

Auctions by the *Common Auction Platform*

January, February, March 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:

No auctions in January 2021;

1, 2, 3(PL), 4, 8, 9, 10(PL), 11, 15, 16, 17(PL), 18, 22, 23, 24(PL), 25 February 2021;

1, 2, 3(PL), 4, 8, 9, 10(PL), 11, 15, 16, 17(PL), 18, 22, 23, 24(PL), 25, 29, 30, 31(PL) March 2021;

Aviation Allowances:

No auctions in January 2021;

No auctions in February 2021;

17 March 2021;

Cancelled auctions:

No auctions in January 2021;

No auctions in February 2021;

No auctions in March 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 January, February, March 2021 auctions at a glance:

	General Allowances				Aviation Allowances		
	Jan	Feb	Mar		Jan	Feb	Mar
General							
Number of auctions	-	16	19		-	-	1
Total volume auctioned	-	49 762 000	58 915 500		-	-	614 500
Amount raised from the auctions (€)	-	1 870 741 055	2 384 370 530		-	-	25 747 550
Average Auction Clearing Price (€/allowance)	-	37.59	40.47		-	-	41.90
Total bid volume	-	86 028 000	101 135 000		-	-	1 104 500
Average Cover ratio	-	1.7	1.7		-	-	1.8
Monthly HHI	-	1 250	1 185		-	-	2 553
Participation							
Number of eligible bidders	90	92	92		90	92	92
Number of participating bidders ⁽¹⁾	-	40	38		-	-	7
Number of successful bidders ⁽¹⁾	-	36	34		-	-	6
Average number of bidders per auction	-	26.7	24.5		-	-	7.0

Average number of successful bidders per auction		-	20.4	17.8		-	-	6.0
Auction data								
Average total volume bid per bidder per auction		-	203 245	219 296		-	-	157 786
Average bid size (volume per bid)		-	57 512	60 872		-	-	38 086
Average volume won per bidder per auction		-	170 363	180 245		-	-	102 417
Average range of bids (€)		-	10.76	4.81		-	-	1.43
Cancelled Auctions		-	-	-		-	-	-

(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 March 2021 are EUR 53,338,846,940, and of aviation allowances EUR 506,135,890. Looking exclusively at the Fourth trading period (January 2021 - March 2021) the total revenues from the auctions of general allowances are EUR 4,255,111,585 and of aviation allowances EUR 25,747,550. 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.

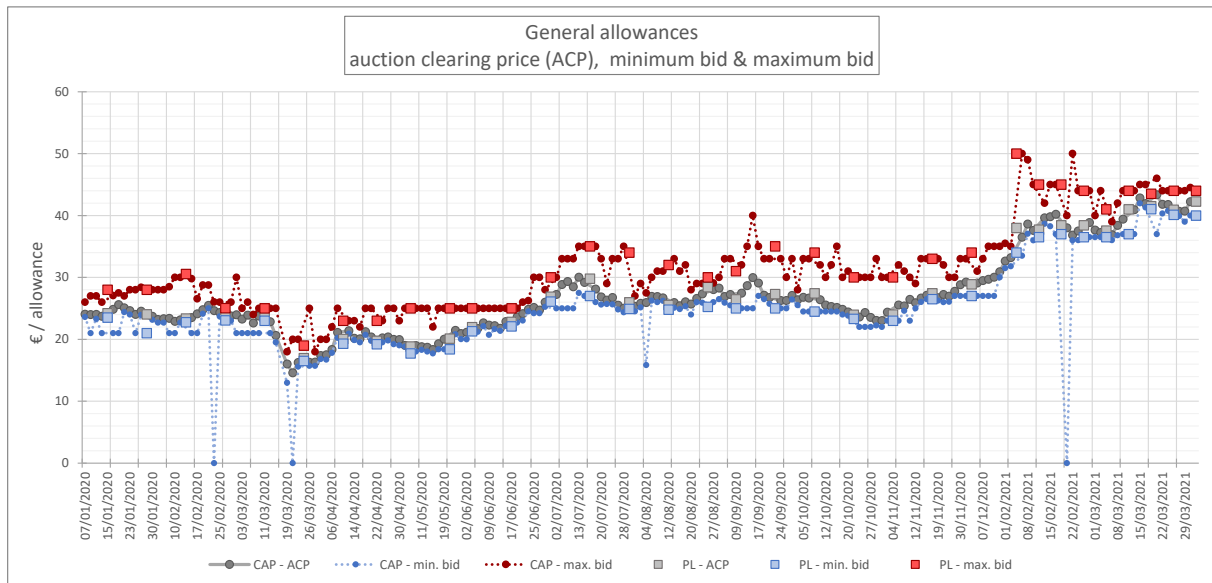
Table 1: General allowances - main statistics on the results of the auctions per month

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 (€)
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
Mar 20	48 709 000	92 013 000	960 193 830	1.9	22.1	16.8	19.71
Feb 20	43 274 000	95 448 000	1 030 723 300	2.2	25.4	17.8	23.82
Jan 20	40 556 500	72 943 000	986 511 155	1.8	26.5	20.3	24.32
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

