Call for Expression of Interest (CEI) for the selection of members of the European Clean Aviation Scientific Advisory Body of the Clean Aviation Joint Undertaking

The present CEI is launched subject to the publication and entry into force of the Single Basic Act establishing the Joint Undertakings under Horizon Europe adopted by the Council of the EU on 19th November 2021¹.

The results of the CEI and the list of members selected under the present CEI will be subject to the confirmatory decision to be taken by the Governing Board of the Clean Aviation JU on the selection process and specific criteria for the composition of the Scientific and Advisory Body (SAB) expected on 16 December 2021 and to the subsequent appointment of the members of the "SAB" by the Governing Board of the Clean Aviation Joint Undertaking.

1. Introduction

The Clean Aviation Joint Undertaking is a public-private partnership between the European Union represented by the European Commission and the European aviation sector, represented by the founding members and the associated members. Its vision and mission are set out below:

The Clean Aviation JU will develop disruptive new aircraft technologies to support the European Green Deal, and climate neutrality by 2050. These technologies will deliver net greenhouse gas (GHG) reductions of no less than 30%, compared to 2020 state-of-the-art. The technological and industrial readiness will allow the deployment of new aircraft with this performance no later than 2035, enabling 75% of the world's civil aviation fleet to be replaced by 2050. The aircraft developed will enable net CO_2 reductions of up to 90% when combined with the effect of sustainable 'drop-in' fuels, or zero CO_2 emissions in flight when using hydrogen as energy source.

In accordance with the high-level objectives as set out by the Single Basic Act https://data.consilium.europa.eu/doc/document/ST-12156-2021-INIT/en/pdf establishing the Joint Undertakings under Horizon Europe (expected to be adopted by the Council of the EU on 18 November 2021) - the technical activities launched by the Clean Aviation Joint Undertaking will have the following high-level objectives as set out below.

https://data.consilium.europa.eu/doc/document/ST-12156-2021-INIT/en/pdf

2. General Objectives of the Clean Aviation Joint Undertaking

- (a) to contribute to reduce the ecological footprint of aviation by accelerating the development of climate neutral aviation technologies for earliest possible deployment, therefore significantly contributing to the achievement of the general goals of the European Green Deal², in particular in relation to the Union-wide net greenhouse gas emissions reduction target of at least 55 % by 2030, compared to 1990 levels and a pathway towards reaching climate neutrality at the latest by 2050;
- (b) to ensure that aeronautics-related research and innovation activities, with particular focus on breakthrough technology initiatives, contribute to the global sustainable competitiveness of the Union aviation industry, and to ensure that climate-neutral aviation technologies meet the relevant aviation safety and security requirements,³ and that aviation remains a secure, reliable, cost-effective, and efficient means of passenger and freight transportation;
- (c) to advance the European aviation research and innovation capacity.

3. Specific objectives of the Clean Aviation Joint Undertaking

- (a) to integrate and demonstrate disruptive aircraft technological innovations able to decrease net emissions of greenhouse gasses by no less than 30 % by 2030, compared to 2020 state-of-the-art technology while paving the ground towards climate-neutral aviation by 2050;
- (b) to ensure that the technological and the potential industrial readiness of innovations can support the launch of disruptive new products and services by 2035, with the aim of replacing 75 % of the operating fleet by 2050 and developing an innovative, reliable, safe and cost-effective European aviation system that is able to meet the objective of climate neutrality at the latest by 2050;
- (c) to expand and foster integration of the climate-neutral aviation research and innovations value chains, including academia, research organisations, industry, and SMEs, also by benefitting from exploiting synergies with other national and European related programmes and by supporting the uptake of industry-related skills across the value chain.

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.

Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions, COM/2019/640 final.

4. The scope of the Clean Aviation Joint Undertaking's programme for research and innovation

The Clean Aviation programme is expected to be built on three key thrusts as defined in its Strategic Research & Innovation Agenda (SRIA⁴) (expected to be adopted by the Governing Board of the Clean Aviation JU) each with targeted research, technology development and demonstration efforts driving the energy efficiency and the emissions reduction of future aircraft. Each thrust will develop technologies and enablers, leverage essential knowledge and capabilities, and de-risk the identified technologies and solutions, where further maturation, validation and demonstration is required to maximise impact:

• Hybrid electric regional aircraft:

Driving research and innovation into novel (hybrid) electrical power architectures and their integration, and maturing technologies towards the demonstration of novel configurations, on-board energy concepts, and flight control.

