 160
Czech Republic	289 537 720	768 960	290 306 680
Denmark	133 945 020	1 874 340	135 819 360
Estonia	110 944 360	192 240	111 136 600
Finland	188 064 220	1 537 920	189 602 140
France	665 666 160	8 218 260	673 884 420
Greece	454 601 280	3 796 740	458 398 020
Hungary	189 417 200	720 900	190 138 100
Iceland	1 352 980	672 840	2 025 820
Innovation Fund	861 848 260	-	861 848 260
Ireland	70 354 960	1 393 740	71 748 700
Italy	1 150 033 000	8 939 160	1 158 972 160
Latvia	25 706 620	384 480	26 091 100
Liechtenstein	144 120	-	144 120
Lithuania	37 883 440	336 420	38 219 860
Luxembourg	4 058 940	240 300	4 299 240
Malta	12 176 820	432 540	12 609 360
Modernisation Fund	1 495 042 900	-	1 495 042 900
The Netherlands	407 246 980	3 123 900	410 370 880
Norway	81 178 800	3 075 840	84 254 640
Poland	2 601 213 500	4 962 420	2 606 175 920
Portugal	230 006 600	2 835 540	232 842 140
Romania	247 595 340	1 345 680	248 941 020
Slovak Republic	127 180 120	96 120	127 276 240
Slovenia	58 178 140	96 120	58 274 260
Spain	1 114 855 520	10 813 500	1 125 669 020
Sweden	98 767 540	2 691 360	101 458 900
TOTAL	11 499 907 080	64 028 160	11 563 935 240

Annex 2 Results of individual auctions on behalf of participating Member States and Poland during the reporting period

(The data used in the highlighted subsection of the tables presented in this annex can also be obtained directly from the EEX website.)

General Allowances - April 2021																			
Date	Auction Clearing Price	Minimum Bid price	Maximum Bid price	Mean Bid price	Median Bid price	Total Auction Volume	Total Bid Volume	Cover ratio	Nr of Bidders	Nr of Successful Bidders	Total Revenue	Nr of Bids	Nr of Successful Bids	Avg nr of bids per bidder	Average bid size	Avg total volume bid per bidder	standard deviation of total volume bid per bidder	Average volume won per bidder	Standard deviation of volume won per bidder
01/04/2021	42.04	39.97	43.75	42.14	42.08	3 288 500	4 771 500	1.45	26	21	138 248 540	89	49	3.42	53 612	183 519	326 898	156 595	309 345
06/04/2021	43.05	40.00	45.00	42.83	42.72	3 288 500	6 185 500	1.88	27	11	141 569 925	98	24	3.63	63 117	229 093	414 129	298 955	394 235
07/04/2021	43.63	40.00	44.80	43.63	43.62	2 575 000	4 587 000	1.78	22	18	112 347 250	85	42	3.86	53 965	208 500	294 835	143 056	212 359
08/04/2021	43.45	40.00	46.00	43.32	43.22	3 288 500	6 080 500	1.85	26	15	142 885 325	101	25	3.88	60 203	233 865	337 859	219 233	242 976
12/04/2021	43.86	43.00	50.00	43.73	43.60	3 288 500	6 103 000	1.86	29	18	144 233 610	108	27	3.72	56 509	210 448	356 983	182 694	270 191
13/04/2021	44.10	43.00	45.90	44.05	43.99	3 288 500	5 041 500	1.53	26	15	145 022 850	88	29	3.38	57 290	193 904	302 367	219 233	326 988
14/04/2021	43.90	33.80	45.50	43.78	43.84	2 575 000	4 830 500	1.88	25	17	113 042 500	91	40	3.64	53 082	193 220	287 362	151 471	239 176
15/04/2021	43.99	39.00	45.70	44.04	43.98	3 288 500	5 207 000	1.58	26	20	144 661 115	95	47	3.65	54 811	200 269	338 763	164 425	298 917
19/04/2021	44.66	43.00	47.01	44.69	44.60	3 288 500	4 902 000	1.49	26	19	146 864 410	95	41	3.65	51 600	188 538	329 663	173 079	305 359
20/04/2021	44.20	43.00	46.01	44.00	43.91	3 288 500	5 574 500	1.70	28	13	145 351 700	104	27	3.71	53 601	199 089	342 144	252 962	314 059
21/04/2021	44.85	43.00	47.00	44.94	44.85	2 575 000	3 682 000	1.43	23	17	115 488 750	80	42	3.48	46 025	160 087	243 602	151 471	218 403
22/04/2021	46.60	45.00	49.00	46.45	46.37	3 288 500	5 532 000	1.68	25	14	153 244 100	89	26	3.56	62 157	221 280	381 271	234 893	361 329