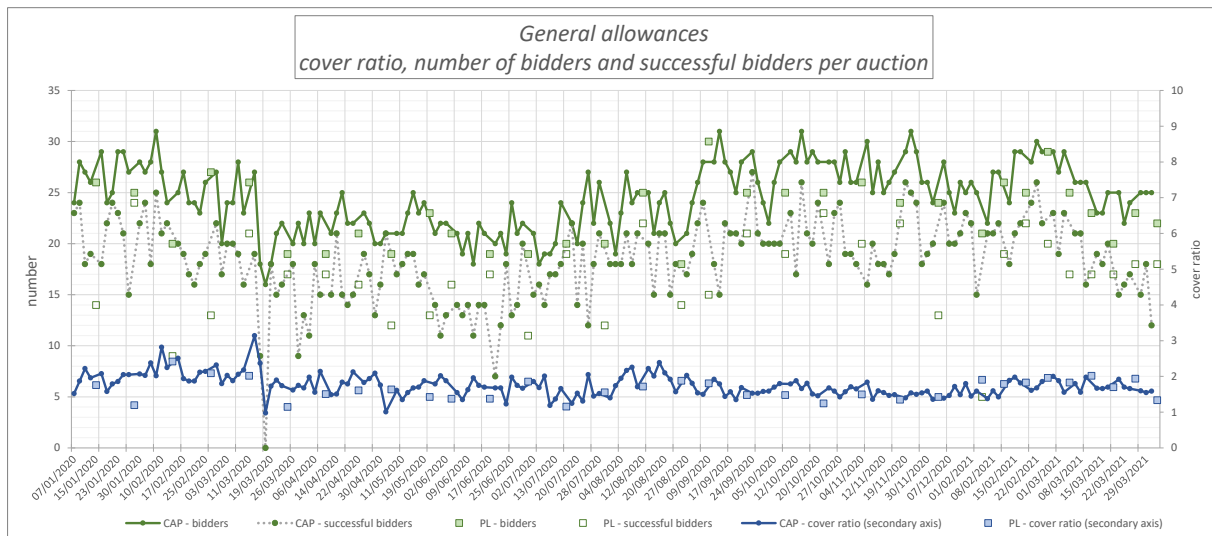
[1] The cover ratio is the ratio between the total bid volume and the auction volume.

During February and March 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 -0.03 and -0.05 respectively, and this difference had a standard deviation of EUR 0.43 and 0.08 respectively.

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

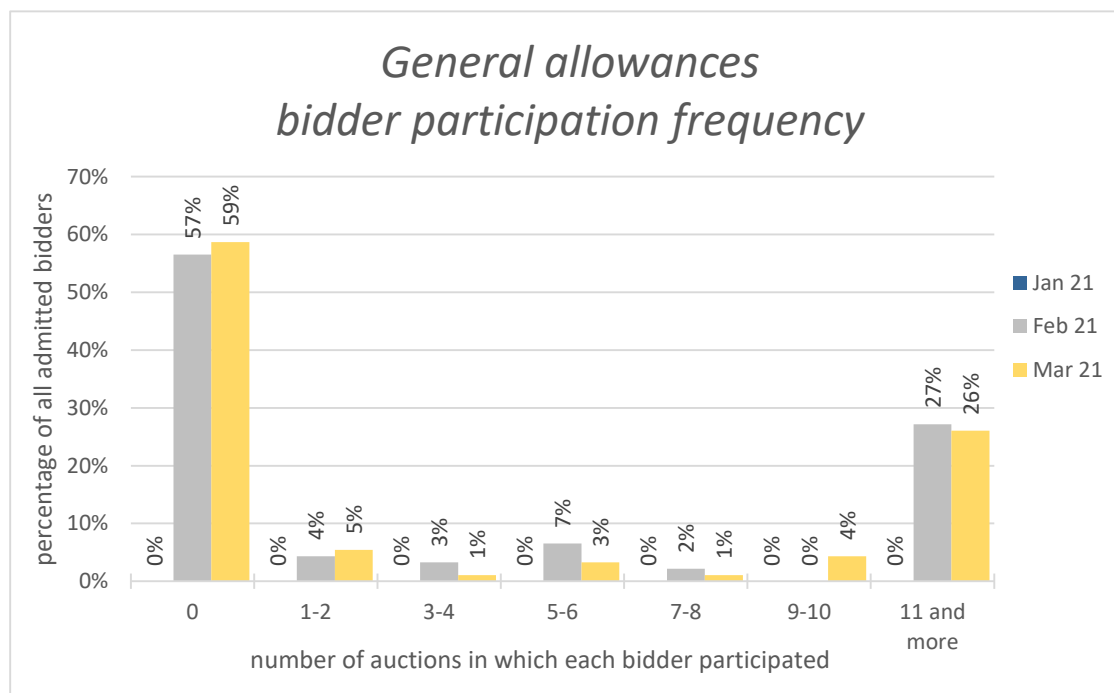


Graph 2: General allowances - cover ratio (left axis), number of bidders and successful bidders (right axis) per auction



The number of eligible bidders is provided in Section 2. Out of these 40 and 38 different bidders participated in the auctions in respectively during the February and March 2021. 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]
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
Mar 20	15	35	92 013 000	289 186	277 148	378 658	1 139	3.4	86 054
Feb 20	14	41	95 448 000	303 101	265 133	420 541	1 454	4.1	70 987
Jan 20	13	37	72 943 000	223 330	210 210	290 750	1 266	3.7	61 347

(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
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
Mar 20	15	32	48 709 000	213 914	197 202	233 879	455
Feb 20	14	37	43 274 000	227 273	164 540	239 696	533
Jan 20	13	36	40 556 500	177 466	151 897	196 407	536

