EUROPEAN
COMMISSION

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COMMISSION IMPLEMENTING REGULATION (EU) …/...

of 18.12.2024

laying down detailed provisions concerning the voluntary environmental labelling scheme for the estimation of the environmental performance of flights, established pursuant to Article 14 of Regulation (EU) 2023/2405 of the European Parliament and of the Council
(Flight Emissions Label)

(Text with EEA relevance)

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THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Regulation (EU) 2023/2405 of the European Parliament and the Council of 18 October 2023 on ensuring a level playing field for sustainable air transport (ReFuelEU Aviation)[1], and in particular Article 14(11) thereof,

Whereas:

(1) Article 14(1) of Regulation (EU) 2023/2405 establishes a voluntary environmental labelling scheme enabling the environmental performance of flights to be measured, open to all aircraft operators falling within the scope of that Regulation.

(2) In order to enable consumers to make informed choices regarding flights and other alternative modes of transport, this Regulation should lay down a robust, reliable, transparent, and harmonised methodology for estimating flight emissions using primary data, and rules on communicating flight emissions to passengers. Since the result of the methodology is the estimation of flight emissions, this Regulation should use a term for this label that represents closely the methodology used. This is why the label should be called Flight Emissions Label.

(3) Aircraft operators seeking the issuance of labels for their flights should apply to the European Union Aviation Safety Agency (the 'Agency') with sufficient time ahead, so that both Agency and aircraft operator can prepare the reporting and relevant digital infrastructure.

(4) The methodology for the estimation of flight emissions laid down in this Regulation should ensure that the highest levels of transparency and traceability of the estimations and of the underlying assumptions which should remain at all times consistent with upcoming Union acts on the accounting of greenhouse gas emissions of transport services.

(5) Flight emissions should be estimated based on the average performance of past flights as a function of the average environmental performance of the aviation fuels used to operate each flight and of the average consumption of aviation fuels in the previous corresponding scheduling period. These two factors are the most reliable and robust to

[1] OJ L 2023/2405, 31.10.2023, ELI: http://data.europa.eu/eli/reg/2023/2405/oj.

accurately estimate flight emissions. Because of possible technical limitations to arrive at such a level of detail on the exact batches of aviation fuels consumed to operate each flight, this Regulation should also lay down robust methods for reaching the closest and safest approximation of the consumption of aviation fuels and of the aviation fuels life cycle emissions while endeavouring to minimise the burden placed on the aircraft operators and on the Agency. For the purpose of estimating the flight emissions of a flight on a route for a given scheduling period, the latest available information of the previous corresponding scheduling period should be taken into account and this Regulation should lay down specific requirements for this purpose. Using the information of the preceding calendar year when estimating flight emissions should allow the Agency to use information already verified by independent verifiers while minimising the administrative burden and using the most recent performance information.

(6) Accurate estimations of the future consumption of aviation fuels of flights are essential for the calculation of flight emissions and these estimations should be based on the latest scientific evidence. These estimations of consumption of aviation fuels should also be based on primary data reported by aircraft operators of their most recent operations which should be those of the previous corresponding scheduling period. The use of secondary data, such as that data stemming from models and estimations not fully derived from primary data, should be limited to exceptional cases where primary data are not available or when estimations based on primary data cannot be made with sufficient accuracy. This could be the case, in particular, when an aircraft operator decides to operate on new routes or when flights operated on existing routes are scheduled to be operated under different conditions. This Regulation should ensure that the methodological requirements to estimate the consumption of aviation fuels continue to be in line with most recent scientific evidence and developments.

(7) The life cycle emissions of aviation fuels have the potential to be lower than those life cycle emissions of conventional aviation fuels, depending on numerous factors such as the choice of feedstock and production pathways for their production. Such aviation fuels life cycle emissions take into account the carbon dioxide equivalent (CO_2eq) emissions of energy production, transport, distribution and use on-board, including during combustion, so as to remain consistent with Union law, notably Regulation (EU) 2023/2405, but also Directive (EU) 2018/2001 of the European Parliament and of the Council[2]. Hence, the scope of gases considered in the estimation of the aviation fuels life cycle emissions should represent the sum of carbon dioxide (CO_2), methane (CH_4), and of nitrous oxide (N_2O). The life cycle emissions of aviation fuels should be calculated in accordance with Point C of Annex V to Directive (EU) 2018/2001 and, where applicable, other relevant Union law and international standards, and data and methodologies which reflect the latest scientific developments developed under the International Civil Aviation Organization (ICAO) framework.

(8) Recognising that information on the consumption and the aviation fuels life cycle emissions is very important for the accurate estimation of flight emissions, this Regulation should lay down the conditions for this information to be reported by aircraft operators to the Agency. The reporting burden should be minimised, especially for small and medium-sized aircraft operators, to avoid that aircraft operators are

[2] Directive (EU) 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable sources (OJ L 328, 21.12.2018, p. 82, ELI: http://data.europa.eu/eli/dir/2018/2001/oj).

dissuaded from taking up the Flight Emissions Label. Therefore, aircraft operators should be able to report data to the Agency in a smooth and seamless manner, using digital reporting tools developed by the Agency, and, where applicable, making use of information reported already for other purposes. To be able to make robust estimates, the Agency should have access to all the necessary information on the volumes of aviation fuels uplifted by each aircraft operator at each airport, and the volumes supplied by aviation fuel suppliers to aircraft operators at each airport and their respective aviation fuels life cycle emissions.

(9) The methodology for the estimation of flight emissions laid down in this Regulation should keep up with developments in the relevant Union law and international standards, data, and methodologies and scientific developments, particularly as regards to the use of default values. For the purpose of this Regulation, the emissions intensity baseline for conventional aviation fuels should be 89 g CO_2eq/MJ, which is the reference value for the aviation fuels developed under the ICAO framework until Union law defines an aviation-specific fossil fuel comparator. The weight attributed per passenger including passenger luggage should be 100 kg, and the energy content of aviation fuels should be in accordance with Directive (EU) 2018/2001 and applicable international standards and methodologies.

(10) For the purpose of this Regulation, environmental performance is limited to the greenhouse gas emissions of the aviation fuels used by aircraft operators, the operational performance of the flights and their fleet, and the impact of air traffic on the consumption of aviation fuels. This Regulation, therefore, does not cover other environmental impacts, such as noise and other air pollutant emissions such oxides of nitrogen (NOx) or particulate matter (PM).

(11) The methodology for the estimation of flight emissions is based on the average past consumption of aviation fuels and fleet renewal and optimised route planning can have a non-negligible impact on reducing the consumption of aviation fuels and, thereby, reducing flight emissions. Those two factors should be automatically reflected in the methodology for the estimation of flight emissions to facilitate the transition to more efficient aircraft and optimised route planning. Therefore, flight emissions estimated by the Agency using the methodology laid down in this Regulation should incentivise fleet renewal and optimised route planning. The methodology laid down in this Regulation should be robust enough to accommodate technological changes and operational advancements.

(12) Where the operating conditions of future scheduled flights coincide with the flights already operated on that route, estimations based in accordance with this Regulation on that same route are considerably more reliable estimation of environmental performance of those scheduled flights. For the purpose of this Regulation, operating conditions refer to the type of aircraft, the type of aviation fuels, the average number of passenger and the mass of freight transported. However, when the aircraft operator changes the operating conditions of a flight or it operates new flights, the estimated consumption of aviation fuels and the estimated environmental performance of the aviation fuels should be estimated using the latest available scientific methods and evidence. Such estimations should be accurate and based on an approach that responds to the precautionary principle. This Regulation should therefore lay down the methodology for the estimation of flight emissions for both cases, that is, for flights where all the necessary information on the past operations of the aircraft operator is available and is deemed a reliable source for estimations of those operations, and for those flights where that information is not available.