• Ultra-efficient short/short-medium range aircraft:

Addressing the short and short-medium range needs with innovative aircraft architectures making use of highly integrated, ultra-efficient thermal propulsion systems and providing disruptive improvements in fuel efficiency.

• Disruptive technologies to enable hydrogen-powered aircraft:

Enabling aircraft and engines to exploit the potential of (liquid) hydrogen as a non-drop-in alternative zero carbon fuel. The application of results from these areas in new aircraft will depend on performance requirements for the various aircraft categories, the technological capability and maturity, and the performance gains achievable.

5. The governance framework of the Clean Aviation Joint Undertaking consists of the following:

- The **Governing Board** is the highest decision-making body. It is composed of representatives from the public and private members.
- The **Executive Director** is responsible for the day-to-day management and is assisted by the **Programme Office**.
- The **Technical Committee** which will develop and maintain the Strategic Research and Innovation Agenda [SRIA] and the relevant technological roadmaps, and provide recommendations for the scope and programming of the research actions needed.

The Advisory Bodies are defined as:

- o the Clean Aviation States' Representatives Group (SRG);
- o the Clean Aviation Scientific Advisory Body (hereinafter referred to as the SAB).

⁴ Draft SRIA available at: https://www.clean-aviation.eu/files/Clean_Aviation_SRIA_16072020.pdf

6. Statutory role and tasks of the SAB

In accordance with Article 21 and 70 of the Single Basic Act, the SAB shall be the scientific advisory body of the Clean Aviation Joint Undertaking and shall carry out the following tasks:

- (a) advise on the scientific priorities to be addressed in the work programmes including on scope of calls for proposals, in line with the SRIA and the Horizon Europe strategic planning;
- (b) advise on the scientific achievements to be described in the annual activity report;
- (c) suggest, in view of the progress of the SRIA and individual actions, corrective measures or re-orientations to the governing board, where necessary;
- (d) provide independent advice and scientific analysis on specific issues as requested by the governing board, in particular as regards developments in adjacent sectors or to support the assessment of applications of potential associated members and contributing partners;
- (e) evaluate the results from technology and innovation actions that are funded by the joint undertaking and report to the governing board;
- (f) participate in sector integration committees specifically set up between European partnerships under Horizon Europe to enable synergies;
- (g) cooperate with relevant European aviation stakeholders' fora, such as the Advisory Council for Aeronautics Research in Europe (ACARE);
- (h) hold coordination meetings with the advisory bodies of other relevant joint undertakings such as the Single European Sky ATM Research 3 Joint Undertaking, with the aim of promoting synergies and cooperation among relevant Union research and innovation initiatives in aviation and providing advice to that effect to the Clean Aviation Joint Undertaking on this basis.
- (i) advise and support the Commission and the Clean Aviation Joint Undertaking on initiatives that promote aviation research in the European education systems, and provide recommendations on aeronautical skills and competences development and updated aeronautical engineering curricula.

The SBA will meet at least twice a year, its assignments and consultations will be organized by the programme office of the Clean Aviation JU in cooperation which will provide its secretariat. Further information on the SAB, its internal organization and cooperation with other JUs' advisory groups and ACARE will be detailed in the SAB rules of procedures to be adopted by the SAB at its first constituent meeting as well as the election of its Chairperson.

7. The SAB selection process and the nature of the Call for Expressions of Interest

a. The procedure for the selection of candidates for membership of the Clean Aviation Scientific Advisory Body is hereby launched through a Call for Expressions of Interest (hereinafter referred to as the CEI) drawn up by the Executive Director of the JU who shall oversee the selection process under the supervision of the Governing Board of the Clean Aviation JU. The