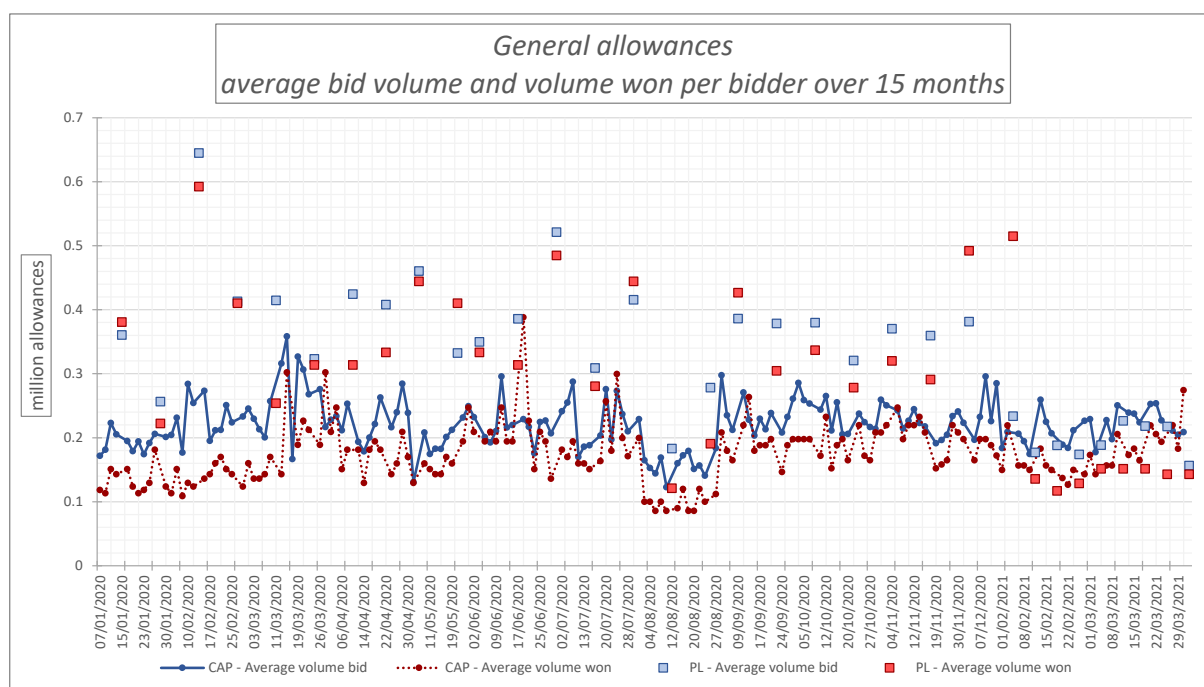
(1): Number of unique individual bidders or unique successful bidders present in a whole month.

[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

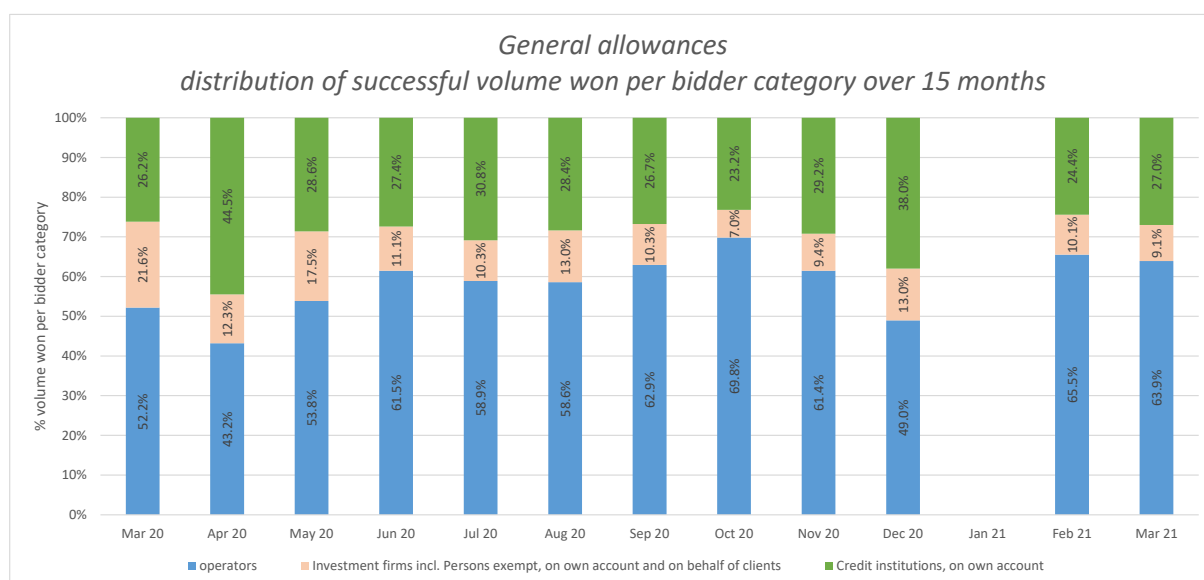
Graph 4: General allowances - average bid volume and volume won per bidder over 15 months



1.1.3. Type of bidders - general allowances

The volume submitted by intermediaries on behalf of a client³ during in February and March 2021 was respectively 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.

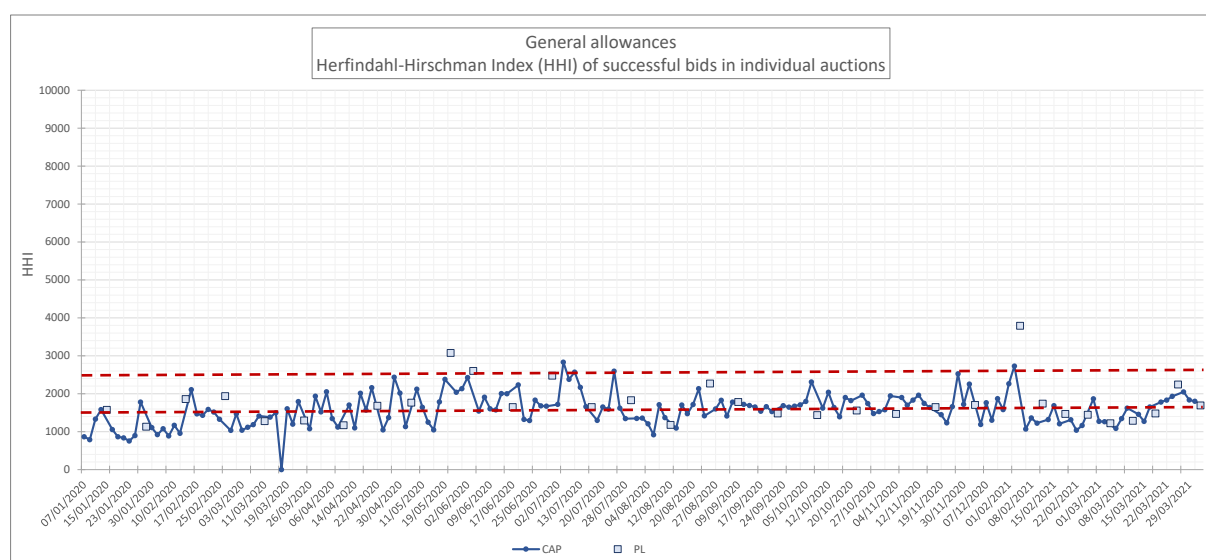
Table 4: General allowances – distribution of volume won per bidder category and their standard deviations