(13) The schedules of future flights should be shared with the Agency, with the necessary confidentiality considerations, so that the Agency compares operating conditions and estimate flight emissions in the most accurate manner. Furthermore, aircraft operators should endeavour to provide the Agency with any other information that might facilitate the most accurate estimation of flight emissions.

(14) Information reported to the Agency, especially regarding the consumption of aviation fuel per flight and the aviation fuels life cycle emissions uplifted per airport, should be verified by an independent verifier before they are reported to the Agency. This independent verification should be carried out based on the principles and guidance of the relevant Union law and applicable international standards and methodologies. The verification should also take into account of the ongoing international developments, particularly to ensure that flights arriving in the Union can also, where applicable, benefit from the provisions of this Regulation.

(15) This Regulation should lay down the rules on the validity period of labels issued by the Agency and the conditions for incorporating the validity period in their issuance to aircraft operators, as well as the conditions for aircraft operators to clearly display to customers information on this validity.

(16) This Regulation should lay down the conditions for the display of labels issued by the Agency. In times of digitalisation, especially for air transport, customers can access online a much wider set of information on the air transport services offered by competing aircraft operators. It is therefore essential to ensure that the labels issued by the Agency for an aircraft operator are displayed at all points of sale owned by that aircraft operator following the templates laid down in this Regulation. Aircraft operators should also ensure that all points of sale with which they have a contractual relationship display the labels issued by the Agency. Finally, aircraft operators should deploy reasonable efforts to ensure that points of sale with which they do not cooperate also display the labels issued by the Agency. Failure to do so would risk undermining the people's trust in the Label and in the efforts undertaken by aircraft operators to use aviation fuels with lower aviation fuels life cycle emissions.

(17) This Regulation should lay down the conditions for aircraft operators to display labels issued by the Agency and ensuring that flight emissions are easily recognised. It should lay down the design specifications and the display templates for the flight emissions to be displayed in a harmonised and recognisable way by all aircraft operators.

(18) The design elements should include a logotype to demonstrate that the flight emissions have been estimated by the Agency on behalf of the European Union in accordance with this Regulation. This harmonised logotype should serve as a vehicle to ensure the recognition and build trust in the flight emissions estimation in accordance this Regulation. It should also serve to represent this Regulation in the world and avoid confusion with other Union legislation and existing initiatives in the field of sustainability, such as the labels issued pursuant to Regulation (EU) 2017/1369 of the European Parliament and of the Council[3] and to the delegated regulations adopted thereunder. With a view to improving communication and raising awareness, this Regulation should also lay down the specific terminology to refer clearly to each of

[3] Regulation (EU) 2017/1369 of the European Parliament and of the Council of 4 July 2017 setting a framework for energy labelling and repealing Directive 2010/30/EU (OJ L 198, 28.7.2017, p. 1 ELI: http://data.europa.eu/eli/reg/2017/1369/oj).

the elements that make up the flight emissions label. This includes, for instance, the combination of the flight emissions, the logotype and the other aspects that should be the key elements making up a label. This Regulation should therefore lay down the design of a simple and clear label logotype that must always be displayed alongside the flight emissions, encompassing the Union flag. The conditions for the display of labels laid down in this Regulation should ensure that the labels are easily accessible and understandable, and the conditions for the display should enable customers to easily compare the environmental performance of flights operated by different aircraft operators flying the same route. This Regulation should ensure the consistent and accurate display data on of emissions to ensure comparability and fair competition in the internal market for transport, in particular when air transport services are part of multimodal transport chains or when the services are competing with other transport modes. To this aim, this Regulation should be consistent with applicable legislation on the accounting of greenhouse gas emissions of transport services.

(19) The conditions for the display of labels should be divided into a primary display and a secondary display. The display of labels has the potential to improve customers' awareness of the estimated emissions of flights and of the efforts made by aircraft operators to reduce the environmental footprint of the air transport services they offer. The primary display, which should always include, in an easily understandable format, the key elements of a given flight throughout the whole flight search and purchase process, should not require any interaction from the customer. The primary display should also incorporate the necessary elements for the customer to be able to compare the performance of a given aircraft operator to other competing aircraft operators on the same route. The purpose of such comparison should be to make it easier for the customer to understand the relevant environmental information, and also to further incentivise efforts by aircraft operators to improve their environmental performance. A secondary display, which should require customer interaction for it to be visible, should contain a higher level of detail and background on the way in which flight emissions were estimated, including, for instance, the average environmental performance of the aviation fuels used by the aircraft operator.

(20) Ensuring that only valid labels are displayed by aircraft operators is essential to building trust among customers. This Regulation should lay down the conditions for the Agency to verify the correct implementation and display of the labels by aircraft operators in accordance with the relevant Union law and applicable international standards and methodologies. Revoked and expired labels should not be displayed by aircraft operators. It should also lay down the conditions for the Agency to review the accuracy and veracity of the information reported by aircraft operators in relation to their operations. It is therefore appropriate that this Regulation, together with the applicable enforcement rules and powers of the Agency, lays down the conditions for the review of labels, as well as the procedure for the Agency to revoke invalid labels or instruct aircraft operators to adjust their display accordingly.

(21) The Agency should create and maintain a flight emissions website, which allows for information on the scheme to be easily accessible both to aircraft operators and to the public. This is also necessary to make the scheme more attractive to aircraft operators.

(22) To facilitate the take up of the Flight Emissions Label in the Union, from the date of entry into force of this Regulation until 1 January 2028 the Agency should issue labels for passenger air transport services or mixed passenger-freight flights only, excluding all-cargo air transport services. Passenger and freight air transport services are inherently different in the way their operations are organised, and in particular, in their

relations with final customers. This Regulation prioritises issuance of labels to aircraft operators providing passenger air transport services to allow sufficient time for the market participants to get acquainted with the label. Labels should cover all types of air transport services only as from 1 January 2028.

(23) The measures provided for in this Regulation are in accordance with the opinion of the ReFuelEU Aviation Committee.

HAS ADOPTED THIS REGULATION:

Article 1

Subject matter

This Regulation lays down detailed provisions to ensure the uniform implementation of and compliance with the rules on the environmental labelling scheme set out in Article 14 of Regulation (EU) 2023/2405, namely:

(a) a standardised and science-based methodology for the calculation of flight emissions, including the methodology for estimations, based on the best available scientific data;

(b) the procedure through which aircraft operators are to provide the European Union Aviation Safety Agency (the 'Agency') with the relevant information for the estimation of flight emissions and the issuance of the respective labels;

(c) the duration of the validity period of the labels issued by the Agency;

(d) the conditions and procedures for the Agency to review, revoke and issue new labels;

(e) the templates for displaying labels;

(f) the rules for ensuring easy access to all issued labels in machine-readable format;

(g) the possibility and conditions under which aircraft operators may display other environmental performance information outside the scope of this Regulation.

