

Auctions by the *Common Auction Platform*

January, February, March 2022

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:

10, 11, 13, 17, 18, 19(PL), 20, 24, 25, 27, 31 January 2022;

1, 2(PL), 3, 7, 8, 10, 14, 15, 16(PL), 17, 21, 22, 23(XI), 24, 28 February 2022;

1, 2(PL), 3, 7, 8, 10, 14, 15, 16(PL), 17, 21, 22, 24, 28, 29, 30 (PL), 31 March 2022;

Aviation Allowances:

No auctions in January 2022;

9 February 2022;

No auctions in March 2022;

Cancelled auctions:

No auctions in January 2022;

1 February 2022;

2 March 2022;

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: https://ec.europa.eu/clima/eu-action/eu-emissions-trading-system-eu-ets/auctioning_en

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 2022 auctions at a glance:

| | General Allowances | | | Aviation Allowances | | |
|--|---------------------------|---------------|---------------|----------------------------|------------|------------|
| | Jan | Feb | Mar | Jan | Feb | Mar |
| General | | | | | | |
| Number of auctions | 11 | 15 | 17 | - | 1 | - |
| Total volume auctioned | 27,148,000 | 35,812,500 | 41,277,000 | - | 600,000 | - |
| Amount raised from the auctions (€) | 2,248,786,940 | 3,229,534,010 | 3,076,655,035 | - | 57,918,000 | - |
| Average Auction Clearing Price (€/allowance) | 82.83 | 90.18 | 74.54 | - | 96.53 | - |
| Total bid volume | 39,669,000 | 48,004,000 | 92,255,000 | - | 1,130,500 | - |
| Average Cover ratio | 1.5 | 1.3 | 2.2 | - | 1.9 | - |
| Monthly HHI | 1,101 | 1,265 | 1,394 | - | 0 | - |
| Participation | | | | | | |
| Number of eligible bidders | 92 | 91 | 92 | 92 | 91 | 92 |
| Number of participating bidders ⁽¹⁾ | 33 | 37 | 41 | - | 7 | - |
| Number of successful bidders ⁽¹⁾ | 32 | 36 | 34 | - | 6 | - |
| Average number of bidders per auction | 24.1 | 22.4 | 21.7 | - | 7.0 | - |
| Average number of successful bidders per auction | 19.9 | 19.2 | 16.0 | - | 6.0 | - |

| Auction data | | | | | | | | |
|---|--|---------|---------|---------|--|---|---------|---|
| Average total volume bid per bidder per auction | | 149,589 | 157,110 | 264,682 | | - | 161,500 | - |
| Average bid size (volume per bid) | | 40,751 | 46,580 | 68,754 | | - | 47,104 | - |
| Average volume won per bidder per auction | | 125,231 | 139,838 | 170,244 | | - | 100,000 | - |
| Average range of bids (€) | | 36.73 | 27.39 | 38.10 | | - | 4.50 | - |
| Cancelled Auctions | | 0 | 1 | 1 | | - | 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, Poland and Northern Ireland from the start of the Third trading period auctions (November 2012) to March 2022 are EUR 83,219,974,690, and of aviation allowances EUR 709,613,830. Looking exclusively at the Fourth trading period (January 2021 - March 2022) the total revenues from the auctions of general allowances are EUR 34,136,239,335 and of aviation allowances EUR 229,225,490. 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.

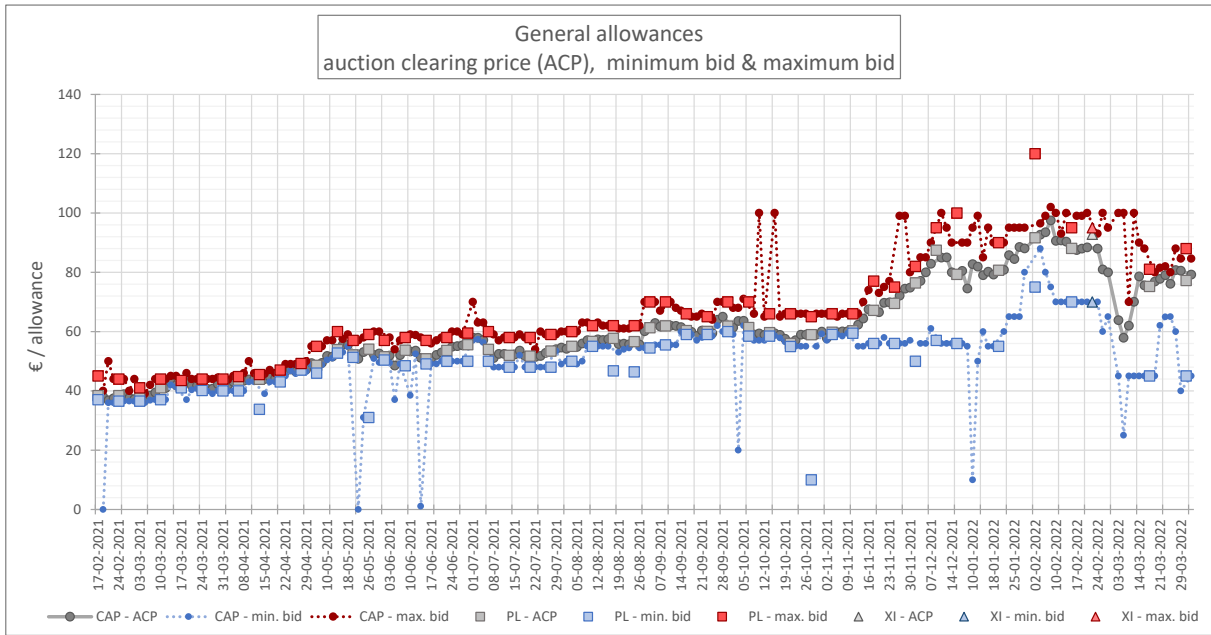
Table 1: General allowances - main statistics on the results of the auctions per month

| 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 22 | 41,277,000 | 92,255,000 | 3,076,655,035 | 2.2 | 21.7 | 16.0 | 74.54 |
| Feb 22 | 35,812,500 | 48,004,000 | 3,229,534,010 | 1.3 | 22.4 | 19.2 | 90.18 |
| Jan 22 | 27,148,000 | 39,669,000 | 2,248,786,940 | 1.5 | 24.1 | 19.9 | 82.83 |
| Dec 21 | 26,358,000 | 37,589,000 | 2,127,412,425 | 1.4 | 19.5 | 16.8 | 80.71 |
| Nov 21 | 43,483,000 | 63,439,500 | 2,843,456,625 | 1.5 | 20.7 | 17.4 | 65.39 |
| Oct 21 | 38,452,000 | 62,101,000 | 2,284,052,960 | 1.6 | 21.9 | 17.5 | 59.40 |
| Sep 21 | 40,527,000 | 64,777,000 | 2,489,433,875 | 1.6 | 21.3 | 16.8 | 61.43 |
| Aug 21 | 26,656,500 | 58,272,500 | 1,502,176,915 | 2.2 | 22.0 | 15.9 | 56.35 |
| Jul 21 | 53,050,500 | 78,671,000 | 2,834,823,470 | 1.5 | 24.9 | 20.0 | 53.44 |
| 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 | - | - | - | - | - | - | - |
| 2021 total | 482,490,000 | 775,121,500 | 25,581,263,350 | 1.6 | 23.4 | 17.9 | 53.02 |
| 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 |