Month	% volume won coming from bidding on behalf of a client	Bidder category	% volume won	Standard deviation of % of volume won
Jan 21	-	Operators (including Business groupings)	-	-
		Investment firms (including persons exempt)	-	-
		Credit institutions	-	-
Feb 21	0%	Operators (including Business groupings)	65.54%	11.9% points
		Investment firms (including persons exempt)	10.06%	5.2% points
		Credit institutions	24.40%	10.3% points
Mar 21	0%	Operators (including Business groupings)	63.92%	13.3% points
		Investment firms (including persons exempt)	9.06%	4.0% points
		Credit institutions	27.01%	12.3% points

1.1.4. Concentration - general allowances

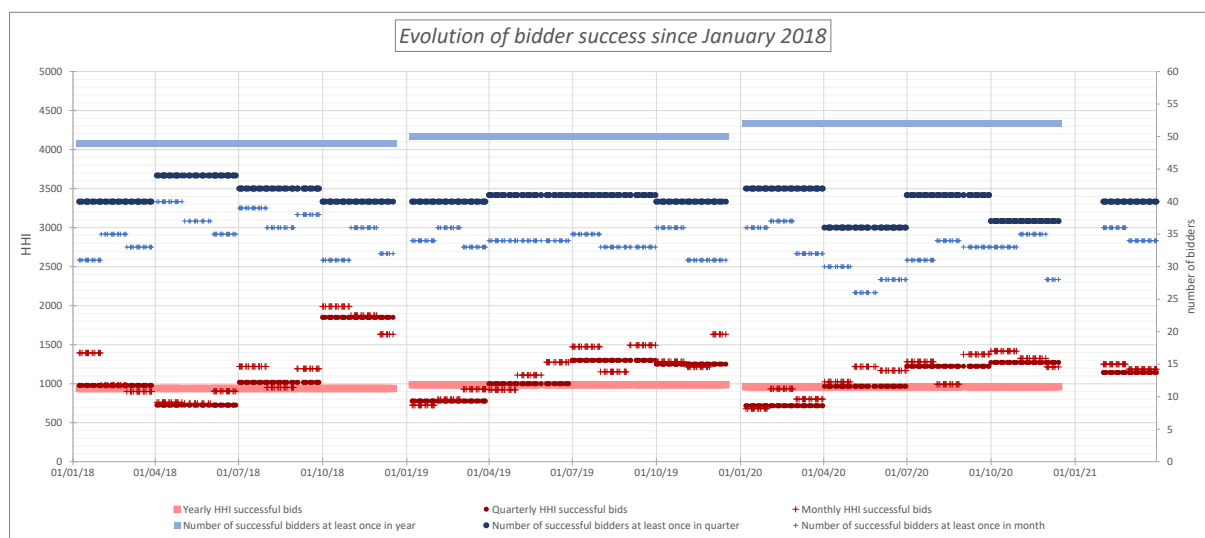
The Herfindahl-Hirschman Index (HHI) of successful bids is used to measure market concentration⁴. The HHI ranges from a value of 0 (perfect competition) to 10 000 (a single buyer). A common interpretation of the HHI is that a score below 1 500 is 'not-concentrated', between 1 500 and 2 500 is 'moderately 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

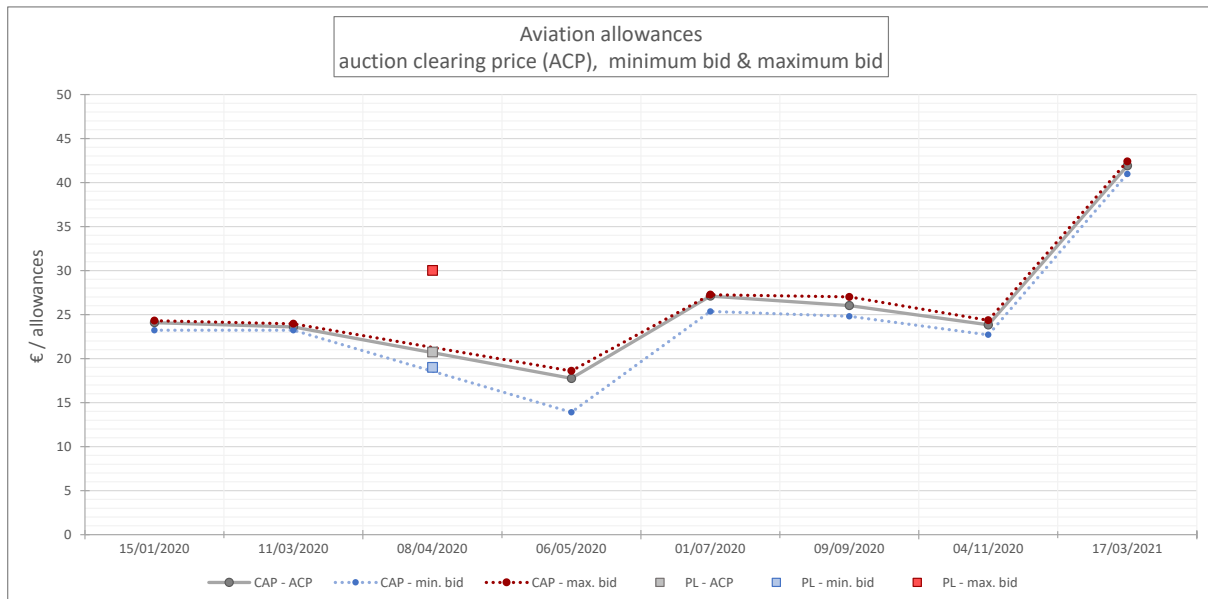
Month	Total auction volume	Total bid volume	Total revenue (€)	Average Cover ratio[1]	Average number of bidders	Average number of successful bidders	Average auction clearing price (€)
Mar 21	614 500	1 104 500	25 747 550	1.8	7.0	6.0	41.90
Feb 21	-	-	-	-	-	-	-
Jan 21	-	-	-	-	-	-	-
Dec 20	-	-	-	-	-	-	-
Nov 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	4.0	7.0	4.0	20.74
Mar 20	810 500	1 825 000	19 119 695	2.3	6.0	4.0	23.59
Feb 20	-	-	-	-	-	-	-
Jan 20	810 500	3 150 500	19 516 840	3.89	8.0	4.0	24.08
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.