Article 2

Definitions

For the purposes of this Regulation, the following definitions apply:

(1) 'flight emissions' means the estimated aviation fuels life cycle emissions of a flight operated by an aircraft operator which are made up of cabin emissions and freight emissions, measured in tonnes of carbon dioxide equivalent;

(2) 'cabin emissions' means the proportion of flight emissions attributed to the cabin, measured in tonnes of carbon dioxide equivalent;

(3) 'freight emissions' means the proportion of flight emissions attributed to freight, measured in tonnes of carbon dioxide equivalent;

(4) 'cabin emissions per passenger' means the result of dividing the cabin emissions by the average number of passengers on the flights in the previous corresponding scheduling period, measured in kilogrammes of carbon dioxide equivalent per passenger;

(5) 'freight emissions per tonne' means the product of dividing the freight emissions by the average mass of freight carried on the aircraft in the previous corresponding scheduling period, measured in kilogrammes of carbon dioxide equivalent per tonne of freight;

(6) 'cabin emissions per passenger-kilometre' means the result of dividing the estimated cabin emissions per passenger by the distance of the operated route, measured in grammes of carbon dioxide equivalent per passenger-kilometre;

(7) ‘freight emissions per tonne-kilometre’ means the product of dividing the estimated freight emissions per tonne by the distance of the operated route, measured in grammes of carbon dioxide equivalent per tonne-kilometre;

(8) ‘label’ means a graphic diagram, printed or electronic, combining the label logotype and the information set out in Annex III;

(9) ‘label logotype’ means the image defined in Point 1 of Annex III to this Regulation that shall represent the verification of the flight emissions;

(10) ‘expired labels’ means labels that are past their validity period;

(11) ‘digital reporting tool’ means a digital platform developed and managed by the Agency as the unique point of contact with aircraft operators for the reporting of data and for the distribution of labels;

(12) ‘aircraft’ means ‘aircraft’ as defined in Article 3, point 28, of Regulation (EU) 2018/1139 of the European Parliament and of the Council[4];

(13) ‘aircraft operator certificate’ (‘AOC’) means ‘air operator certificate (AOC)’ as defined in Article 2, point 8, of Regulation (EC) No 1008/2008 of the European Parliament and of the Council[5];

(14) ‘airport’ means an ‘airport’ as defined in Article 2, point 1, of Directive 2009/12/EC of the European Parliament and of the Council[6];

(15) ‘seat’ means a seat fitted to an aircraft on which a passenger may be accommodated for the duration of a journey;

(16) ‘passenger’ (‘pax’) means a person occupying a seat within the cabin area of an aircraft at the moment of departure of an aircraft, and who is travelling aboard an aircraft for the purpose of reaching a specific destination;

(17) ‘seating area’ means the area allocated for each seat for each passenger and for each cabin class, measured in square metres;

(18) ‘cabin class’ means the distinct service and accommodation provided to passengers which is characterised by the specific configuration of the seats in the cabin, amenities, and fare structures;

(19) ‘scheduling period’ means a ‘scheduling period’ as defined in Article 2, point (d), of Council Regulation (EEC) No 95/93[7];

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4 Regulation (EU) 2018/1139 of the European Parliament and of the Council of 4 July 2018 on common rules in the field of civil aviation and establishing a European Union Aviation Safety Agency, and amending Regulations (EC) No 2111/2005, (EC) No 1008/2008, (EU) No 996/2010, (EU) No 376/2014 and Directives 2014/30/EU and 2014/53/EU of the European Parliament and of the Council, and repealing Regulations (EC) No 552/2004 and (EC) No 216/2008 of the European Parliament and of the Council and Council Regulation (EEC) No 3922/91 (OJ L 212, 22.8.2018, p. 1, ELI: http://data.europa.eu/eli/reg/2018/1139/oj).

5 Regulation (EC) No 1008/2008 of the European Parliament and of the Council of 24 September 2008 on common rules for the operation of air services in the Community (OJ L 293, 31.10.2008, p. 1, ELI: http://data.europa.eu/eli/reg/2008/1008/oj).

6 Directive 2009/12/EC of the European Parliament and of the Council of 11 March 2009 on airport charges (OJ L 70, 14.3.2009, p. 11, ELI: http://data.europa.eu/eli/dir/2009/12/oj).

7 Council Regulation (EEC) No 95/93 of 18 January 1993 on common rules for the allocation of slots at Community airports (OJ L 14, 22.1.1993, p. 1, ELI: http://data.europa.eu/eli/reg/1993/95/oj).

(20) ‘block aviation fuel’ means the amount of aviation fuels consumed by an aircraft when operating a flight, from its initial movement from its parking place at the departure airport until it comes to a complete stop at the parking place at the arrival airport, measured in tonnes;

(21) ‘block time’ means the total time elapsed from the aircraft’s initial movement from its parking place at the departure airport until it comes to a complete stop at the parking place at the arrival airport, measured in minutes;

(22) ‘aviation fuels life cycle emissions’ means carbon dioxide equivalent emissions of aviation fuels that include carbon dioxide equivalent emissions of energy production, transport, distribution and use on board, including during combustion, and which represent the sum of carbon dioxide (CO_2), methane (CH_4), and of nitrous oxide (N_2O) emitted, calculated in accordance with Point C of Annex V to Directive (EU) 2018/2001 and, where applicable, other relevant Union law and international standards, and data and methodologies which reflect the latest scientific developments developed under the ICAO framework, and measured in grammes of carbon dioxide equivalent per megajoule;

(23) ‘carbon dioxide equivalent’ (‘CO_2eq’) means the unit of measurement comparing the radiative force of a greenhouse gas to that of carbon dioxide (CO_2);

(24) ‘aviation fuels greenhouse gas scheme’ means a scheme granting benefits to aircraft operators for reducing greenhouse gas emissions from aviation fuels;

(25) ‘freight’ means goods, materials, and parcels other than passenger luggage transported on board an aircraft, measured in tonnes;

(26) ‘point of sale’ means a physical location or online platform service owned by an aircraft operator, or which offers the flights of an aircraft operator, where an aircraft operator, or any person authorised to represent that aircraft operator, stores and makes information available to the public about flights operated by that aircraft operator for purchase or comparison purposes.

Article 3

Application for the issuance of labels by the Agency

1. An aircraft operator seeking the issuance of labels for its flights shall submit an application to the Agency, by 1 February of each year, through the dedicated module of the digital reporting tool. The aircraft operator shall, for that purpose, indicate the scope of the flights to be covered, in accordance with Article 14(2) of Regulation (EU) 2023/2405. On the basis of the application, the Agency shall engage with the aircraft operator.

2. By 1 May of each year, the aircraft operators mentioned in paragraph 1 shall report, through the dedicated module of the digital reporting tool, the information listed in paragraphs 3 and 4 on their scheduled flights and on the operations carried out during the previous calendar year.

3. The aircraft operator shall report the following information on its scheduled flights for the two upcoming scheduling periods:

(a) the routes, with reference to the departure and arrival airports, defined by their respective International Civil Aviation Organization (ICAO) and International Air Transport Association (IATA) codes;

(b) aircraft type or types to be used, including the seat capacity per cabin class and its ICAO and IATA codes;

(c) the estimated number of flights to be operated for each route, accompanied by a detailed justification of the estimation;

(d) the scheduling period or periods of the operations;

(e) voluntarily, for scheduled flights which are new, or when operating conditions significantly differ from past operations, the following information accompanied by a detailed justification:

(i) estimated amount of block aviation fuel;

(ii) estimated number of passengers per cabin class;

(iii) estimated amount of freight.

4. The aircraft operator shall report the following information on the operations carried out during the previous calendar year:

(a) for each aircraft operated:

(i) the aircraft type defined by its respective ICAO and IATA codes;

(ii) the number of available seats by cabin class for each cabin configuration;

(iii) where available, the seating area by cabin class.

(b) for each flight operated on a given route, the:

(i) aircraft type defined by its respective ICAO and IATA codes;

(ii) route, with reference to the departing and arrival airports, defined by their respective ICAO and IATA codes;

(iii) number of flights operated under the same operating conditions;

(iv) number of passengers and seats per cabin class;

(v) amount of freight;

(vi) amount of block aviation fuel;

(vii) block time;

(viii) month and year of operation.