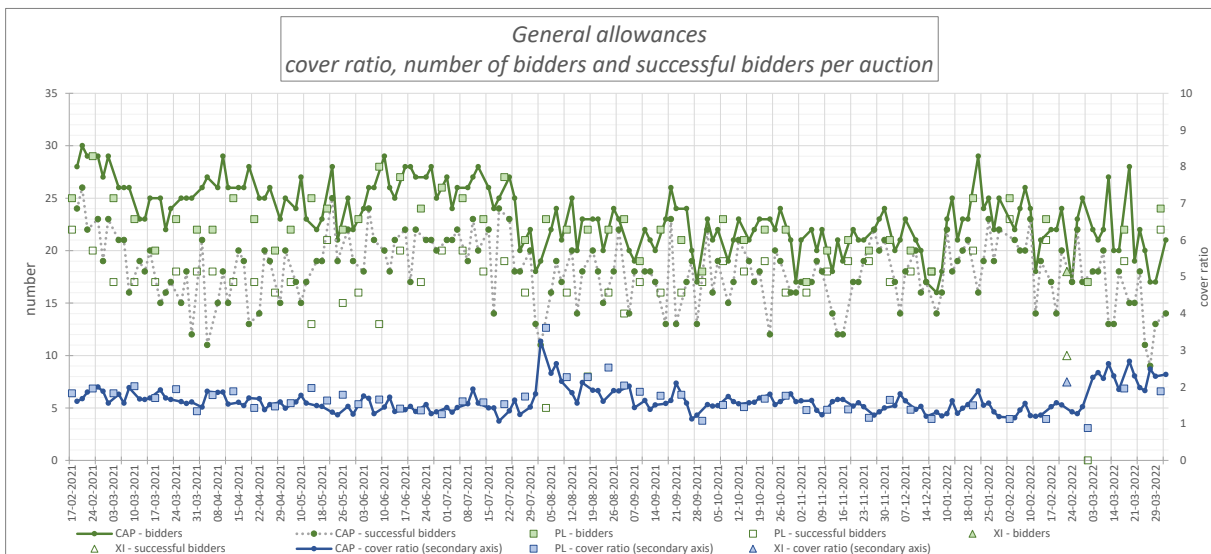
| | | | | | | | |
|-------------------|-------------|---------------|---------------|-----|------|------|------|
| 2015 total | 413,874,000 | 1,337,010,500 | 3,154,940,925 | 3.2 | 18.3 | 13.3 | 7.62 |
| 2014 total | 335,052,000 | 1,796,711,000 | 1,977,712,120 | 5.4 | 17.6 | 11.9 | 5.90 |
| 2013 total | 530,488,000 | 1,761,639,500 | 2,349,853,340 | 3.3 | 18.4 | 13.2 | 4.43 |

During January, February, March 2022, 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 -0.12, -0.26, -0.15 respectively, and this difference had a standard deviation of EUR 0.17, 0.40, 0.45 respectively.

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

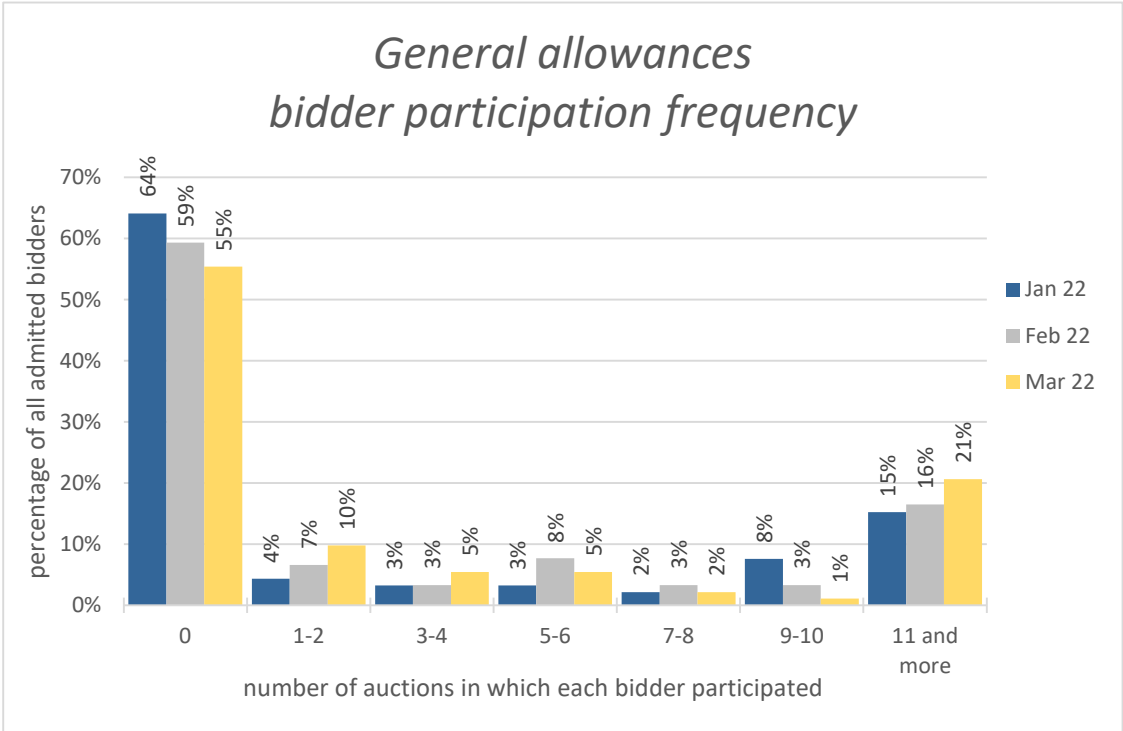


Graph 2: General allowances - cover ratio (left axis), number of bidders and successful bidders (right axis) per auction



The number of eligible bidders is provided in Section 2. Out of these 33, 37 and 41 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] |
|--------|----------------|------------------------------|----------------------|--|---|---|--------------------------|---|---------------------|
| Mar 22 | 17 | 41 | 92,255,000 | 264,682 | 253,448 | 459,116 | 1,362 | 3.7 | 68,754 |
| Feb 22 | 15 | 37 | 48,004,000 | 157,110 | 155,353 | 246,505 | 1,044 | 3.4 | 46,580 |
| Jan 22 | 11 | 33 | 39,669,000 | 149,589 | 149,694 | 207,912 | 979 | 3.7 | 40,751 |
| Dec 21 | 11 | 32 | 37,589,000 | 176,366 | 174,833 | 231,424 | 830 | 3.9 | 45,502 |
| Nov 21 | 18 | 33 | 63,439,500 | 173,816 | 170,996 | 268,268 | 1,424 | 3.8 | 45,101 |
| Oct 21 | 16 | 32 | 62,101,000 | 179,384 | 177,431 | 257,777 | 1,211 | 3.5 | 51,746 |
| Sep 21 | 17 | 33 | 64,777,000 | 179,524 | 178,942 | 256,547 | 1,335 | 3.7 | 48,842 |
| Aug 21 | 17 | 34 | 58,272,500 | 157,063 | 155,809 | 257,972 | 1,295 | 3.5 | 45,182 |
| Jul 21 | 17 | 41 | 78,671,000 | 187,375 | 185,983 | 317,457 | 1,407 | 3.3 | 56,336 |
| 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 | - | - | - | - | - | - | - | - | - |

(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 22 | 17 | 34 | 41,277,000 | 170,244 | 163,150 | 268,614 | 524 |
| Feb 22 | 15 | 36 | 35,812,500 | 139,838 | 137,213 | 231,500 | 560 |
| Jan 22 | 11 | 32 | 27,148,000 | 125,231 | 123,963 | 189,178 | 457 |
| Dec 21 | 11 | 31 | 26,358,000 | 145,810 | 142,476 | 218,273 | 424 |
| Nov 21 | 18 | 32 | 43,483,000 | 144,139 | 138,923 | 230,916 | 675 |
| Oct 21 | 16 | 29 | 38,452,000 | 140,606 | 136,840 | 216,414 | 537 |
| Sep 21 | 17 | 29 | 40,527,000 | 146,820 | 142,200 | 224,108 | 615 |
| Aug 21 | 17 | 31 | 26,656,500 | 109,081 | 100,212 | 185,608 | 519 |
| Jul 21 | 17 | 35 | 53,050,500 | 160,072 | 156,954 | 253,238 | 668 |
| 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 | - | - | - | - | - | - | - |