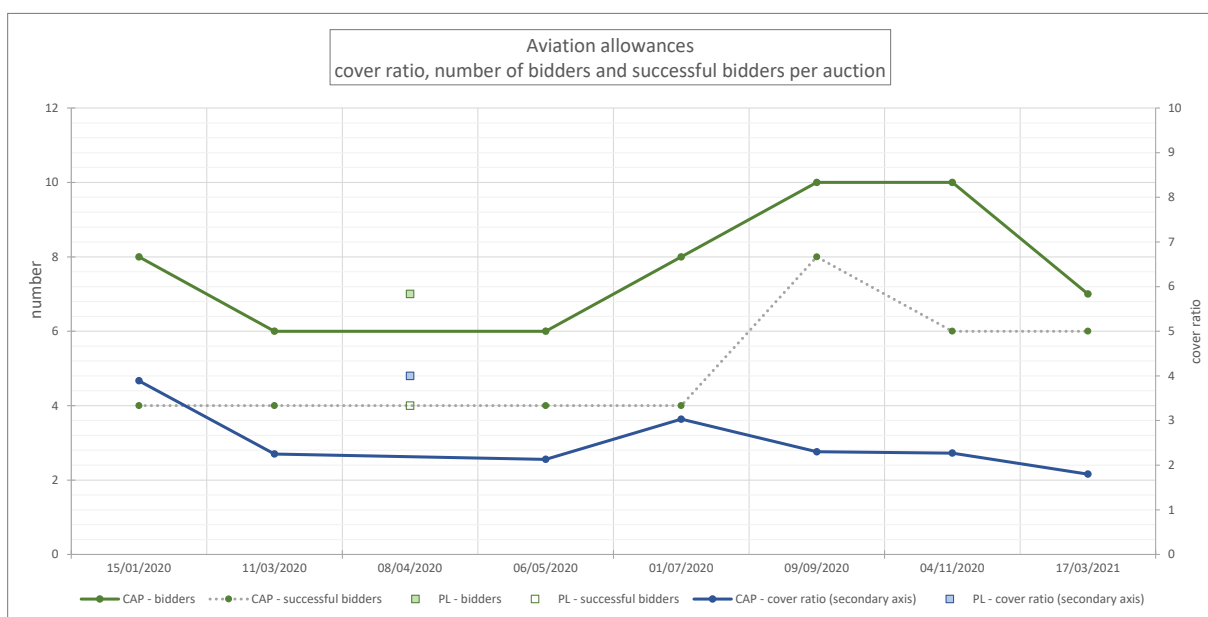
⁵ The auctions were suspended end 2012, see the Regulatory update published by the Commission on 16 November 2012 http://ec.europa.eu/clima/news/articles/news_2012111601_en.htm.

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.

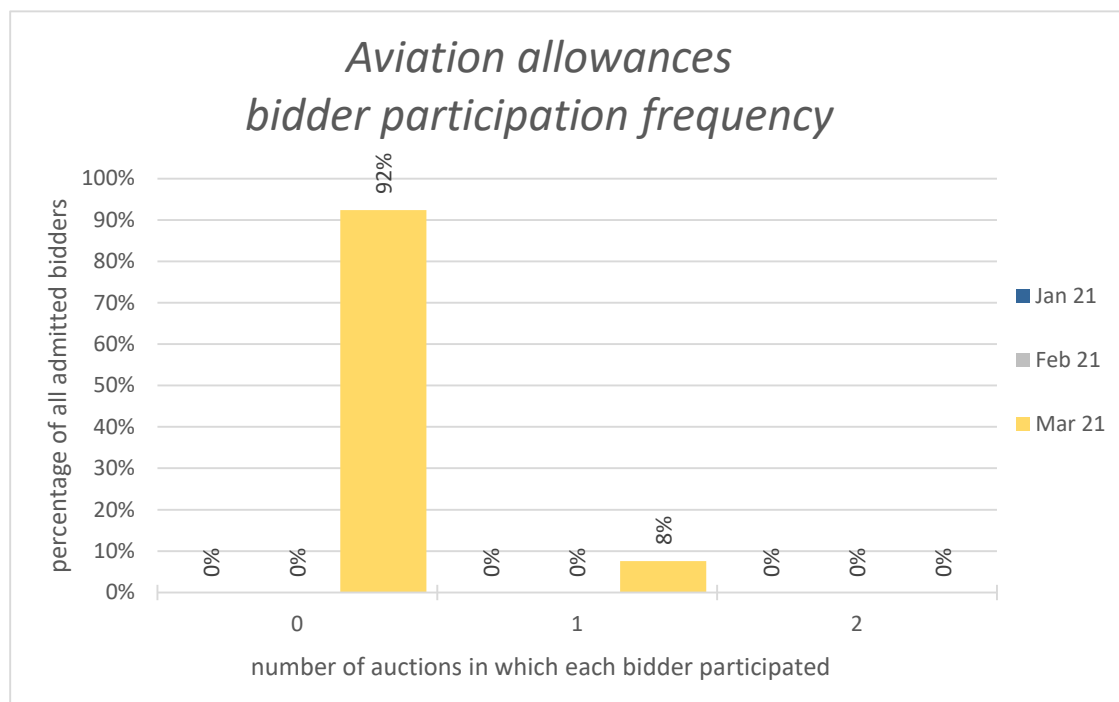
Graph 8: Aviation allowances - auction clearing price (ACP) & maximum prices bid & minimum prices bid