(c) for each batch of aviation fuels uplifted at a given departure airport, purchased from aviation fuel suppliers and for which benefits have been claimed and, voluntarily, for all other batches of aviation fuels:

(i) the amount, in tonnes, the batch number, and an identification of the aviation fuel supplier;

(ii) the airport, defined by its respective ICAO and IATA codes, and a proof of purchase and of delivery to that airport;

(iii) the aviation fuels life cycle emissions, in grammes of carbon dioxide equivalent per megajoule (g CO_2eq/MJ);

(iv) where applicable, a declaration of the aviation fuels greenhouse gas scheme for which benefits have been claimed, the reference to the legal instrument under which the benefits have been claimed, and an identification of the authority to which the claim has been submitted.

5. The Agency shall use the information referred to in paragraphs 3 and 4, with the necessary confidentiality considerations, for the purpose of processing the application and issuing the labels.

6. The Agency shall also take into account the information reported by aircraft operators and by aviation fuel suppliers under Articles 8 and 10 of Regulation (EU) 2023/2405.

7. The Agency may require the aircraft operator to provide any additional information necessary for the estimation of flight emissions and for the issuance of labels.

8. Before an aircraft operator provides the Agency with the information referred to in paragraphs 4 and 6, the information shall be verified by an independent verifier identified in the report of the aircraft operator. The verification shall be performed in accordance with the requirements set out in Article 8(3) of Regulation (EU) 2023/2405. The aircraft operator shall provide the verifier with all the relevant supporting documents to facilitate the process of verifying the information referred to in paragraphs 4 and 6.

In addition, the information provided under paragraph 4, point (c) related to the aviation fuels life cycle emissions shall be verified by one of the certification bodies identified in the framework of Directive (EU) 2018/2001 or of the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA).

Article 4

Attribution of labels to flights of aircraft operators

1. Where the Agency finds the information provided by the aircraft operator in accordance with Article 3 complete and precise it shall, by 30 June of each year:

(a) estimate the flight emissions of each flight or set of flights, in accordance with Article 5;

(b) generate and attribute the labels to scheduled flights, separating the labels for each of the two upcoming scheduling periods, in accordance with the validity period referred to in paragraph 2;

(c) distribute the labels in machine-readable format to aircraft operators, informing them of the deadline to display and the validity period of the labels, through the dedicated module of the digital reporting tool and using the templates laid down in Annex III.

2. The validity period of the labels issued by the Agency shall correspond to the following:

(a) for the winter scheduling period of the aircraft operator, the validity period shall be from the moment of issuance of the label until the end of the winter scheduling period, in accordance with the timeline laid down in Annex I;

(b) for the summer scheduling period of the aircraft operator, the validity period shall be as of five months before the start of that summer scheduling period until its end, in accordance with the timeline laid down in Annex I.

3. Where the Agency determines that an aircraft operator did not submit all the information necessary for the issuance of labels in accordance with Article 3, or where it has duly justified reasons to consider that the information provided is not complete or precise, the Agency shall request the aircraft operator to correct the information provided or to provide additional information.

4. Where the Agency determines, after making the request referred to in the previous paragraph, that the information provided by the aircraft operator does not comply with the

minimum requirements laid down in Article 3, or that the veracity or accuracy of such information cannot be verified, the Agency shall, after giving the aircraft operator the right to be heard, reject the issuance of the labels. The Agency shall inform the concerned aircraft operator thereof.

6. When the information provided by an aircraft operator in accordance with Article 3 needs to be corrected after its submission or after its verification by the Agency or is no longer valid, the aircraft operator shall inform the Agency thereof without any undue delay through the digital reporting tool and shall provide the corrected information with the necessary justification. The Agency, based on the information and justification provided by the aircraft operator, may retroactively update the flight emissions and issue new labels for the flights or set of flights concerned.

Article 5

Estimation of the flight emissions

1. The Agency shall estimate the flight emissions for each flight or set of flights operated by an aircraft operator under the same conditions using the methodology laid down in Annex II to this Regulation by:

(a) calculating the flight emissions, in accordance with Point 1 of Annex II;

(b) allocating the flight emissions to cabin and freight, in accordance with Point 2 of Annex II;

(c) generating the emissions footprint and efficiency, in accordance with Point 3 of Annex II;

(d) allocating cabin emissions to each cabin class, in accordance with Point 4 of Annex II.

2. When applying the methodology laid down in Annex II, the Agency shall estimate the flight emissions for each flight or set of flights operated by an aircraft operator under the same conditions in accordance with the best estimate of the:

(a) expected consumption of aviation fuels needed to operate the flight departing from a given airport, estimated on the basis of the weighted average of the block aviation fuel of all flights operated on that route in the previous corresponding scheduling period;

(b) expected aviation fuels life cycle emissions of the aviation fuels uplifted at a given departure airport, estimated on the basis of the weighted average of the aviation fuels life cycle emissions of the aviation fuels uplifted at that airport in the previous corresponding scheduling period.

3. Where the information necessary to estimate the consumption of aviation fuel in accordance with paragraph 2, point (a), of this Article does not exist, is insufficient, cannot be verified or exists only for significantly different operating conditions, the Agency shall estimate the consumption of aviation fuels needed to operate the flight in accordance with Point (1)(3)(b), of Annex II.

4. Where the information necessary to estimate the expected aviation fuels life cycle emissions in accordance with paragraph 2, point (b), does not exist, is insufficient, cannot be verified or exists for significantly different operating conditions, the Agency shall consider these aviation fuels to be conventional aviation fuels.

5. By way of derogation from paragraph 2, point (b), for the purpose of estimating the average aviation fuels life cycle emissions in accordance with that point, the Agency may assign specific batches of aviation fuels to a specific flight or set of flights operated by the aircraft operator departing from a given departure airport, provided that the following conditions are met:

(a) the aircraft operator has requested this through the dedicated module of the digital reporting tool;

(b) the aviation fuels are physically delivered to the aircraft operators at that airport for a specific flight or set of flights by an aviation fuel supplier in physically identifiable batches, supported by a proof of supply, such as a product transfer document;

(c) the flight or set of flights to which the batches are assigned are identified and defined, at least, by the route;

(d) the batches of aviation fuels assigned to a specific flight or set of flights in accordance with this Article are deducted from the overall estimation of the weighted average of aviation fuels life cycle emissions from the aircraft operator at that airport and are not used to determine the average environmental performance of the aviation fuels at that airport;

(e) where relevant, the aviation fuels are assigned to the same specific flight or subset of flights reported under Directive 2003/87/EC of the European Parliament and of the Council[8].

6. Where subsequent flights are carried out by an aircraft operator without refuelling aviation fuels between them, the Agency shall split the expected aviation fuels life cycle emissions at the initial departure airport proportionally between all flights operated under such circumstances.

7. Where an aircraft operator fails to provide sufficient information to the Agency regarding aviation fuels life cycle emissions uplifted at a departure airport or where aviation fuels cannot physically be attributed to a specific departure airport, the Agency shall consider those batches of aviation fuels to be conventional aviation fuels.

8. The default values used in the estimation of the expected aviation fuels life cycle emissions referred to in paragraph 2, point (b) shall be disclosed and updated on the website created under Article 8.

Article 6

Display of labels by aircraft operators

1. Aircraft operators holding the labels shall be responsible for the manner in which the label and the label logotype are used, especially in the context of advertising, and for compliance with the requirements of this Regulation. The issuance of the labels, including the label logotype, shall only confer the aircraft operator or the point of sale the right to use the label logotype in compliance with the requirements set out in this Regulation.

[8] Directive 2003/87/EC of the European Parliament and of the Council of 13 October 2003 establishing a system for greenhouse gas emission allowance trading within the Union and amending Council Directive 96/61/EC (OJ L 275, 25.10.2003, p. 32, ELI: http://data.europa.eu/eli/dir/2003/87/oj).