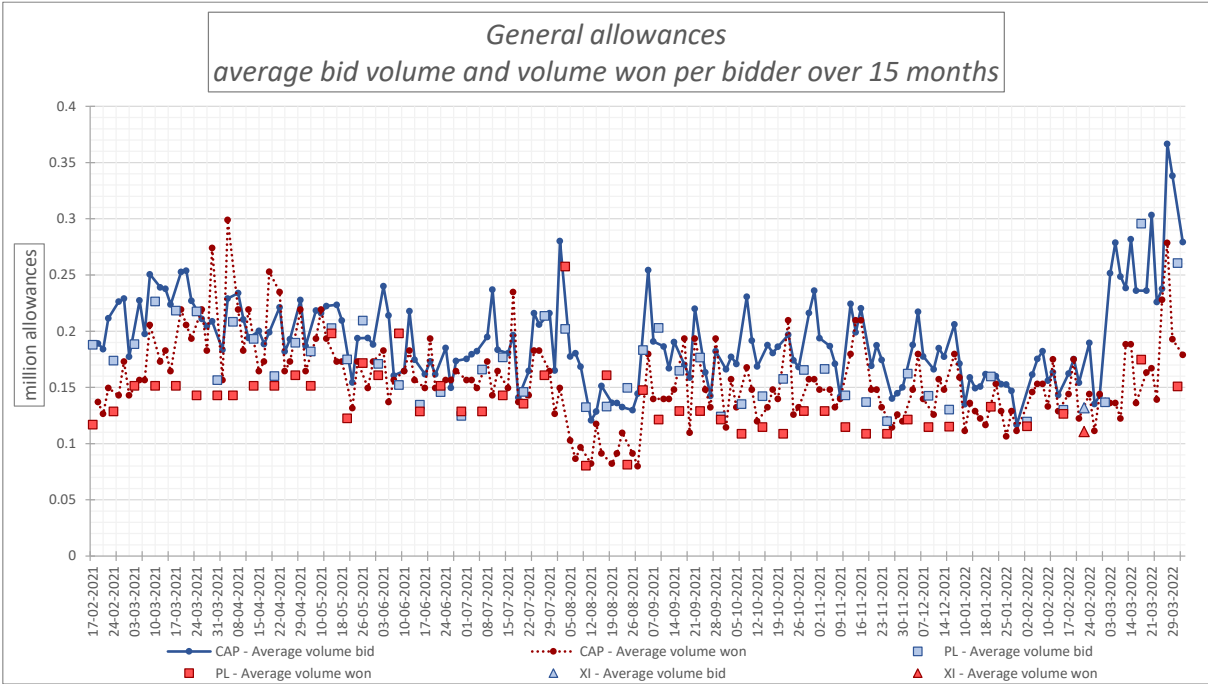
(1): Number of unique individual bidders or unique successful bidders present in a whole month.

[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

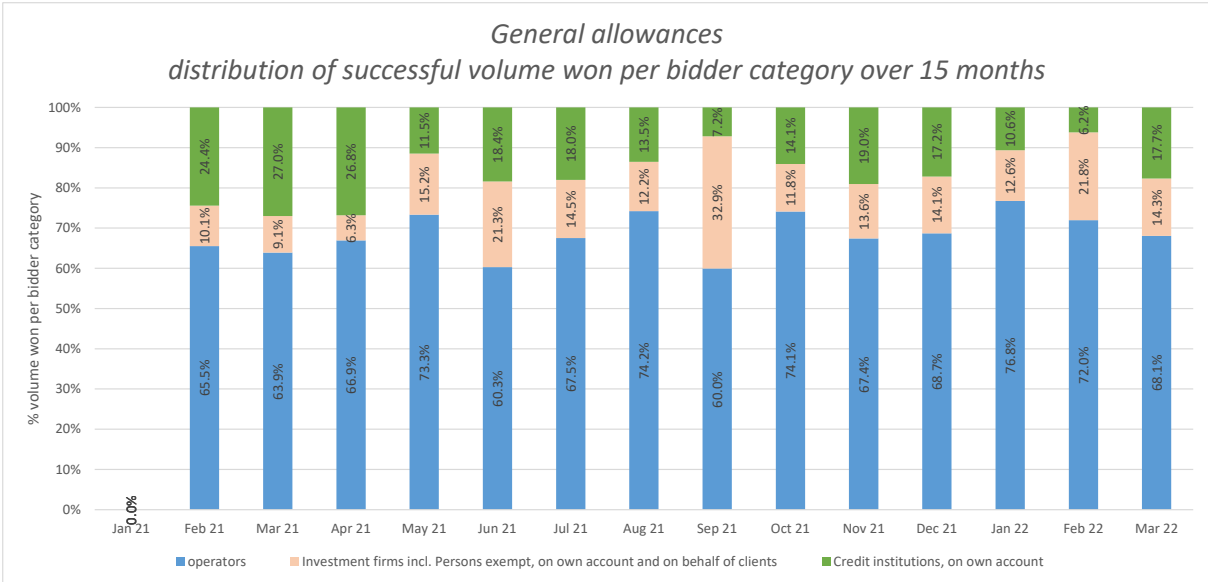
Graph 4: General allowances - average bid volume and volume won per bidder over 15 months



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 0,0031, 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.

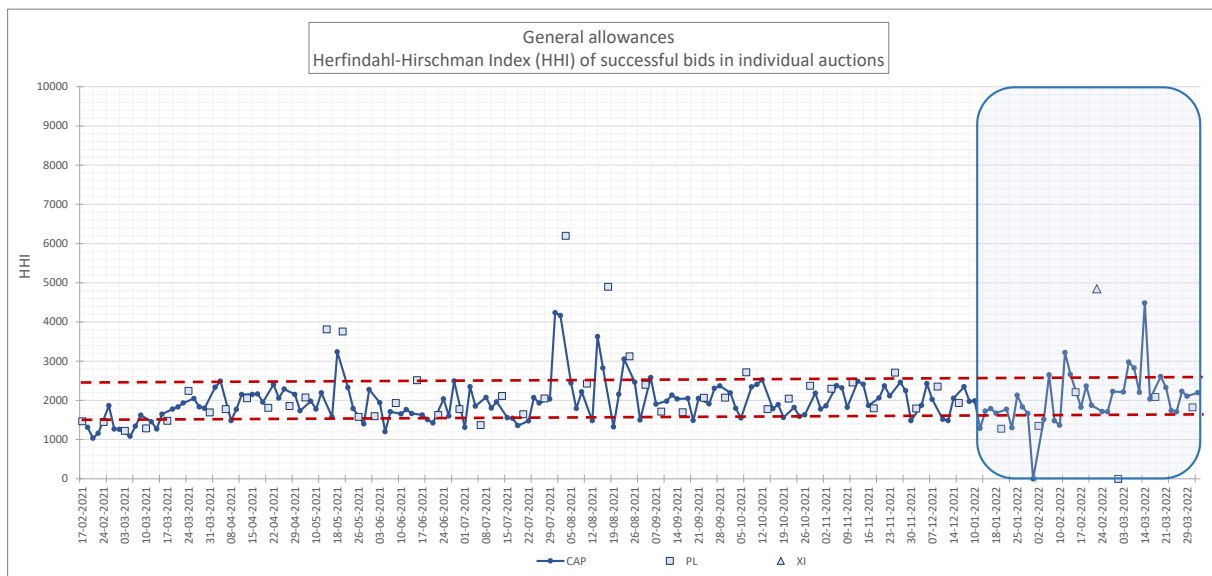
Table 4: General allowances – distribution of volume won per bidder category and their standard deviations

| Month | % volume won coming from bidding on behalf of a client | Bidder category | % volume won | Standard deviation of % of volume won |
|--------|--|---|--------------|---------------------------------------|
| Jan 22 | 0.00% | Operators (including Business groupings) | 76.76% | 8.9% points |
| | | Investment firms (including persons exempt) | 12.62% | 5.6% points |
| | | Credit institutions | 10.63% | 8.8% points |
| Feb 22 | 0.00% | Operators (including Business groupings) | 71.96% | 10.8% points |
| | | Investment firms (including persons exempt) | 21.82% | 11.3% points |
| | | Credit institutions | 6.22% | 7.7% points |
| Mar 22 | 0.31% | Operators (including Business groupings) | 68.05% | 17.3% points |
| | | Investment firms (including persons exempt) | 13.95% | 11.8% points |
| | | Credit institutions | 17.68% | 16.6% points |