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]
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
Mar 20	1	6	1 825 000	304 167	304 167	253 483	28	4.7	65 179
Feb 20	-	-	-	-	-	-	-	-	-
Jan 20	1	8	3 150 500	393 813	393 813	290 528	52	6.5	60 587

(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
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
Mar 20	1	4	810 500	202 625	202 625	93 652	9
Feb 20	-	-	-	-	-	-	-
Jan 20	1	4	810 500	202 625	202 625	126 800	12

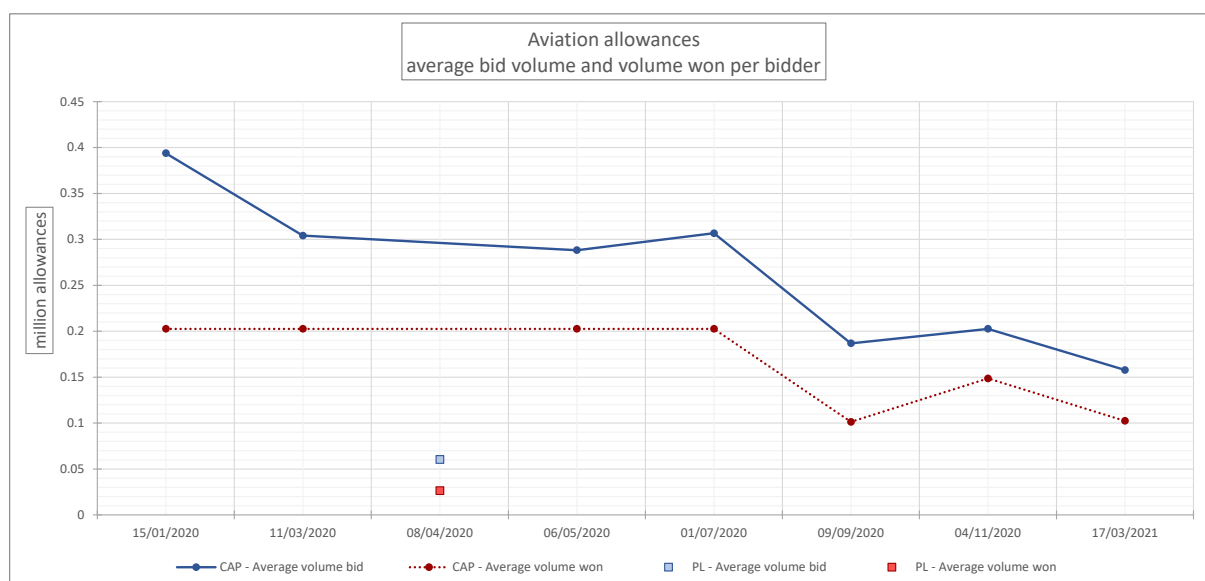
(1): Number of unique individual bidders or unique successful bidders present in a whole month.

[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



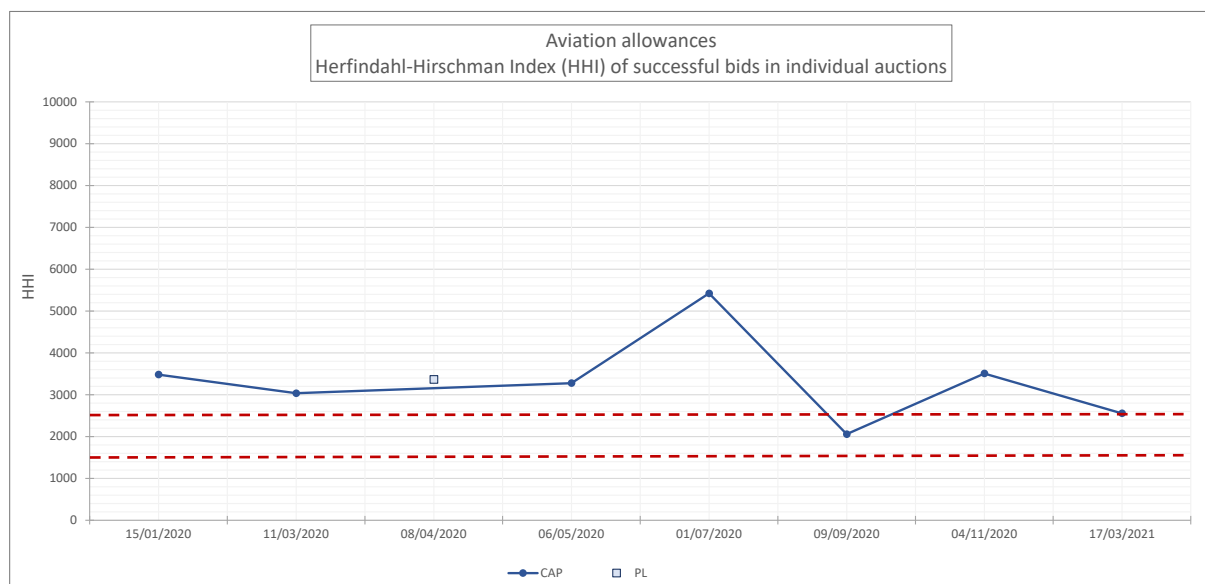
1.2.3 Type of bidders – aviation allowances