2. Aircraft operators shall display the labels issued to them at all points of sale owned by them without any undue delay and in accordance with the specifications of Annex III and with the following requirements:

(a) at the latest within 15 days following their receipt from the Agency in accordance with Article 4(1), point (c). Any delay shall be notified and justified to the Agency within those 15 days;

(b) the labels shall be displayed clearly visible alongside essential flight details, including the route, scheduled flight time and duration, and price, during the whole electronic purchase process, starting from the flight search engine results, and upon the completion of purchase, and both in the electronic purchase confirmation and in the delivery of such confirmation;

(c) the labels shall be displayed in all visual advertising and technical promotional material of those flights, including on the internet, digital applications, and physical format, regardless of the geographical location of such advertising or promotion;

3. Aircraft operators may display the labels on the boarding passes of those flights for which labels were issued.

4. Aircraft operators shall display the labels issued to them without interruption during their respective validity periods provided for in Article 4(2).

5. To ensure clear and correct display of labels, aircraft operators shall:

(a) not provide customers with or display labels, markers, symbols, or any equivalent form or inscriptions that mimic the labels issued under this Regulation and which do not comply with the requirements of this Regulation;

(b) not provide customers with or display flight emissions equivalent or similar to those included in the labels provided for by this Regulation or that mimic the flight emissions estimated pursuant to this Regulation or which may mimic or replicate the information, or the units of measurement laid down in Article 14(3) of Regulation (EU) 2023/2405, for flights or sets of flights for which labels were not requested under this Regulation and for any other activity not related to the scope of this Regulation;

(c) refrain from including any information in relation to their purchases of a given type of aviation fuel that may give customers the false impression that a given flight will be operated including a certain type of aviation fuels unless the aircraft operator can demonstrate the physical presence of that type of aviation fuels in that particular flight in the amount and characteristics claimed to consumers.

6. Aircraft operators shall ensure that, where their flights are offered or made available at points of sale with which the aircraft operator has a contractual relation:

(a) the labels are displayed without any undue delay and the latest within 30 days following their receipt from the Agency in accordance with Article 4(1), point (c). Any delay shall be notified and justified to the Agency within those 30 days;

(b) the points of sale do not reject the display of labels nor recalculate the flight emissions estimated by the Agency for those aircraft operators, either for comparison or purchase purposes.

7. Aircraft operators shall deploy reasonable efforts to ensure that points of sale with which they do not cooperate, but which display their flights, also comply with the requirements laid down in the previous paragraph without any undue delay.

Article 7

Monitoring of compliance

1. The Agency shall review, at least on a semi-annual basis, for each aircraft operator for which labels were issued, whether the factors on the basis of which a label was issued for each flight or set of flights operated under the same conditions have changed.

2. The review referred to in paragraph 1 shall comprise the review of:

(a) the accuracy and veracity of the information reported by aircraft operators pursuant to Article 3, particularly the information reported pursuant to paragraph 3 thereof;

(b) the correct display of labels, in accordance with Article 6 and Annex III, and the timely display of labels, in accordance with Articles 6(2), 6(6) and 6(7);

(c) compliance by aircraft operators with the removal of revoked, or expired labels, in accordance with paragraph 4.

3. For the purposes of carrying out the review, the Agency shall request the necessary information from the aircraft operator, including, where relevant, reports from independent verifiers.

4. If the Agency concludes, after carrying out the review, that a label is no longer appropriate or is not being correctly displayed by an aircraft operator, it shall decide, after giving the aircraft operator an opportunity to be heard, to revoke the existing label, or to issue a new label. Such decision shall be notified to the aircraft operator through the digital reporting tool.

5. The Agency shall consider the justifications of the aircraft operator for any delays in the display of labels, as provided for in Article 6(2), 6(6), and 6(7). In view of the justification, the Agency shall take one of the following decisions, after giving the aircraft operator an opportunity to be heard, and notify it to the aircraft operator through the digital reporting tool:

(a) revoke all labels issued for the aircraft operator if the justification for the delay is unsatisfactory;

(b) grant the aircraft operator a one-time exemption for the delay, alongside a new deadline.

6. Upon receipt of a notification issued in accordance with paragraph 4 or point (a) of paragraph 5, the aircraft operator shall adjust the display of the labels or remove the revoked labels, and, if applicable, replace them by valid labels distributed by the Agency, without any undue delay. The aircraft operator shall confirm the status of compliance with the notifications received from the Agency through the digital reporting tool.

7. The Agency shall take all necessary action to ensure that an aircraft operator adheres to its decisions issued in accordance with paragraph 4 and paragraph 5, point (a).

8. Aircraft operators shall remove revoked, or expired labels without any undue delay without the need for a notification from the Agency to that effect. Aircraft operators shall keep the Agency informed at all times about the removal or rectification of labels through the digital reporting tool.

9. Aircraft operators shall cooperate with the Agency when carrying out a review and shall continuously follow its instructions in relation to the correct display of labels.

10. Aircraft operators may, under exceptional circumstances, request the Agency to terminate individual labels issued for flights or a set of flights whose operations have been discontinued or where a change in operational conditions during the scheduling period render the valid

labels incorrect. They shall notify the Agency of their request through the digital reporting tool.

11. The Agency shall inform the aircraft operators of any dedicated rules and procedures contained in other legal acts of the Union that ensure the effective monitoring of compliance with this Regulation, including to verify the accuracy and veracity of the information reported by aircraft operators and the correct display of labels.

12. The Agency shall inform the aircraft operators of any applicable rules and procedures for lodging complaints against other aircraft operators.

Article 8

Flight emissions website

1. The Agency shall create and maintain a flight emissions website (the 'website') consisting of a public part with online access for the general public and a compliance part only to be accessed by aircraft operators. The compliance part of the website shall be linked to the digital reporting tool set up by the Agency.

2. The public part of the website shall meet the following minimum requirements:

(a) be open to access in a machine-readable format by any online services and without the customer having to register. It shall be accessible both from the point of sale where the labels are displayed and also through all search engines;

(b) provide detailed information on how flight emissions of each flight or set of flights of aircraft operators have been estimated, informing the customer of the method of calculation including all the assumptions in a clear, understandable and concise way, providing explanations of key terms and variables, including examples and illustrations and any background information to facilitate the understanding of the steps taken by the Agency to calculate flight emissions, the data used for such calculation and estimations, and also default values used for the estimation of flight emissions;

(c) provide information about each estimation of flight emissions and on the issuance and attribution of labels to flights placed in the market;

(d) provide information about the reduction of aviation fuels lifecycle emissions resulting from the purchase by aircraft operators of aviation fuels with lower aviation fuel life cycle emissions at a given departure airport;

(e) contain a search function allowing customers to search for labels. The search criteria shall be, at least, the departure and arrival airport and, optionally, the aircraft operator;

(f) provide a comparison of the labels on the same route against a benchmark to be developed by the Agency based on observed typical performance on the route or comparable routes. Particularly for cases where no aircraft operator was selected in the search function mentioned in point (e), including:

  (i) a relative comparison of the flight emissions, expressed in percentage;

  (ii) a relative comparison of the aviation fuel lifecycle emissions reduction, expressed in percentage.

(g) present the comparison referred to in letter (f) as a list of aircraft operators in ascending order, placing first the aircraft operator with the lowest flight emissions or

the aircraft operator using the aviation fuels with the lowest average aviation fuels life cycle emissions;

(h) show the following information based on the route searched for:

(i) the route, measured in kilometres, defined by a departure and arrival airport, and using the full names of both airports, as well as their respective ICAO and IATA codes;

(ii) the aircraft operators operating that route;

(iii) the average cabin emissions per passenger by each aircraft operator operating that route;

(iv) an indication of the aircraft type or types most frequently operated by each aircraft operator operating that route;

(v) information to customers on whether a route introduced in the search tool falls outside of the scope of this Regulation and for which no information is available. In such cases, the Agency shall provide a concise explanation of the criteria that need to be fulfilled in order for the route to be listed in the search tool.