26/04/2021	47.24	46.71	49.00	47.35	47.25	3 288 500	4 550 500	1.38	25	20	155 348 740	88	46	3.52	51 710	182 020	334 220	164 425	290 292
27/04/2021	46.55	45.81	49.03	46.56	46.45	3 288 500	5 013 500	1.52	26	19	153 079 675	89	30	3.42	56 331	192 827	345 709	173 079	316 700
28/04/2021	48.00	47.00	49.20	48.03	48.01	2 575 000	3 797 500	1.47	20	16	123 600 000	72	41	3.60	52 743	189 875	279 926	160 938	225 952
29/04/2021	47.25	46.46	50.00	47.27	47.10	3 288 500	5 239 500	1.59	23	15	155 381 625	88	28	3.83	59 540	227 804	361 007	219 233	327 276

General Allowances - May 2021

Date	Auction Clearing Price	Minimum Bid price	Maximum Bid price	Mean Bid price	Median Bid price	Total Auction Volume	Total Bid Volume	Cover ratio	Nr of Bidders	Nr of Successful Bidders	Total Revenue	Nr of Bids	Nr of Successful Bids	Avg nr of bids per bidder	Average bid size	Avg total volume bid per bidder	standard deviation of total volume bid per bidder	Average volume won per bidder	Standard deviation of volume won per bidder
04/05/2021	49.33	48.71	55.00	49.60	49.31	3 288 500	4 671 500	1.42	25	20	162 221 705	83	39	3.32	56 283	186 860	290 346	164 425	258 468
05/05/2021	48.62	46.00	55.00	48.82	48.55	2 575 000	4 005 500	1.56	22	17	125 196 500	77	36	3.50	52 019	182 068	270 030	151 471	240 932
06/05/2021	49.45	48.71	55.00	49.68	49.32	3 288 500	5 242 000	1.59	24	17	162 616 325	85	30	3.54	61 671	218 417	349 564	193 441	297 591
10/05/2021	51.81	50.41	57.00	51.73	51.50	3 288 500	5 830 000	1.77	27	15	170 377 185	105	28	3.89	55 524	215 926	331 669	219 233	282 790
11/05/2021	51.59	51.03	57.00	51.79	51.55	3 288 500	5 115 000	1.56	23	17	169 653 715	81	34	3.52	63 148	222 391	371 720	193 441	319 419
12/05/2021	53.95	52.76	60.00	53.89	53.64	2 575 000	5 072 500	1.97	25	13	138 921 250	78	20	3.12	65 032	202 900	359 092	198 077	394 038
17/05/2021	55.57	53.00	57.50	55.64	55.62	3 288 500	4 915 500	1.49	22	19	182 741 945	74	43	3.36	66 426	223 432	383 790	173 079	244 814
18/05/2021	55.53	54.87	59.00	55.69	55.52	3 288 500	4 820 500	1.47	23	19	182 610 405	84	41	3.65	57 387	209 587	459 722	173 079	392 775
19/05/2021	52.12	51.30	57.00	52.33	52.13	2 575 000	4 200 000	1.63	24	21	134 209 000	78	40	3.25	53 846	175 000	363 694	122 619	321 948