- present CEI and its results will be subject to the confirmatory decision on the SAB selection process and specific criteria expected to be adopted by the Governing Board of Clean Aviation JU on 16th December 2021 and to the subsequent appointment of the Members of the SAB by the Governing Board of the Clean Aviation Joint Undertaking.
- b. An overview of the process described under this CEI for the establishment and composition of the SAB and a preliminary description of the selection criteria hereby laid down have been discussed and endorsed by the Clean Aviation stakeholders preparatory group ("CS3PG") on its meeting of 26th October 2021 as part of the transitional arrangements deemed necessary to ensure a timely establishment of the governance of Clean Aviation JU and timely launch of the statutory consultations required for the adoption of the Clean Aviation Work Programme and launch of the technical programme to be able to meet the timeline/targets set in the Single Basic Act specific objectives of Clean Aviation JU. .
- c. The Call for Expressions of Interest shall be published through the websites of the Clean Sky 2 Joint Undertaking and that of the Clean Aviation JU, as well as in relevant scientific and trade publications. The States Representatives Group of the Clean Aviation JU shall be notified of the publication of the Call for Expressions of Interest and shall be invited to make recommendations of possible candidates, however application under the present CEI is a necessary condition for any candidate's expression of interest to be considered for selection.
- d. The applicants will be duly informed of the follow-up and results related to the present CEI and of its possible take-up and legal effects under the Clean Aviation Joint Undertaking subject to the above mentioned legal conditions. The JU reserves the right to publish additional information or "corrigenda" to the present CEI as appropriate.

8. Selection criteria

Candidates shall meet the following essential eligibility criteria:

- Individuals/persons holding a University degree in a relevant scientific area, preferably at post-graduate level;
- b. At least 15 years of professional experience in the relevant scientific and/or technological area after having obtained the above mentioned degree;
- c. Recognised competence and expertise in one or more of the following areas:
 - i. Aeronautical sciences and/or engineering disciplines;
 - ii. Physical sciences relevant to aviation or other relevant high-technology sectors;
 - iii. Engineering disciplines with the potential for disruptive innovation in aviation, such as but not limited to power electronics; hydrogen storage, distribution and use as power source; cryogenics, superconducting, innovative / multi-functional materials, smart grids and energy management, thermal management, digital systems and electronics, and systems engineering;
 - iv. Aviation and/or transport economics and social sciences or econometric modelling;
- d. Excellent command of written and spoken English;

Candidates shall be assessed based on the following selection criteria:

- a. The competencies and expertise necessary to make relevant and impactful science-based recommendations to the Clean Aviation JU;
- b. The need for a balanced composition (of the stakeholders) reflecting the key technological challenges and scientific domains relevant for the achievement of the objectives as set for the Clean Aviation JU as set in the Single Basic Act, including the potential for market deployment and impact within the timeframes foreseen therein;
- c. A clear understanding of the global state-of-art in their field of expertise (including outside aviation where relevant);
- d. The need to ensure geographical and gender balance.

In addition to the above, proven ability to seek consensus and to provide impactful analyses for example through **evidenced** participation in other scientific and/or technological advisory bodies would be an asset;

In addition to the above, **a track record** of valorisation of research and/or the transfer of science and innovation results into market applications would be an asset.

The Clean Aviation JU shall reserve the right to request any necessary documentary evidence and records it deems necessary to verify the applicants' skills and knowledge under the CEI selection process and subsequently in view of the appointment decision to be taken by the Governing Board of the Clean Aviation JU.

9. Eligibility conditions:

- a. European Commission staff, including external staff working for the Commission, staff of the Joint Research Centre, officials of Member States, and of national, regional or local authorities shall not be eligible;
- b. Candidate SAB Members shall not be members of any other body of the Clean Aviation Joint Undertaking;
- c. Persons who are employed by an organisation that will become "member other than the Union" (Founding Members⁵ and Associated Members) of the Clean Aviation JU at the date of establishment the Clean Aviation JU or later on shall not be eligible.

Should a person be selected through this procedure for the SAB or added to its reserve list be employed by an organisation that is selected at a later stage for membership of the Clean Aviation JU, he/she shall notify the Executive Director of the JU without delay and resign from the SAB or his/her eligibility shall be considered to be ceased and his/her mandate to be revoked.

⁵ The list of Founding Members is listed in the SBA Annex I https://data.consilium.europa.eu/doc/document/ST 12156-2021-INIT/en/pdf

The Clean Aviation JU shall reserve the right to request any necessary documentary evidence it deems fit in order to verify the applicants' eligibility at any stage of the process and after appointment by the Governing Board.