3. The compliance part of the website shall comply with the following technical specifications:

(a) access by each aircraft operator shall be restricted via unique login credentials. It shall be secure, and aircraft operators shall be able to view and manage their compliance data, including reporting requirements and label generation and distribution and their respective status per route;

(b) aircraft operators shall only be able to view their own compliance information. Aircraft operators shall only be able to access the public information regarding the labels of other aircraft operators.

Article 9

Entry into force

This Regulation shall enter into force on the twentieth day following that of its publication in the *Official Journal of the European Union*.

However, it shall apply to freight aircraft operators within the scope of Regulation (EU) 2023/2405 as from 1 January 2028.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Brussels, 18.12.2024

For the Commission
The President
Ursula VON DER LEYEN

EUROPEAN
COMMISSION

Brussels, 18.12.2024
C(2024) 8795 final

ANNEXES 1 to 3

ANNEXES

to

Commission Implementing Regulation (EU) .../...

laying down detailed provisions concerning the voluntary environmental labelling scheme for the estimation of the environmental performance of flights, established pursuant to Article 14 of Regulation (EU) 2023/2405 of the European Parliament and of the Council
(Flight Emissions Label)

ANNEX I

Timeline for submitting applications and for generating labels

The timeline for aircraft operators to submit applications and for the Agency to generate and distribute labels shall be the following.

Table 1

Obligation	**Timeline**
Operations of calendar year X-1, to be the basis for the information given to the Agency in accordance with Article 3(4)	01.01.X-1 to 31.12.X-1
Aircraft operators submit to the Agency their application for the issuance of labels, in accordance with Article 3(1)	By 01.02.X
Aircraft operators report the information listed in Articles 3(3) and 3(4), in accordance with Article 3(2)	By 01.05.X
The Agency estimates the flight emissions of each flight or set of flights, generates and distributes the labels for all flights scheduled for the two upcoming scheduling periods, in accordance with Article 4(1).	By 30.06.X
Validity period of the labels for flights operated in the winter scheduling period, in accordance with Article 4(2)(a).	As of the moment of issuance by the Agency in year X and until the end of the winter scheduling period of years X to X+1, as used in the aircraft operator's schedule
Validity period of the labels for flights operated in the summer scheduling period, in accordance with Article 4(2)(b).	As of five months before the start of the summer scheduling period of year X+1 and until the end of that scheduling period, as used in the aircraft operator's schedule

ANNEX II

Methodology for estimating flight emissions

This Annex lays down the methodology and the necessary steps that the Agency shall follow for the estimation of flight emissions.

(1) CALCULATION OF FLIGHT EMISSIONS

(1) Flight emissions shall be calculated by multiplying the estimated consumption of aviation fuels for the flight in question by the weighted average of lifecycle emissions of the aviation fuels uplifted at the departure airport. At the same time, flight emissions are equal to the sum of cabin and freight emissions.

$$E = E_c + E_f = E_{WTT} + E_{TTW} = V_{fuel} \times EC_{fuel} \times LCE_{fuel}$$

where:

E = flight emissions, in tonnes of carbon dioxide equivalent (t CO_2eq),

E_c = cabin emissions, in t CO_2eq,

E_f = freight emissions, in t CO_2eq,

E_{WTT} = fraction of the flight emissions corresponding to well-to-tank, in t CO_2eq,

E_{TTW} = fraction of the flight emissions corresponding to tank-to-wheel, in t CO_2eq,

V_{fuel} = consumption of aviation fuels of the flight, in tonnes,

EC_{fuel} = energy content of aviation fuels, in megajoule per kilogramme (MJ/kg),

LCE_{fuel} = weighted average lifecycle emissions of the aviation fuels uplifted at the departure airport, in grammes of carbon dioxide equivalent per megajoule (g CO_2eq/MJ).

(2) The average lifecycle emissions of the aviation fuels uplifted at the departure airport shall be the weighted average of the aviation fuel life cycle emissions of all batches (*b*) of aviation fuels uplifted at that airport, taking into account Article 5(6):

$$LCE_{fuel} = \frac{\sum_{b=1}^{n}(LCE_b \times V_b)}{\sum_{b=1}^{n} V_b}$$

where:

LCE_b =aviation fuels lifecycle emissions of a batch ‘b’ of aviation fuels, in g CO_2eq/MJ. For conventional aviation fuels, this value shall be 89 g CO_2eq/MJ;

V_b = mass of a batch ‘b’ of aviation fuels, in tonnes.

(3) The estimated aviation fuels consumption of a flight shall be calculated using either of the following methods:

(a) Using past operations

When primary data is available for the operations of the previous corresponding scheduling periods and tallies with the operating conditions of the scheduled flight, the estimation of aviation fuels consumption shall be calculated as the weighted average of the reported aviation fuels consumption in the flights (*a*) operated on the route in question:

$$V_{fuel} = \sum_{a=1}^{n} \frac{F_a}{N_a}$$

where:

F_a = total block aviation fuel for all flights relevant to each label, in the reporting period;

N_a = total number of flights operated relevant to each label, in the reporting period.

(b) Based on the Breguet-Range equation

If primary data for the scheduled flights reported under Article 3(3) does not exist, is insufficient, cannot be verified or exists only for operating conditions significantly differing from those reported under Article 3(4), the estimated aviation fuels consumption shall be calculated by approximation using the Breguet-Range equation.

This equation estimates the overall cruise performance as follows:

$$R = \frac{V}{c} \times \frac{L}{D} \times ln\left(\frac{W_1}{W_2}\right)$$

where:

R = distance travelled, in kilometres,

V = speed of the aircraft, in kilometres per hour,

c = thrust-specific aviation fuels consumption, in kilogrammes per Newton-hour,

L = lift force acting on the aircraft, in Newtons,

D = aerodynamic drag force acting on the aircraft, in Newtons,

ln = natural logarithm function,

W_1 = aircraft mass at the beginning of the cruise, in tonnes,

W_2 = aircraft mass at the end of the cruise, in tonnes.

By rearranging the Breguet-Range equation, a ratio between an aircraft's initial and final mass can be derived, representing the aviation fuels consumption of the flight in question:

$$\frac{W_1}{W_2} = e^{\left(\frac{R \times c}{V \times \frac{L}{D}}\right)}$$

In the absence of information on each flight's landing mass, engine performance and the aerodynamic performance of the aircraft, these factors are not computed directly. The equation is further refined by regressing the factors to correlate them with observations of the information reported under Article 3(4) and, at least, the aircraft type. This refined equation shall be applied for each aircraft:

$$V_{fuel} = a \times \left(\frac{e^{b \times R}}{r} - 1\right)$$

where:

a = aircraft mass when landing at the airport of arrival, in tonnes,

$b = \frac{c}{V \times \frac{L}{D}}$,

$r = \frac{W_3}{W_1} = \frac{W_2}{W_0}$.

and where:

W_0 = aircraft empty mass, in tonnes,

W_1 = aircraft mass after climbing to 3 000 ft (or 914.4 metres), in tonnes,

W_2 = aircraft mass after climbing to cruise, cruising, and descending to 3 000 ft (or 914.4 metres), in tonnes,

W_3 = aircraft mass when landing at the arrival airport, in tonnes.

The coefficients *a*, *b* and *r* shall be determined using regression analysis, to minimise the estimated difference (L2-Norm) between the observed aviation fuels consumption and the estimated value.