The volume submitted by intermediaries on behalf of a client⁷ in March 2021 was 0, 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	Jan 21	-	-	-	-	-	-	146
	Feb 21	-	-	-	-	-	-	149
	Mar 21	-	-	-	-	-	-	149
Participants eligible to bid in the auctions	Jan 21	65	1	11	4	-	9	90
	Feb 21	66	1	11	4	-	10	92
	Mar 21	66	1	11	4	-	10	92
(Of which:) Participants eligible to bid in the auctions on behalf of clients	Jan 21	-	-	3	2	-	3	8
	Feb 21	-	-	3	2	-	3	8
	Mar 21	-	-	3	2	-	3	8
(Of which:) Auction-only access	Jan 21	2	-	-	-	-	1	3
	Feb 21	2	-	-	-	-	1	3
	Mar 21	2	-	-	-	-	1	3

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

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

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>EUAA</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 1 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	957 334 020	13 192 565	970 526 585
Belgium	1 777 570 600	15 937 415	1 793 508 015
Bulgaria	1 839 765 325	4 913 545	1 844 678 870
Croatia	366 699 110	3 038 770	369 737 880
Cyprus	108 762 875	7 362 180	116 125 055
Czech Republic	2 602 299 440	6 550 445	2 608 849 885
Denmark	860 371 750	15 017 095	875 388 845
Estonia	575 912 205	873 745	576 785 950
Finland	1 155 815 060	11 729 905	1 167 544 965
France	3 803 576 330	72 232 915	3 875 809 245
Greece	2 519 890 565	26 792 055	2 546 682 620
Hungary	1 073 006 385	5 375 840	1 078 382 225
Iceland	60 699 795	4 981 695	65 681 490
Innovation Fund	1 657 196 055	-	1 657 196 055
Ireland	630 878 535	11 803 095	642 681 630
Italy	6 721 908 645	78 531 985	6 800 440 630
Latvia	197 843 005	2 867 075	200 710 080
Liechtenstein	1 373 300	-	1 373 300
Lithuania	385 177 280	1 569 140	386 746 420
Luxembourg	81 883 995	1 814 225	83 698 220
Malta	74 349 765	3 034 440	77 384 205
Modernisation Fund	560 953 250	-	560 953 250
The Netherlands	2 326 892 930	24 540 550	2 351 433 480
Norway	1 227 813 935	46 776 050	1 274 589 985
Poland	8 920 345 270	10 911 495	8 931 256 765
Portugal	1 274 821 795	16 403 095	1 291 224 890
Romania	3 267 236 225	8 585 245	3 275 821 470
Slovak Republic	1 131 589 175	1 028 675	1 132 617 850
Slovenia	323 909 485	747 750	324 657 235
Spain	6 222 023 645	89 840 050	6 311 863 695
Sweden	630 947 190	19 684 850	650 632 040
TOTAL	53 338 846 940	506 135 890	53 844 982 830

Annex 1b Auction revenues per Member State and for Poland from 12 November 2012 to the end of Quarter 1 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	53 810 900	670 400	54 481 300
Belgium	92 392 300	921 800	93 314 100
Bulgaria	138 588 450	314 250	138 902 700
Croatia	18 783 050	251 400	19 034 450
Cyprus	12 691 250	230 450	12 921 700
Czech Republic	108 637 100	335 200	108 972 300
Denmark	50 257 350	817 050	51 074 400
Estonia	41 627 300	83 800	41 711 100
Finland	70 563 350	670 400	71 233 750
France	249 763 800	3 582 450	253 346 250
Greece	170 570 400	1 655 050	172 225 450
Hungary	71 071 000	314 250	71 385 250
Iceland	507 650	293 300	800 950
Innovation Fund	323 373 050	-	323 373 050
Ireland	26 397 800	607 550	27 005 350
Italy	431 502 500	3 896 700	435 399 200
Latvia	9 645 350	167 600	9 812 950
Liechtenstein	61 035	-	61 035
Lithuania	14 214 200	146 650	14 360 850
Luxembourg	1 522 950	104 750	1 627 700
Malta	4 568 850	188 550	4 757 400
Modernisation Fund	560 953 250	-	560 953 250
The Netherlands	152 802 650	1 361 750	154 164 400
Norway	30 459 000	1 340 800	31 799 800
Poland	916 236 500	-	916 236 500
Portugal	86 300 500	1 236 050	87 536 550
Romania	92 899 950	586 600	93 486 550
Slovak Republic	47 719 100	41 900	47 761 000
Slovenia	21 828 950	41 900	21 870 850
Spain	418 303 600	4 713 750	423 017 350
Sweden	37 058 450	1 173 200	38 231 650
TOTAL	4 255 111 585	25 747 550	4 280 859 135

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 - January 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
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

General Allowances - February 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
01/02/2021	32.66	31.50	35.50	32.81	32.61	3 288 500	4 779 500	1.45	26	22	107 402 410	82	37	3.15	58 287	183 827	333 090	149 477	298 013
02/02/2021	33.20	31.80	35.00	33.11	32.99	3 288 500	5 228 500	1.59	25	15	109 178 200	80	24	3.20	65 356	209 140	386 763	219 233	385 576
03/02/2021	38.00	34.00	50.00	36.45	36.13	2 575 000	4 907 000	1.91	21	5	97 850 000	70	7	3.33	70 100	233 667	369 372	515 000	487 444
04/02/2021	36.51	33.50	50.00	37.14	36.96	3 288 500	4 537 000	1.38	22	21	120 063 135	71	60	3.23	63 901	206 227	338 471	156 595	174 760
08/02/2021	38.62	37.05	49.00	38.86	38.63	3 288 500	5 255 000	1.60	27	21	127 001 870	99	52	3.67	53 081	194 630	302 810	156 595	213 222