1.1.4. Concentration - general allowances

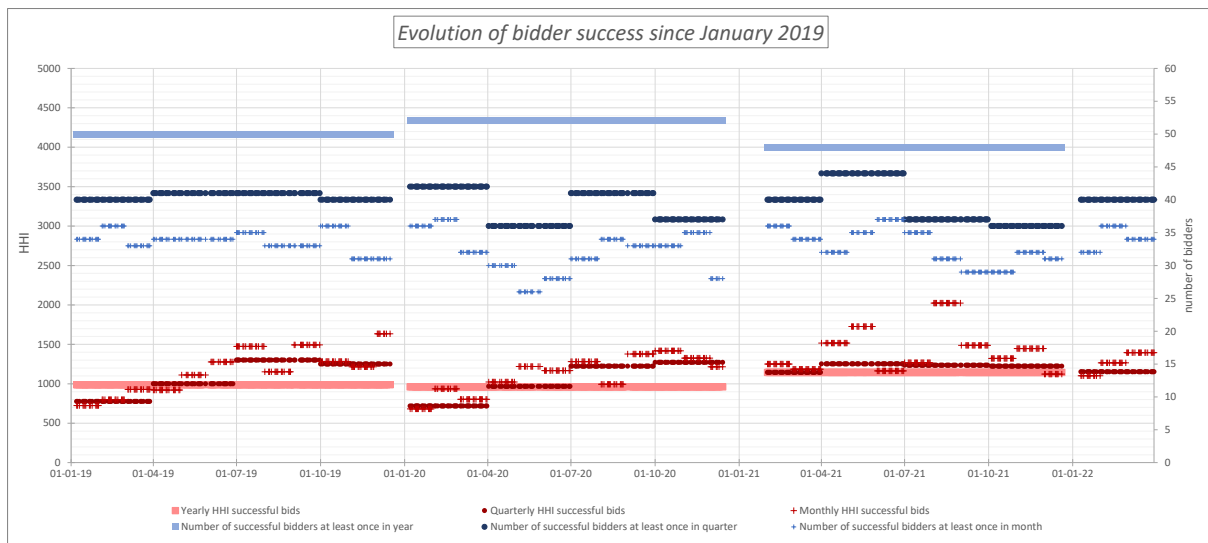
The Herfindahl-Hirschman Index (HHI) of successful bids is used to measure market concentration⁴. The HHI ranges from a value of 0 (perfect competition) to 10 000 (a single buyer). A common interpretation of the HHI is that a score below 1 500 is 'not-concentrated,' between 1 500 and 2 500 is 'moderately 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 22 | - | - | - | - | - | - | - |
| Feb 22 | 600,000 | 1,130,500 | 57,918,000 | 1.9 | 7.0 | 6.0 | 96.53 |
| Jan 22 | - | - | - | - | - | - | - |
| Dec 21 | - | - | - | - | - | - | - |
| Nov 21 | 613,500 | 1,370,500 | 37,748,655 | 2.2 | 7.0 | 5.0 | 61.53 |
| Oct 21 | - | - | - | - | - | - | - |
| Sep 21 | 614,500 | 1,044,500 | 36,870,000 | 1.7 | 7.0 | 5.0 | 60.00 |
| Aug 21 | - | - | - | - | - | - | - |
| Jul 21 | 614,500 | 1,486,000 | 32,660,675 | 2.4 | 5.0 | 4.0 | 53.15 |
| 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 | - | - | - | - | - | - | - |

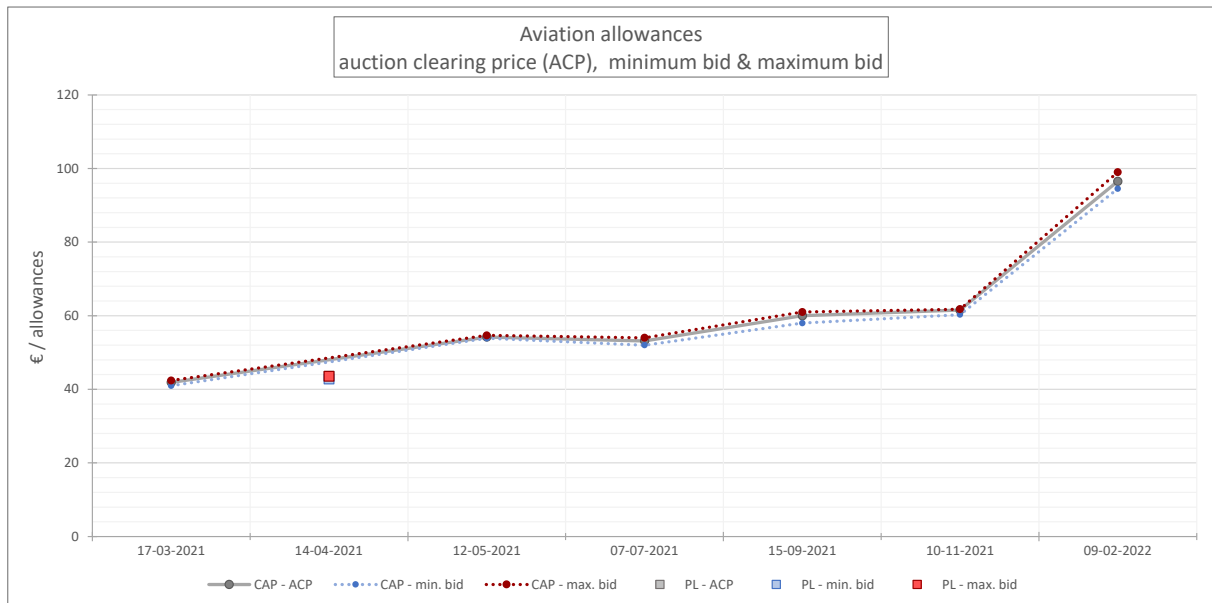
⁵ The auctions were suspended end 2012, see the Regulatory update published by the Commission on 16 November 2012: https://ec.europa.eu/clima/news-your-voice/news/auctions-2012-aviation-allowances-put-hold-2012-11-16_en

⁶ See also the regulatory update published by the Commission on 29 July 2014: https://ec.europa.eu/clima/news-your-voice/news/2014-aviation-auction-calendars-published-2014-07-29_en

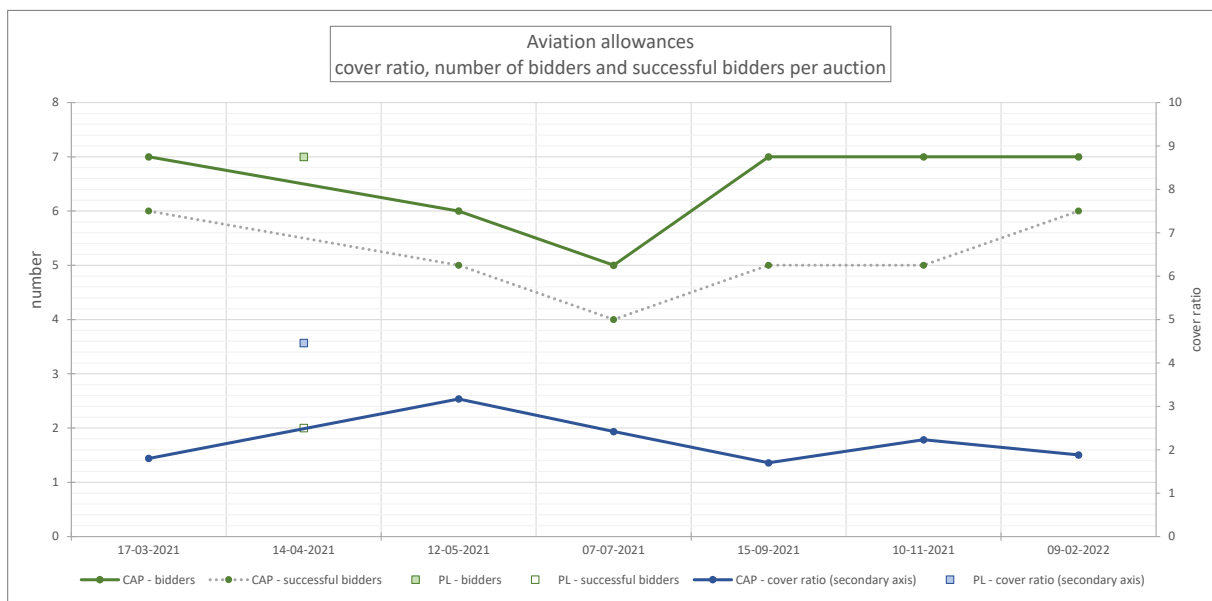
| | | | | | | | |
|-------------------|------------|------------|-------------|-----|------|-----|-------|
| Jan 21 | - | - | - | - | - | - | - |
| 2021 total | 3,185,500 | 7,463,000 | 171,307,490 | 2.6 | 6.5 | 4.5 | 53.78 |
| 2020 total | 5,049,500 | 13,474,500 | 119,509,185 | 2.7 | 8.0 | 5.0 | 23.67 |
| 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.