20/05/2021	50.84	0.01	57.00	50.51	50.98	3 288 500	4 323 500	1.31	28	25	167 187 340	84	55	3.00	51 470	154 411	329 288	131 540	288 669
25/05/2021	53.09	31.00	58.00	52.00	53.35	3 288 500	4 068 000	1.24	21	19	174 586 465	66	52	3.14	61 636	193 714	296 196	173 079	268 032
26/05/2021	54.07	31.00	59.00	52.75	53.96	2 575 000	4 608 500	1.79	22	15	139 230 250	78	31	3.55	59 083	209 477	271 784	171 667	201 001
27/05/2021	52.11	50.86	60.00	52.41	52.15	3 288 500	4 850 000	1.47	25	22	171 363 735	76	40	3.04	63 816	194 000	285 720	149 477	215 715

General Allowances - June 2021

Date	Auction Clearing Price	Minimum Bid price	Maximum Bid price	Mean Bid price	Median Bid price	Total Auction Volume	Total Bid Volume	Cover ratio	Nr of Bidders	Nr of Successful Bidders	Total Revenue	Nr of Bids	Nr of Successful Bids	Avg nr of bids per bidder	Average bid size	Avg total volume bid per bidder	standard deviation of total volume bid per bidder	Average volume won per bidder	Standard deviation of volume won per bidder
01/06/2021	52.58	49.56	60.00	52.87	52.76	3 288 500	4 139 500	1.26	22	19	172 909 330	68	46	3.09	60 875	188 159	311 436	173 079	315 598
02/06/2021	51.50	50.41	57.00	51.55	51.38	2 575 000	3 932 000	1.53	23	16	132 612 500	67	23	2.91	58 687	170 957	227 694	160 938	200 638
03/06/2021	51.90	49.46	58.00	51.90	51.76	3 288 500	5 760 500	1.75	24	18	170 673 150	71	26	2.96	81 134	240 021	430 552	182 694	288 654
07/06/2021	48.56	37.00	54.00	49.07	49.25	3 288 500	5 564 000	1.69	26	24	159 689 560	98	79	3.77	56 776	214 000	389 217	137 021	188 260
08/06/2021	52.03	49.06	57.00	52.14	52.23	3 288 500	4 174 500	1.27	26	21	171 100 655	90	60	3.46	46 383	160 558	291 829	156 595	252 132
09/06/2021	53.70	48.50	58.00	53.32	53.29	2 575 000	4 263 000	1.66	28	13	138 277 500	83	22	2.96	51 361	152 250	238 758	198 077	243 486
10/06/2021	53.30	38.50	59.00	53.12	53.15	3 288 500	4 777 500	1.45	29	20	175 277 050	96	37	3.31	49 766	164 741	245 848	164 425	249 902
14/06/2021	53.60	52.44	58.80	53.68	53.50	3 288 500	5 661 000	1.72	26	18	176 263 600	86	36	3.31	65 826	217 731	428 752	182 694	269 647
15/06/2021	51.18	1.12	58.00	50.80	51.17	3 288 500	4 365 500	1.33	25	21	168 305 430	84	42	3.36	51 970	174 620	275 356	156 595	247 518