(2) ALLOCATION OF FLIGHT EMISSIONS TO CABIN AND FREIGHT

(1) Flight emissions shall be attributed to the cabin (cabin emissions, *Ec*) and to freight (freight emissions, *Ef*) on the basis of the respective apportionment of cabin and freight mass, as follows:

(a) cabin emissions (E_c)

$$E_c = E \times W_c$$

where:

$W_c = \frac{\mathrm{C_w}}{F_w + C_w}$, share of the payload of the aircraft attributed to the cabin,

C_w = mass corresponding to the cabin (passengers and their baggage), in tonnes,

F_w = mass corresponding to the freight on board of the aircraft, in tonnes.

(b) freight emissions (E_f)

$$E_f = E \times W_F$$

where:

$W_f = \frac{\mathrm{F_w}}{F_w + C_w}$, share of the payload of the aircraft attributed to the freight.

(2) Where information on the number of passengers is not reported because the conditions of the scheduled operations are different to those of previous flights, such as for new aircraft operators or new aircraft configurations, an estimated number of passengers shall be calculated on the basis of the following factors (to be given on the website established under Article 8):

$$C_w = \frac{N \times L \times P_m}{1000}$$

where:

N = number of seats available in the aircraft type, per cabin class,

L = estimated load factor of the flight, calculated taking into account the average load factor of the aircraft operator per cabin class particularly in flights i) on the same route, ii) on comparable routes, and iii) in any other route,

P_m = mass attributed to a passenger including their baggage, which shall be 100 kg.

(3) GENERATION OF EMISSIONS FOOTPRINT AND EFFICIENCY

(1) Flight emissions allocated to the cabin and freight are then used to generate its emissions footprint and emissions efficiency, and shall be calculated as follows:

(a) Cabin emissions footprint and efficiency

Cabin emissions per passenger (C_{ef})

$C_{ef} = \frac{E_c}{pax} \times 1000$, in kg CO_2eq/pax

Cabin emissions per passenger-kilometre (C_{ei})

$C_{ee} = \frac{C_{ef}}{R} \times 1000$, in g CO_2eq/pkm

where,

$R = GCD$, flight range determined using the great circle distance method (GCD), in km.

(b) Freight emissions footprint and efficiency

Freight emissions per tonne of freight (F_{ef})

$F_{ef} = \frac{E_f}{F_w} \times 1000$, in kg CO_2eq/t

Freight emissions per tonne-kilometre (F_{ee})

$F_{ee} = \frac{F_{ef}}{R}$, in g CO_2eq/tkm

(4) ALLOCATION OF CABIN EMISSIONS TO EACH CABIN CLASS

(1) Where an aircraft is operated with more than one cabin class, the cabin emissions shall be allocated to each cabin class.

(2) Where the aircraft operator reports the seating area of every configuration of each aircraft type, that seating area (*SA*) shall be used in the first instance to calculate what cabin class factor to apply.

$$CCF = \frac{SA_c}{SA_l}$$

where:

CCF = cabin class factor representing the allocation of cabin emissions per passenger in each cabin class estimated based on the seating area allocated in an aircraft to the lowest class,

SA_c = floor area per seat in each cabin class ("c"), in square metres,

SA_l = floor area per seat of the lowest cabin class ("l"), in square metres.

(3) If the information referred to in the previous point is not available, the CCF shall be estimated based on the weighted averages of the seating area reported under Article 3(4)(a). The weighted averages shall be based, where possible, on operator specific data and shall be, at least, by cabin class.

(4) Where the information to estimate CCF is insufficient, the default CCF set out in Table 1 shall be used.

Table 1

CCF calculations based on seating area and default values

Cabin class (c)	CCF based on seating area	Default CCF	
		Wide-body ($CCF_{c\text{-}w}$)	Narrow-body ($CCF_{c\text{-}n}$)
Economy (e)	$\frac{SA_e}{SA_l}$	$CCF_{e-w} = 1$	$CCF_{e-n} = 1$
Premium Economy (pe)	$\frac{SA_{pe}}{SA_l}$	$CCF_{pe-w} = 1$	$CCF_{pe-n} = 1$
Business (b)	$\frac{SA_b}{SA_l}$	$CCF_{b-w} = 4$	$CCF_{b-n} = 1.5$
First (f)	$\frac{SA_f}{SA_l}$	$CCF_{f-w} = 5$	$CCF_{f-n} = 1.5$

(5) As cabin emissions include all passengers on a flight regardless of the cabin class they are seated in, cabin emissions shall be allocated to each passenger based on their respective cabin class factor. This allocation shall be made using a theoretical number of passengers (LC_{eq}) using as a common equivalent the lowest cabin class.

$$LC_{eq} = \sum pax_c \times CCF$$

where:

LC_{eq} = theoretical number of passengers calculated for the purpose of allocating cabin emissions to passengers in each cabin class,

pax_c = number of passengers in each cabin class.

(6) The emissions of the lowest cabin class equivalent passenger are then allocated to each passenger proportionally to their respective cabin class factor:

Cabin class emissions per passenger (CC_{ef})

$CC_{ef} = \frac{E_c}{LE_{eq}} \times CCF$, in kg CO_2eq/pax

Cabin class emissions per passenger-kilometre (CC_{ei})

$CC_{ee} = \frac{CC_{ef}}{R}$, in g CO_2eq/pkm.

ANNEX III

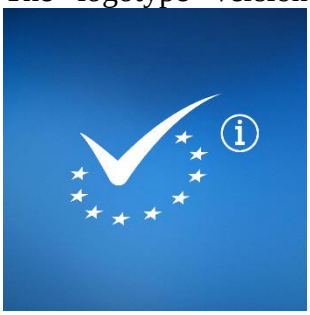
Templates for displaying labels

1. The label logotype shall comply with the following requirements:

(a) The logotype must be the following, which shall be displayed depending on the colour of the background behind it, to ensure the accessibility and user-friendliness of the design.

(a) The principal version of the logotype to be used whenever feasible shall be:

(b) The logotype version to be used against dark backgrounds shall be:



(c) The logotype to be used against light-coloured backgrounds only if the principal version is not visible enough such as due to lack of contrast shall be:

(b) If enough space, the word ‘Verified’ must accompany the label logotype on the right. It must be stylised in Calibri bold and always in the user’s language:

(a) The principal version of the logotype to be used whenever feasible shall be:

(b) The logotype version to be used against dark backgrounds shall be:

(c) The logotype to be used against light-coloured backgrounds only if the principal version is not visible enough such as due to lack of contrast shall be:

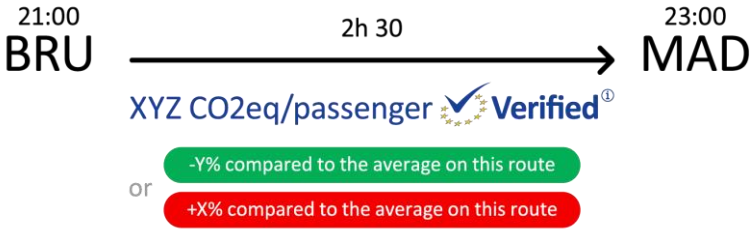
(c) The colour of the label logotype and the accompanying text must be:

(i) blue #034EA2;

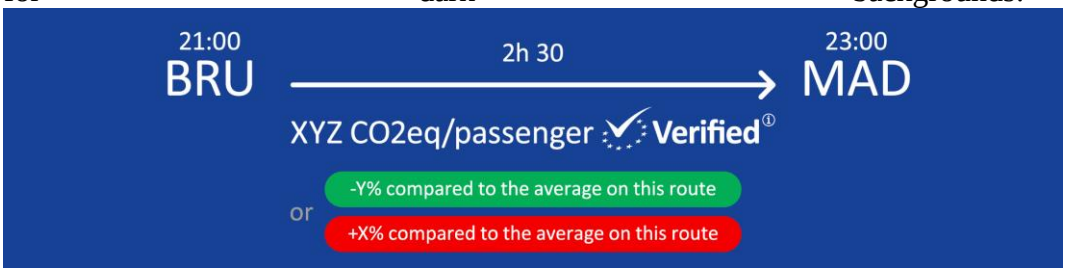
(ii) yellow #FFCB04.