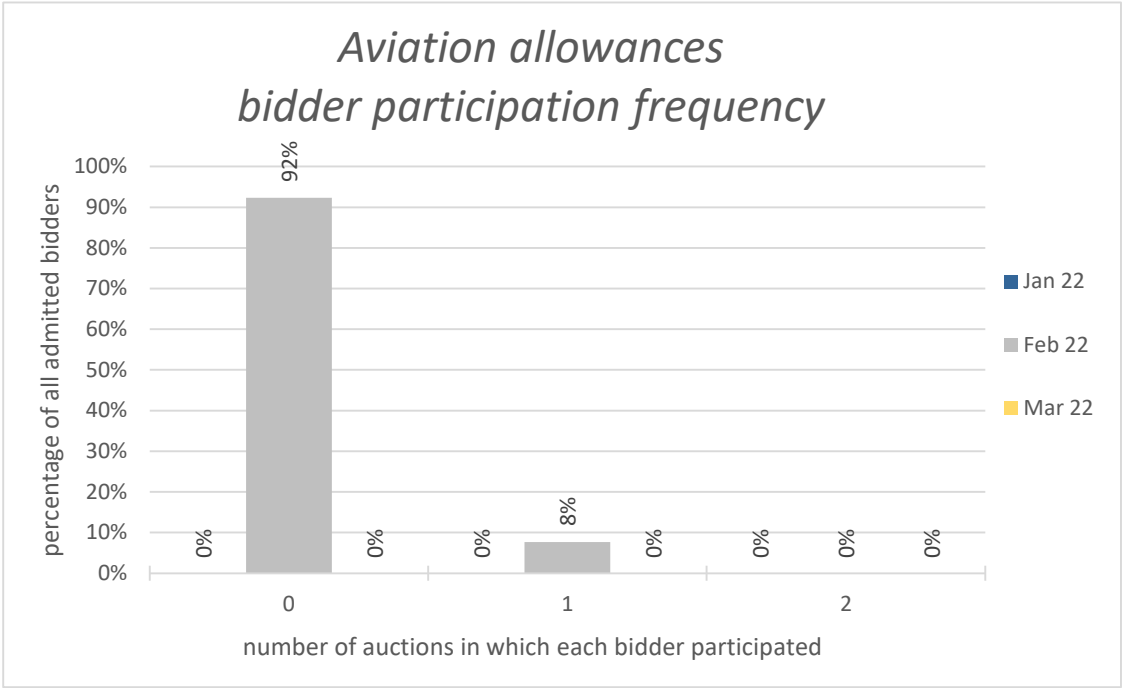
Graph 8: Aviation allowances - auction clearing price (ACP) & maximum prices bid & minimum prices bid



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 22 | - | - | - | - | - | - | - | - | - |
| Feb 22 | 1 | 7 | 1,130,500 | 161,500 | 161,500 | 215,120 | 24 | 3.4 | 47,104 |
| Jan 22 | - | - | - | - | - | - | - | - | - |
| Dec 21 | - | - | - | - | - | - | - | - | - |
| Nov 21 | 1 | 7 | 1,370,500 | 195,786 | 195,786 | 210,922 | 27 | 3.9 | 50,759 |
| Oct 21 | - | - | - | - | - | - | - | - | - |
| Sep 21 | 1 | 7 | 1,044,500 | 149,214 | 149,214 | 137,952 | 33 | 4.7 | 31,652 |
| Aug 21 | - | - | - | - | - | - | - | - | - |
| Jul 21 | 1 | 5 | 1,486,000 | 297,200 | 297,200 | 206,783 | 18 | 3.6 | 82,556 |
| 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 | - | - | - | - | - | - | - | - | - |

(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 22 | - | - | - | - | - | - | - |
| Feb 22 | 1 | 6 | 600,000 | 100,000 | 100,000 | 127,577 | 10 |
| Jan 22 | - | - | - | - | - | - | - |
| Dec 21 | - | - | - | - | - | - | - |
| Nov 21 | 1 | 5 | 613,500 | 122,700 | 122,700 | 123,118 | 9 |
| Oct 21 | - | - | - | - | - | - | - |
| Sep 21 | 1 | 5 | 614,500 | 122,900 | 122,900 | 152,587 | 21 |
| Aug 21 | - | - | - | - | - | - | - |
| Jul 21 | 1 | 4 | 614,500 | 153,625 | 153,625 | 116,936 | 7 |
| 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 | - | - | - | - | - | - | - |

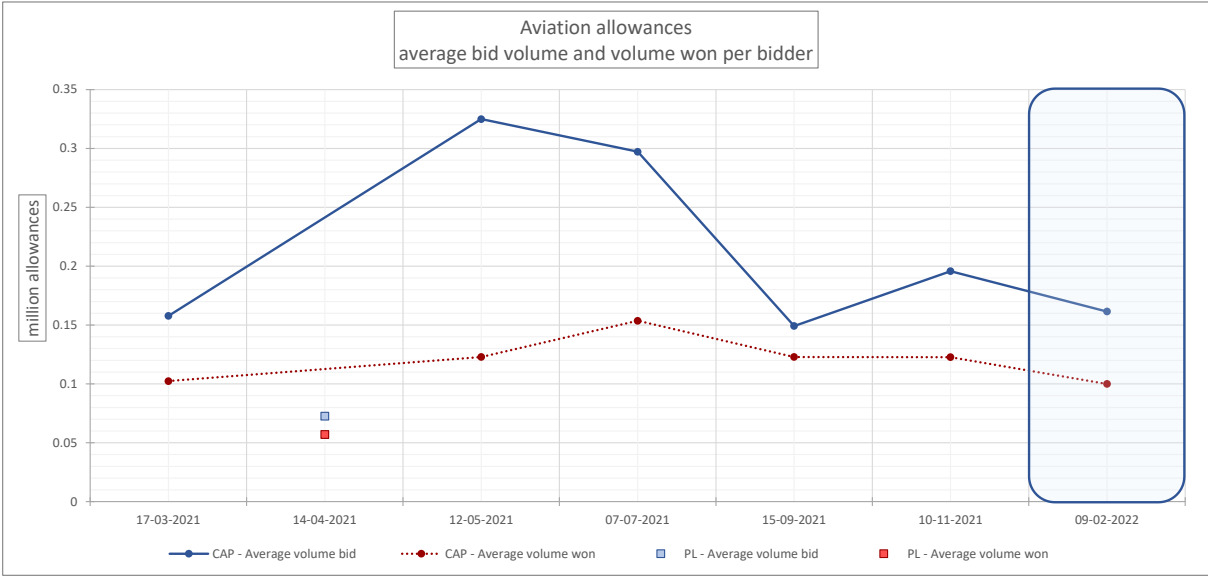
(1): Number of unique individual bidders or unique successful bidders present in a whole month.