09/02/2021	37.58	36.00	45.00	37.84	37.61	3 288 500	4 716 000	1.43	27	22	123 581 830	92	54	3.41	51 261	174 667	259 262	149 477	194 555
10/02/2021	37.70	36.50	45.00	37.76	37.60	2 575 000	4 604 000	1.79	26	19	97 077 500	90	34	3.46	51 156	177 077	234 003	135 526	205 825
11/02/2021	39.62	38.67	42.00	39.58	39.50	3 288 500	6 223 000	1.89	24	18	130 290 370	100	36	4.17	62 230	259 292	351 660	182 694	214 244
15/02/2021	39.82	38.25	45.00	39.69	39.60	3 288 500	6 524 000	1.98	29	21	130 948 070	119	35	4.10	54 824	224 966	326 555	156 595	249 595
16/02/2021	40.19	37.00	45.00	40.08	40.01	3 288 500	5 995 500	1.82	29	22	132 164 815	117	39	4.03	51 244	206 741	294 006	149 477	192 411
17/02/2021	38.42	37.00	45.00	38.54	38.42	2 575 000	4 700 000	1.83	25	22	98 931 500	88	45	3.52	53 409	188 000	275 057	117 045	174 715
18/02/2021	38.01	0.01	40.00	37.79	38.03	3 288 500	5 296 000	1.61	28	24	124 995 885	95	51	3.39	55 747	189 143	279 988	137 021	200 954
22/02/2021	36.84	36.00	50.00	37.12	36.85	3 288 500	5 522 500	1.68	30	26	121 148 340	106	55	3.53	52 099	184 083	225 984	126 481	164 757
23/02/2021	37.50	36.01	44.00	37.55	37.41	3 288 500	6 132 500	1.86	29	22	123 318 750	104	41	3.59	58 966	211 466	260 393	149 477	186 539
24/02/2021	38.42	36.51	44.00	38.47	38.32	2 575 000	5 044 500	1.96	29	20	98 931 500	91	37	3.14	55 434	173 948	228 482	128 750	177 362
25/02/2021	38.88	36.51	44.00	38.85	38.72	3 288 500	6 563 000	2.00	29	23	127 856 880	104	38	3.59	63 106	226 310	313 184	142 978	259 265

General Allowances - March 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
01/03/2021	37.66	36.51	40.00	37.62	37.52	3 288 500	6 185 500	1.88	27	19	123 844 910	97	35	3.59	63 768	229 093	300 331	173 079	205 995
02/03/2021	37.25	36.50	44.00	37.40	37.24	3 288 500	5 143 000	1.56	29	23	122 496 625	97	48	3.34	53 021	177 345	274 930	142 978	197 067

03/03/2021	37.56	36.51	41.00	37.62	37.55	2 575 000	4 712 500	1.83	25	17	96 717 000	76	37	3.04	62 007	188 500	219 951	151 471	157 485
04/03/2021	36.90	36.01	39.00	36.93	36.85	3 288 500	5 911 000	1.80	26	21	121 345 650	95	44	3.65	62 221	227 346	302 349	156 595	176 938
08/03/2021	38.41	36.80	42.00	38.42	38.39	3 288 500	5 138 500	1.56	26	21	126 311 285	88	41	3.38	58 392	197 635	248 528	156 595	211 307
09/03/2021	39.40	37.00	44.00	39.31	39.23	3 288 500	6 514 000	1.98	26	16	129 566 900	101	32	3.88	64 495	250 538	343 152	205 531	259 408
10/03/2021	41.00	37.00	44.00	40.93	40.92	2 575 000	5 207 500	2.02	23	17	105 575 000	81	33	3.52	64 290	226 413	274 190	151 471	164 964
11/03/2021	40.92	37.00	44.00	40.99	40.92	3 288 500	5 497 000	1.67	23	19	134 565 420	84	43	3.65	65 440	239 000	306 747	173 079	230 074
15/03/2021	42.84	41.96	45.00	42.85	42.76	3 288 500	5 465 500	1.66	23	18	140 879 340	91	37	3.96	60 060	237 630	301 202	182 694	207 054
16/03/2021	41.92	41.29	45.00	42.00	41.89	3 288 500	5 594 000	1.70	25	20	137 853 920	97	43	3.88	57 670	223 760	320 505	164 425	249 176
17/03/2021	41.52	41.01	43.50	41.70	41.59	2 575 000	4 365 500	1.70	20	17	106 914 000	76	44	3.80	57 441	218 275	298 432	151 471	186 468
18/03/2021	43.35	37.00	46.00	43.11	43.13	3 288 500	6 316 000	1.92	25	15	142 556 475	95	30	3.80	66 484	252 640	384 860	219 233	283 198
22/03/2021	41.80	40.31	44.01	41.83	41.73	3 288 500	5 581 500	1.70	22	16	137 459 300	84	32	3.82	66 446	253 705	441 112	205 531	285 642
23/03/2021	41.77	40.76	44.00	41.81	41.71	3 288 500	5 449 000	1.66	24	17	137 360 645	85	34	3.54	64 106	227 042	388 052	193 441	292 280
24/03/2021	40.94	40.11	44.00	40.99	40.86	2 575 000	5 004 000	1.94	23	18	105 420 500	87	36	3.78	57 517	217 565	330 537	143 056	249 445
25/03/2021	40.69	39.91	44.00	40.76	40.59	3 290 000	5 275 000	1.60	25	15	133 870 100	88	30	3.52	59 943	211 000	339 427	219 333	315 604
29/03/2021	40.71	39.00	44.00	40.82	40.67	3 288 500	5 112 500	1.55	25	18	133 874 835	89	41	3.56	57 444	204 500	372 510	182 694	277 320
30/03/2021	42.25	40.00	44.50	42.26	42.12	3 288 500	5 217 500	1.59	25	12	138 939 125	89	33	3.56	58 624	208 700	318 511	274 042	295 095
31/03/2021	42.26	40.00	44.00	42.34	42.30	2 575 000	3 445 500	1.34	22	18	108 819 500	62	37	2.82	55 573	156 614	218 948	143 056	204 822

Aviation Allowances - January 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
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Aviation Allowances - February 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
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Aviation Allowances - March 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
17/03/2021	41.90	40.97	42.40	41.68	41.81	614 500	1 104 500	1.80	7	6	25 747 550	29	11	4.14	38 086	157 786	195 077	102 417	74 683

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.