16/06/2021	50.83	49.06	57.00	51.08	50.82	2 575 000	3 636 500	1.41	27	20	130 887 250	87	42	3.22	41 799	134 685	251 354	128 750	258 534
17/06/2021	50.84	49.06	56.00	50.84	50.76	3 288 500	4 528 500	1.38	28	22	167 187 340	85	36	3.04	53 276	161 732	248 912	149 477	240 216
21/06/2021	52.09	49.06	57.00	52.03	51.91	3 288 500	4 850 500	1.47	28	17	171 297 965	85	29	3.04	57 065	173 232	268 762	193 441	241 843
22/06/2021	52.97	50.00	58.00	53.12	52.96	3 288 500	4 365 500	1.33	27	22	174 191 845	84	40	3.11	51 970	161 685	240 929	149 477	218 318
23/06/2021	53.62	50.00	58.00	53.77	53.62	2 575 000	3 500 000	1.36	24	17	138 071 500	74	36	3.08	47 297	145 833	188 737	151 471	201 255
24/06/2021	54.85	50.00	60.00	54.76	54.64	3 288 500	4 999 000	1.52	27	21	180 374 225	84	31	3.11	59 512	185 148	302 982	156 595	283 512
28/06/2021	55.06	50.00	60.00	55.10	55.05	3 288 500	4 190 000	1.27	28	21	181 064 810	90	43	3.21	46 556	149 643	251 001	156 595	240 602
29/06/2021	55.39	50.00	59.00	55.42	55.39	3 290 000	4 338 500	1.32	25	20	182 233 100	85	43	3.40	51 041	173 540	316 703	164 500	328 567
30/06/2021	55.57	50.00	59.50	55.72	55.64	2 575 000	3 242 000	1.26	26	20	143 092 750	70	45	2.69	46 314	124 692	189 930	128 750	205 835

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Aviation Allowances - April 2021																			
Date	Auction Clearing Price	Minimum Bid price	Maximum Bid price	Mean Bid price	Median Bid price	Total Auction Volume	Total Bid Volume	Cover ratio	Nr of Bidders	Nr of Successful Bidders	Total Revenue	Nr of Bids	Nr of Successful Bids	Avg nr of bids per bidder	Average bid size	Avg total volume bid per bidder	standard deviation of total volume bid per bidder	Average volume won per bidder	Standard deviation of volume won per bidder
14/04/2021	43.53	42.80	43.53	43.23	43.26	114 000	508 000	4.46	7	2	4 962 420	25	2	3.57	20 320	72 571	48 341	57 000	44 000

Aviation Allowances - May 2021																			
Date	Auction Clearing Price	Minimum Bid price	Maximum Bid price	Mean Bid price	Median Bid price	Total Auction Volume	Total Bid Volume	Cover ratio	Nr of Bidders	Nr of Successful Bidders	Total Revenue	Nr of Bids	Nr of Successful Bids	Avg nr of bids per bidder	Average bid size	Avg total volume bid per bidder	standard deviation of total volume bid per bidder	Average volume won per bidder	Standard deviation of volume won per bidder
12/05/2021	54.22	53.87	54.65	54.18	54.17	614 500	1 949 500	3.17	6	5	33 318 190	26	9	4.33	74 981	324 917	213 955	122 900	61 471

Aviation Allowances - June 2021																			
Date	Auction Clearing Price	Minimum Bid price	Maximum Bid price	Mean Bid price	Median Bid price	Total Auction Volume	Total Bid Volume	Cover ratio	Nr of Bidders	Nr of Successful Bidders	Total Revenue	Nr of Bids	Nr of Successful Bids	Avg nr of bids per bidder	Average bid size	Avg total volume bid per bidder	standard deviation of total volume bid per bidder	Average volume won per bidder	Standard deviation of volume won per bidder
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Note: volume variables reported in tCO₂, monetary variables reported in €

(1): Number of unique individual bidders or unique successful bidders present in a whole month. (2): Average number of bids submitted over the whole month by each bidder in each auction. Computed as total number of bids for the month / sum over whole month of number of bidders present in each auction. (3): Average size of all bids submitted in all auctions over the month. Computed as total bid volume for the month / number of bids for the month. (4): Average over the whole month of the volume bid by bidders each time they are present in an auction. Computed as total volume bid for the month / sum over whole month of number of bidders present in each auction. (5): Standard deviation of the total volume bid, by each bidder in each auction, over the whole month. (6): Average over the whole month of the volume won by bidders each time they are successful in an auction. Computed as total auction volume for the month / sum over whole month of number of bidders successful in each auction. (7): Standard deviation of the total volume won by each bidder in each auction, over the whole month, (8): HHI Monthly value is computed considering successful bidder's market share over whole month.