[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



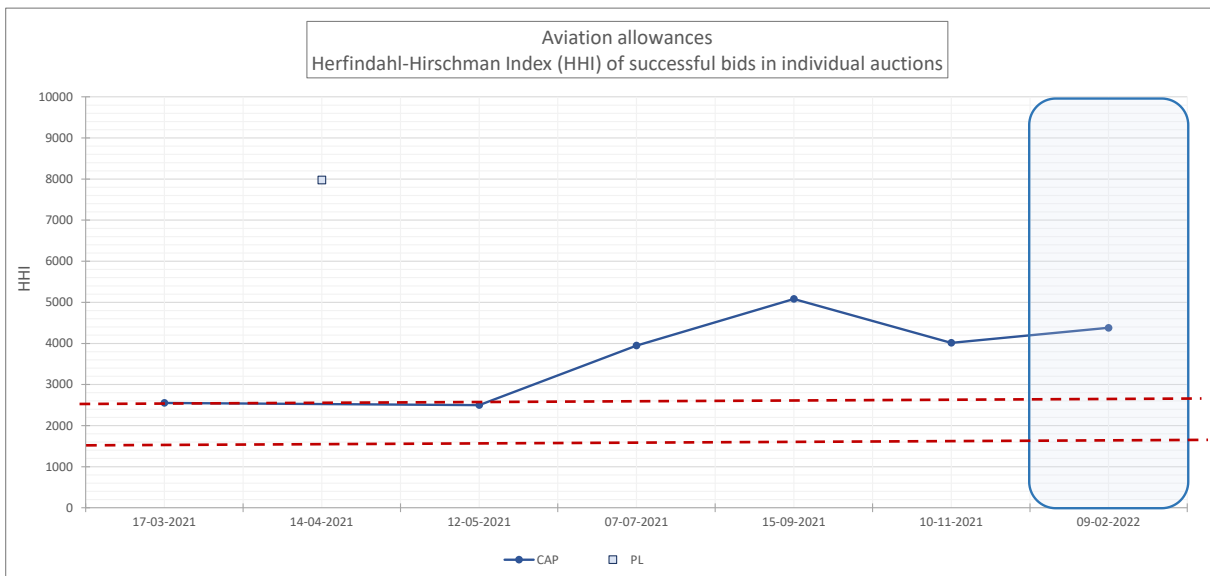
1.2.3 Type of bidders – aviation allowances

The volume submitted by intermediaries on behalf of a client⁷ during the reporting period was respectively -, 0 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



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.

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.

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

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 22 | - | - | - | - | - | - | 160 |
| | Feb 22 | - | - | - | - | - | - | 162 |
| | Mar 22 | - | - | - | - | - | - | 164 |
| Participants eligible to bid in the auctions | Jan 22 | 66 | 1 | 11 | 4 | - | 10 | 92 |
| | Feb 22 | 66 | 1 | 10 | 4 | - | 10 | 91 |
| | Mar 22 | 67 | 1 | 10 | 4 | - | 10 | 92 |
| (Of which:) Participants eligible to bid in the auctions on behalf of clients | Jan 22 | - | - | 2 | 2 | - | 2 | 6 |
| | Feb 22 | - | - | 2 | 2 | - | 2 | 6 |
| | Mar 22 | - | - | 2 | 2 | - | 2 | 6 |
| (Of which:) Auction-only access | Jan 22 | 3 | - | - | - | - | 1 | 4 |
| | Feb 22 | 2 | - | - | - | - | 1 | 3 |
| | Mar 22 | 2 | - | - | - | - | 1 | 3 |

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: 01/06/2022

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 1 2022 (reported in euros)

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

| Cumulated Revenues since November 2012 (start of Phase III) | General allowances | Aviation allowances | General and aviation allowances |
|--|---------------------------|----------------------------|--|
| Austria | 1,308,959,395 | 18,381,945 | 1,327,341,340 |
| Belgium | 2,451,444,725 | 22,987,080 | 2,474,431,805 |
| Bulgaria | 2,740,774,160 | 7,244,475 | 2,748,018,635 |
| Croatia | 495,477,440 | 4,881,555 | 500,358,995 |
| Cyprus | 199,618,025 | 9,042,250 | 208,660,275 |
| Czech Republic | 3,269,638,890 | 9,044,090 | 3,278,682,980 |
| Denmark | 1,227,543,290 | 21,345,480 | 1,248,888,770 |
| Estonia | 872,343,615 | 1,555,370 | 873,898,985 |
| Finland | 1,653,611,215 | 16,998,315 | 1,670,609,530 |
| France | 5,488,117,230 | 99,802,590 | 5,587,919,820 |
| Greece | 3,705,857,075 | 39,550,010 | 3,745,407,085 |
| Hungary | 1,392,886,690 | 7,706,770 | 1,400,593,460 |
| Iceland | 69,970,700 | 7,228,940 | 77,199,640 |
| Innovation Fund | 4,364,563,270 | - | 4,364,563,270 |
| Ireland | 875,165,780 | 16,552,595 | 891,718,375 |
| Italy | 9,628,583,075 | 108,603,915 | 9,737,186,990 |
| Latvia | 271,665,085 | 4,199,560 | 275,864,645 |

| | | | |
|---------------------------|----------------|-------------|----------------|
| Liechtenstein | 1,628,380 | - | 1,628,380 |
| Lithuania | 482,832,215 | 2,677,380 | 485,509,595 |
| Luxembourg | 105,404,250 | 2,689,330 | 108,093,580 |
| Malta | 109,635,535 | 4,498,875 | 114,134,410 |
| Modernisation Fund | 5,231,464,270 | - | 5,231,464,270 |
| The Netherlands | 3,357,290,195 | 35,020,495 | 3,392,310,690 |
| Northern Ireland | 102,868,800 | - | 102,868,800 |
| Norway | 1,453,016,980 | 57,062,515 | 1,510,079,495 |
| Poland | 14,791,365,240 | 15,873,915 | 14,807,239,155 |
| Portugal | 1,871,503,465 | 25,924,250 | 1,897,427,715 |
| Romania | 3,778,360,125 | 13,172,030 | 3,791,532,155 |
| Slovak Republic | 1,449,696,265 | 1,415,635 | 1,451,111,900 |
| Slovenia | 477,625,325 | 1,073,180 | 478,698,505 |
| Spain | 9,110,349,225 | 126,271,130 | 9,236,620,355 |
| Sweden | 880,714,760 | 28,810,155 | 909,524,915 |

Annex 1b Auction revenues per Member State and for Poland from 12 November 2012 to the end of Quarter 1 2022 (reported in euros)

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

| Cumulated Revenues since January 2021 (start of Phase IV) | General allowances | Aviation allowances | General and aviation allowances |
|--|---------------------------|----------------------------|--|
| Austria | 405,436,275 | 5,859,780 | 411,296,055 |
| Belgium | 766,266,425 | 7,971,465 | 774,237,890 |
| Bulgaria | 1,039,597,285 | 2,645,180 | 1,042,242,465 |
| Croatia | 147,561,380 | 2,094,185 | 149,655,565 |
| Cyprus | 103,546,400 | 1,910,520 | 105,456,920 |
| Czech Republic | 775,976,550 | 2,828,845 | 778,805,395 |
| Denmark | 417,428,890 | 7,145,435 | 424,574,325 |
| Estonia | 338,058,710 | 765,425 | 338,824,135 |
| Finland | 568,359,505 | 5,938,810 | 574,298,315 |
| France | 1,934,304,700 | 31,152,125 | 1,965,456,825 |
| Greece | 1,356,536,910 | 14,413,005 | 1,370,949,915 |
| Hungary | 390,951,305 | 2,645,180 | 393,596,485 |
| Iceland | 9,778,555 | 2,540,545 | 12,319,100 |
| Innovation Fund | 3,030,740,265 | - | 3,030,740,265 |
| Ireland | 270,685,045 | 5,357,050 | 276,042,095 |
| Italy | 3,338,176,930 | 33,968,630 | 3,372,145,560 |
| Latvia | 83,467,430 | 1,500,085 | 84,967,515 |

| | | | |
|---------------------------|---------------|------------|---------------|
| Liechtenstein | 316,115 | - | 316,115 |
| Lithuania | 111,869,135 | 1,254,890 | 113,124,025 |
| Luxembourg | 25,043,205 | 979,855 | 26,023,060 |
| Malta | 39,854,620 | 1,652,985 | 41,507,605 |
| Modernisation Fund | 5,231,464,270 | - | 5,231,464,270 |
| The Netherlands | 1,183,199,915 | 11,841,695 | 1,195,041,610 |
| Northern Ireland | 102,868,800 | - | 102,868,800 |
| Norway | 255,662,045 | 11,627,265 | 267,289,310 |
| Poland | 6,787,256,470 | 4,962,420 | 6,792,218,890 |
| Portugal | 682,982,170 | 10,757,205 | 693,739,375 |
| Romania | 604,023,850 | 5,173,385 | 609,197,235 |
| Slovak Republic | 365,826,190 | 428,860 | 366,255,050 |
| Slovenia | 175,544,790 | 367,330 | 175,912,120 |
| Spain | 3,306,629,180 | 41,144,830 | 3,347,774,010 |
| Sweden | 286,826,020 | 10,298,505 | 297,124,525 |