(d) The primary display referred to in point 2 shall always be displayed in the user's language (English version for illustration purposes) and comply with the following layout:

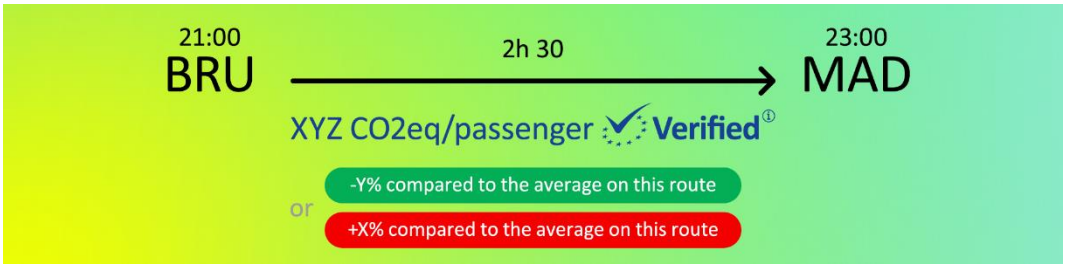
(a) whenever feasible:



(b) for dark backgrounds:

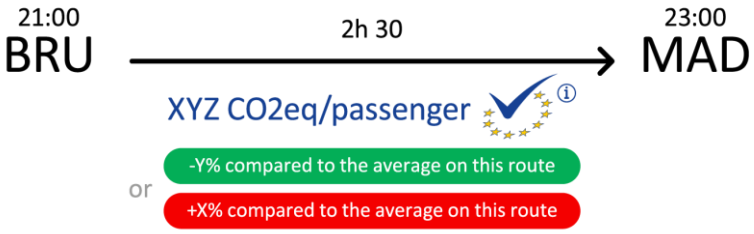


(c) for light-coloured backgrounds only if the principal version is not visible enough such as due to lack of contrast :

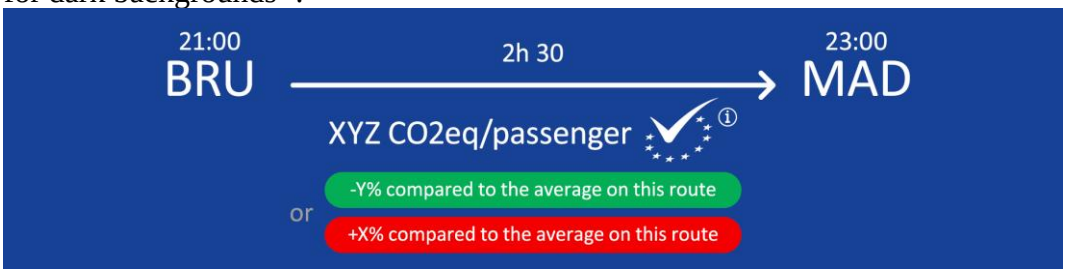


(e) Whenever there is insufficient space to comply with the requirements of the previous paragraph, the primary display shall comply with the following:

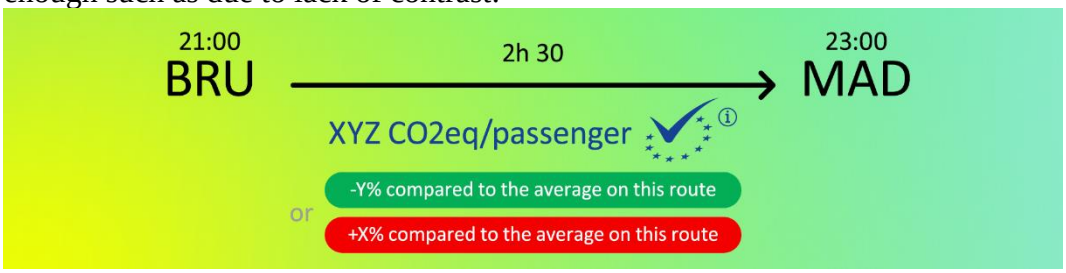
(a) whenever feasible:



(b) for dark backgrounds :



(c) for light-coloured backgrounds only if the principal version is not visible enough such as due to lack of contrast:



(f) The secondary display referred to in point 3 shall comply with the following layout and it shall always be displayed in the user's language and appear when hovering over or when clicking on the logotype or on the information ("i") icon visible on the right side of the logotype in the primary display:

Verified Flight Emissions Label

Emissions are estimated in accordance with the **European Commission Implementing Regulation 2024/XXXX (Flight Emissions Label)**. The emissions are estimated based on the most recent operational data of past flight performance.

Emissions for [cabin class] in a [Manufacture name] + [ICAO aircraft code]

FROM [Departure airport name] TO [Arrival airport name] ([123] km)

[123] kg CO_2eq / passenger

+/- X% [benchmark to be developed]

[123] kg CO2eq / passenger-kilometre

+/- X% [benchmark to be developed]

[123] kg CO2eq / MJ

+/- X% [benchmark to be developed]

Emissions are estimated by the European Union Aviation Safety Agency.

An Agency of the European Union

Valid until DD Month YYYY

More information on this label: www.flightemissions.eu

(g) The label shall be referred to as the 'Flight Emissions Label';

2. The following information shall always be included in the primary display of the label alongside the logotype:

(a) for passenger flights, the cabin class emissions per passenger, in kg CO_2eq/pax. When flying with infants aged up to 24 months on the lap of an adult using an infant seat belt, the expected cabin emissions per passenger shall be those of the adult only;

(b) for all-cargo flights, having regard to Article 9, the freight emissions per tonne, in kg CO_2eq/t;

(c) a small-scale version of the label logotype, as set out in point 1(b);

(d) the relative comparison, in percentage, between the emissions listed in subpoints (a) or (b) against a benchmark to be developed by the Agency based on observed typical performance on the route or on comparable routes. A green colour may be used to indicate a negative difference and a red colour to indicate a positive difference compared to the average;

(e) an icon, stylised as an information ("i") icon, to open the secondary display.

3. The following additional information shall be included in the secondary display of the label:

(a) the name of the aircraft operator;

(b) the route, defined by the departure and arrival airport names;

(c) the route distance, in kilometres;

(d) for passenger flights, the cabin class emissions per passenger-kilometre, measured in kg CO_2eq/passenger-kilometre;

(e) for all-cargo flights, having regard to Article 9, the freight emissions per tonne-kilometre, in kg CO_2eq/tonne-kilometre;

(f) the aviation fuels lifecycle emissions, in kg CO_2eq/MJ;

(g) the relative comparison, in percentage, of the emissions listed in points 2(a) and 3(d) or 2(b) and 3(e), and 3(f) against a benchmark to be developed by the Agency based on observed typical performance on the route or on comparable routes. A green colour may be used to indicate a negative difference and a red colour to indicate a positive difference compared to the average;

(h) the validity period of the label, including its last day of validity;

(i) A hyperlink to the specific Flight Emissions Label hosted on the website established under Article 8, stylised as www.flightemissions.eu.

4. The label's display shall comply with the following technical specifications during its validity period:

(a) it shall be displayed in a machine-readable and accessible format;

(b) the information in the label's primary display shall not require passenger interaction to be displayed;

(c) the label's font type (Calibri) and size used shall be clear and legible;