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 2022 | | | | | | | | | | | | | | | | | | | |
|-----------------------------------|------------------------|-------------------|-------------------|----------------|------------------|----------------------|------------------|-------------|---------------|--------------------------|---------------|------------|-----------------------|---------------------------|------------------|---------------------------------|---|-------------------------------|---|
| 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 |
| 10-01-2022 | 82.71 | 10.00 | 95.00 | 80.49 | 82.91 | 2,449,000 | 3,104,000 | 1.27 | 23 | 22 | 202,556,790 | 68 | 43 | 2.96 | 45,647 | 134,957 | 208,012 | 111,318 | 204,430 |
| 11-01-2022 | 81.90 | 50.00 | 99.00 | 80.49 | 81.63 | 2,449,000 | 3,970,500 | 1.62 | 25 | 18 | 200,573,100 | 93 | 31 | 3.72 | 42,694 | 158,820 | 179,699 | 136,056 | 156,207 |
| 13-01-2022 | 79.05 | 60.00 | 85.00 | 78.85 | 79.14 | 2,449,000 | 3,136,000 | 1.28 | 21 | 19 | 193,593,450 | 86 | 48 | 4.10 | 36,465 | 149,333 | 206,200 | 128,895 | 194,718 |
| 17-01-2022 | 80.21 | 55.00 | 95.00 | 79.85 | 80.20 | 2,449,000 | 3,466,000 | 1.42 | 23 | 20 | 196,434,290 | 85 | 42 | 3.70 | 40,776 | 150,696 | 214,914 | 122,450 | 196,772 |
| 18-01-2022 | 79.22 | 55.00 | 90.00 | 78.95 | 79.28 | 2,449,000 | 3,719,500 | 1.52 | 23 | 21 | 194,009,780 | 88 | 49 | 3.83 | 42,267 | 161,717 | 229,843 | 116,619 | 185,010 |
| 19-01-2022 | 80.70 | 55.00 | 90.00 | 80.17 | 80.62 | 2,658,000 | 3,996,000 | 1.50 | 25 | 20 | 214,500,600 | 98 | 43 | 3.92 | 40,776 | 159,840 | 195,415 | 132,900 | 165,983 |
| 20-01-2022 | 80.80 | 60.00 | 90.00 | 80.21 | 80.46 | 2,449,000 | 4,639,500 | 1.89 | 29 | 16 | 197,879,200 | 116 | 32 | 4.00 | 39,996 | 159,983 | 224,882 | 153,063 | 207,385 |
| 24-01-2022 | 85.75 | 65.00 | 95.00 | 85.22 | 85.59 | 2,449,000 | 3,669,500 | 1.50 | 24 | 19 | 210,001,750 | 96 | 38 | 4.00 | 38,224 | 152,896 | 179,610 | 128,895 | 156,518 |
| 25-01-2022 | 84.48 | 65.00 | 95.00 | 84.25 | 84.41 | 2,449,000 | 3,813,500 | 1.56 | 25 | 23 | 206,891,520 | 95 | 45 | 3.80 | 40,142 | 152,540 | 245,390 | 106,478 | 210,182 |
| 27-01-2022 | 88.51 | 65.00 | 95.00 | 87.86 | 88.43 | 2,449,000 | 3,234,000 | 1.32 | 22 | 19 | 216,760,990 | 89 | 42 | 4.05 | 36,337 | 147,000 | 203,457 | 128,895 | 203,174 |
| 31-01-2022 | 88.03 | 80.00 | 95.00 | 88.31 | 88.19 | 2,449,000 | 2,920,500 | 1.19 | 25 | 22 | 215,585,470 | 65 | 44 | 2.60 | 44,931 | 116,820 | 181,902 | 111,318 | 181,664 |

| General Allowances - February 2022 | | | | | | | | | | | | | | | | | | | |
|------------------------------------|------------------------|-------------------|-------------------|----------------|------------------|----------------------|------------------|-------------|---------------|--------------------------|---------------|------------|-----------------------|---------------------------|------------------|---------------------------------|---|-------------------------------|---|
| 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 |
| 01-02-2022 | - | - | - | - | - | 2,449,000 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 02-02-2022 | 91.61 | 75.00 | 120.00 | 91.91 | 91.81 | 2,658,000 | 2,991,500 | 1.13 | 25 | 23 | 243,499,380 | 71 | 54 | 2.84 | 42,134 | 119,660 | 169,477 | 115,565 | 167,612 |
| 03-02-2022 | 92.65 | 88.00 | 96.50 | 93.15 | 93.00 | 3,062,000 | 3,552,500 | 1.16 | 22 | 21 | 283,694,300 | 78 | 60 | 3.55 | 45,545 | 161,477 | 227,003 | 145,810 | 215,070 |
| 07-02-2022 | 93.50 | 80.00 | 99.00 | 93.30 | 93.45 | 3,062,000 | 4,206,500 | 1.37 | 24 | 20 | 286,297,000 | 79 | 39 | 3.29 | 53,247 | 175,271 | 332,899 | 153,100 | 317,521 |
| 08-02-2022 | 97.51 | 75.00 | 102.00 | 96.92 | 97.34 | 3,062,000 | 4,735,500 | 1.55 | 26 | 20 | 298,575,620 | 91 | 34 | 3.50 | 52,038 | 182,135 | 285,232 | 153,100 | 214,454 |
| 10-02-2022 | 90.60 | 70.00 | 100.00 | 90.42 | 90.79 | 3,059,000 | 3,742,000 | 1.22 | 24 | 23 | 277,145,400 | 76 | 44 | 3.17 | 49,237 | 155,917 | 227,190 | 133,000 | 194,682 |
| 14-02-2022 | 90.73 | 70.00 | 93.00 | 89.86 | 90.78 | 2,449,000 | 2,941,000 | 1.20 | 18 | 14 | 222,197,770 | 62 | 34 | 3.44 | 47,435 | 163,389 | 304,863 | 174,929 | 327,733 |
| 15-02-2022 | 90.35 | 70.00 | 100.00 | 88.84 | 90.42 | 2,449,000 | 3,005,500 | 1.23 | 21 | 19 | 221,267,150 | 77 | 43 | 3.67 | 39,032 | 143,119 | 266,145 | 128,895 | 259,748 |
| 16-02-2022 | 88.05 | 70.00 | 95.00 | 88.09 | 88.31 | 2,658,000 | 2,992,000 | 1.13 | 23 | 21 | 234,036,900 | 71 | 49 | 3.09 | 42,141 | 130,087 | 235,808 | 126,571 | 241,445 |
| 17-02-2022 | 87.50 | 70.00 | 99.00 | 87.30 | 87.44 | 2,449,000 | 3,570,000 | 1.46 | 22 | 17 | 214,287,500 | 84 | 40 | 3.82 | 42,500 | 162,273 | 216,158 | 144,059 | 208,814 |
| 21-02-2022 | 87.99 | 70.00 | 99.00 | 87.56 | 87.60 | 2,449,000 | 3,855,500 | 1.57 | 22 | 14 | 215,487,510 | 76 | 22 | 3.45 | 50,730 | 175,250 | 263,104 | 174,929 | 265,904 |
| 22-02-2022 | 88.40 | 70.00 | 100.00 | 87.96 | 88.13 | 2,449,000 | 3,701,500 | 1.51 | 24 | 20 | 216,491,600 | 83 | 34 | 3.46 | 44,596 | 154,229 | 224,298 | 122,450 | 203,147 |
| 23-02-2022 | 92.80 | 70.00 | 95.00 | 91.53 | 92.25 | 1,108,500 | 2,375,500 | 2.14 | 18 | 10 | 102,868,800 | 64 | 12 | 3.56 | 37,117 | 131,972 | 182,257 | 110,850 | 217,502 |
| 24-02-2022 | 88.00 | 70.00 | 93.00 | 88.38 | 89.07 | 2,449,000 | 3,223,000 | 1.32 | 17 | 17 | 215,512,000 | 56 | 50 | 3.29 | 57,554 | 189,588 | 253,613 | 144,059 | 199,354 |
| 28-02-2022 | 80.92 | 60.00 | 100.00 | 81.29 | 81.07 | 2,449,000 | 3,112,000 | 1.27 | 23 | 22 | 198,173,080 | 76 | 45 | 3.30 | 40,947 | 135,304 | 197,053 | 111,318 | 185,017 |

| General Allowances - March 2022 | | | | | | | | | | | | | | | | | | | |
|---------------------------------|------------------------|-------------------|-------------------|----------------|------------------|----------------------|------------------|-------------|---------------|--------------------------|---------------|------------|-----------------------|---------------------------|------------------|---------------------------------|---|-------------------------------|---|
| 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 |
| 01-03-2022 | 79.96 | 65.00 | 95.00 | 80.05 | 79.70 | 2,449,000 | 3,573,000 | 1.46 | 25 | 17 | 195,822,040 | 79 | 25 | 3.16 | 45,228 | 142,920 | 213,370 | 144,059 | 240,300 |
| 02-03-2022 | - | - | - | - | - | 2,658,000 | 2,327,000 | 0.88 | 17 | - | - | 45 | - | 2.65 | 51,711 | 136,882 | 233,798 | - | - |
| 03-03-2022 | 63.87 | 45.00 | 100.00 | 64.17 | 63.76 | 2,449,000 | 5,535,000 | 2.26 | 22 | 18 | 156,417,630 | 89 | 44 | 4.05 | 62,191 | 251,591 | 489,384 | 136,056 | 235,070 |
| 07-03-2022 | 57.91 | 25.00 | 100.00 | 58.09 | 57.54 | 2,449,000 | 5,852,500 | 2.39 | 21 | 18 | 141,821,590 | 84 | 32 | 4.00 | 69,673 | 278,690 | 589,869 | 136,056 | 284,037 |
| 08-03-2022 | 62.01 | 45.00 | 70.00 | 61.75 | 62.01 | 2,449,000 | 5,470,000 | 2.23 | 22 | 20 | 151,862,490 | 87 | 44 | 3.95 | 62,874 | 248,636 | 481,862 | 122,450 | 264,098 |
| 10-03-2022 | 70.04 | 45.00 | 100.00 | 69.75 | 69.45 | 2,449,000 | 6,437,500 | 2.63 | 27 | 13 | 171,527,960 | 91 | 22 | 3.37 | 70,742 | 238,426 | 426,595 | 188,385 | 257,566 |
| 14-03-2022 | 78.60 | 45.00 | 90.00 | 77.18 | 77.95 | 2,449,000 | 5,636,000 | 2.30 | 20 | 13 | 192,491,400 | 75 | 22 | 3.75 | 75,147 | 281,800 | 556,162 | 188,385 | 413,891 |
| 15-03-2022 | 75.55 | 45.00 | 88.00 | 75.47 | 75.90 | 2,449,000 | 4,723,000 | 1.93 | 20 | 18 | 185,021,950 | 61 | 41 | 3.05 | 77,426 | 236,150 | 474,606 | 136,056 | 221,977 |
| 16-03-2022 | 75.25 | 45.00 | 81.00 | 75.04 | 75.06 | 3,322,500 | 6,506,000 | 1.96 | 22 | 19 | 250,018,125 | 91 | 41 | 4.14 | 71,495 | 295,727 | 493,224 | 174,868 | 301,098 |
| 17-03-2022 | 76.87 | 45.00 | 80.00 | 75.22 | 76.28 | 2,449,000 | 6,609,500 | 2.70 | 28 | 15 | 188,254,630 | 90 | 21 | 3.21 | 73,439 | 236,054 | 441,178 | 163,267 | 278,599 |
| 21-03-2022 | 77.76 | 62.03 | 81.50 | 77.18 | 77.32 | 2,506,500 | 5,761,500 | 2.30 | 19 | 15 | 194,905,440 | 81 | 27 | 4.26 | 71,130 | 303,237 | 502,224 | 167,100 | 263,886 |
| 22-03-2022 | 79.05 | 64.92 | 82.00 | 78.89 | 78.99 | 2,506,500 | 4,971,000 | 1.98 | 22 | 18 | 198,138,825 | 90 | 41 | 4.09 | 55,233 | 225,955 | 360,827 | 139,250 | 203,189 |
| 24-03-2022 | 76.15 | 65.00 | 80.00 | 75.94 | 75.75 | 2,507,500 | 4,753,000 | 1.90 | 20 | 11 | 190,946,125 | 82 | 25 | 4.10 | 57,963 | 237,650 | 313,676 | 227,955 | 213,942 |
| 28-03-2022 | 80.76 | 60.00 | 88.00 | 79.93 | 80.13 | 2,506,500 | 6,232,000 | 2.49 | 17 | 9 | 202,424,940 | 74 | 22 | 4.35 | 84,216 | 366,588 | 519,513 | 278,500 | 279,481 |
| 29-03-2022 | 80.51 | 40.00 | 84.60 | 79.25 | 80.48 | 2,506,500 | 5,750,500 | 2.29 | 17 | 13 | 201,798,315 | 74 | 36 | 4.35 | 77,709 | 338,265 | 523,258 | 192,808 | 254,157 |
| 30-03-2022 | 77.22 | 45.00 | 88.00 | 76.87 | 77.35 | 3,322,500 | 6,254,000 | 1.88 | 24 | 22 | 256,563,450 | 87 | 50 | 3.63 | 71,885 | 260,583 | 482,328 | 151,023 | 261,961 |
| 31-03-2022 | 79.25 | 45.00 | 84.60 | 78.62 | 79.01 | 2,506,500 | 5,863,500 | 2.34 | 21 | 14 | 198,640,125 | 82 | 31 | 3.90 | 71,506 | 279,214 | 491,241 | 179,036 | 257,985 |

| Aviation Allowances - January 2022 | | | | | | | | | | | | | | | | | | | | |
|------------------------------------|------------------------|-------------------|-------------------|----------------|------------------|----------------------|------------------|-------------|---------------|--------------------------|---------------|------------|-----------------------|---------------------------|------------------|---------------------------------|---|-------------------------------|---|---|
| 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 2022 | | | | | | | | | | | | | | | | | | | |
|-------------------------------------|------------------------|-------------------|-------------------|----------------|------------------|----------------------|------------------|-------------|---------------|--------------------------|---------------|------------|-----------------------|---------------------------|------------------|---------------------------------|---|-------------------------------|---|
| 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 |
| 09-02-2022 | 96.53 | 94.50 | 99.00 | 96.46 | 96.46 | 600,000 | 1,130,500 | 1.88 | 7 | 6 | 57,918,000 | 24 | 10 | 3.43 | 47,104 | 161,500 | 215,120 | 100,000 | 127,577 |

| Aviation Allowances - March 2022 | | | | | | | | | | | | | | | | | | | | |
|----------------------------------|------------------------|-------------------|-------------------|----------------|------------------|----------------------|------------------|-------------|---------------|--------------------------|---------------|------------|-----------------------|---------------------------|------------------|---------------------------------|---|-------------------------------|---|---|
| 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.