The candidate members shall be required to inform the Clean Aviation JU immediately of any changes to their professional status and functions covered including administrative details during the selection of the SAB or at any later stage which may result in a substantial change to their original application, selection, and appointment by the Governing Board.

10. Selection and appointment procedure

- a. Based on the applications received, the Executive Director of the Clean Aviation JU will prepare (with the support of the JU programme office) a list of all candidates eligible to become members of the SAB on the basis of the essential eligibility criteria under above section 8.1 and eligibility conditions under above section 9.
- b. An evaluation panel composed of seven (7) members including members of the Governing Board of the Clean Aviation JU⁶, senior statutory staff of the Clean Aviation JU and representatives of the European Commission will carry out an objective assessment of the eligible candidates applications. based on the selection criteria under above section 8.2. The evaluation panel will establish a draft shortlist of up to 15 candidates who are considered best suited as well as a reserve list of up to 5 further candidates.
- c. The Chair of the Governing Board (in cooperation with the Executive Director) will present the results of the evaluation panel's selection process to the Governing Board in the form of a draft short-list of selected candidates, a draft reserve list and a full record of candidates not included in the lists as well as candidates deemed ineligible.
- d. Based on the lists established by the evaluation panel, the Governing Board will appoint the Members of the SAB taking into consideration the candidates proposed by the States' Representatives Group and approve the reserve list.
- e. Members of the SAB will be appointed for a 4-year term. Upon recommendation by the Executive Director, the Governing Board may decide to renew the appointment for an additional term of 3 years.
- f. The approved reserve list will be valid for the duration of the term, including any subsequent renewal, of the appointed SAB. In case of a vacancy, the Governing Board will, subject to continuing eligibility check in terms of the criteria in Article 2, appoint a new member from the reserve list for a period of 4 years or for the rest of the duration of the aforementioned term, whichever is the earliest. The JU may consider, where appropriate, to launch a further CEI to ensure the continuity of tasks of the SAB, after the expiry of the first term of appointment.

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⁶ The Members of the Governing Board will be appointed ahead of the 1st meeting of the Governing Board expected on 16th December 2021

- g. Before appointment, all members of the SAB shall be required to complete a declaration of confidentiality as well as a commitment to disclose any actual or potential conflict of interest according to the procedure established by the Governing Board to give effect to Articles 31 and 40 of the Single Basic Act.
- h. The same rules on appointment, reimbursement of costs and allowances, applicable to the European Commission external experts according to the rules of the European Commission (add ref) will apply to the members of the SAB and will be implemented by the Joint Undertaking.

11. Application procedure

Applicants should carefully review their suitability and potential candidacy **including the eligibility criteria**.

Applicants are requested submit an online application via the Clean Sky vacancies page: http://www.cleansky.eu/vacancies

Applicants should note that there are two parts to the application portal:

- The Vacancy Document Download Link in which this Call text can be found as well as further instructions on use of the application portal;
- The Link to the Application Submission System.

Annexed to this document, applicants will find instructions on the use of the on-line application tool.

12. Deadline for submission of applications

Applications shall be notified and be received by the Clean Aviation JU by 12:00 CET on 5th January 2022. The title and exact reference of the call for expression of interest should be indicated in the subject of the e-mail.

13. Other information

No correspondence will be exchanged on the status of the applications except in the case of a positive or negative final decision, or in the case of any necessary documentary evidence the Executive Director or the evaluation panel may deem necessary for the establishment of eligibility and assessment of the selection criteria as set out in sections 8 and 9 2 and 3 of this call. Applicants are therefore formally requested not to enquire about the progress of their application neither by email, telephone or fax, nor by letter.

14. Confidentiality and dissemination

For each task they will be called to perform, the appointed SAB Members shall demonstrate appropriate ethical conduct, absence of conflict of interest and shall respect the confidentiality of the information and documents to which they will have access. The appointed SAB Members as well as invited observers, shall be subject to the obligation of professional secrecy which, by virtue of the Treaties and the rules implementing them, applies to all members of the institutions and their staff, as well as to the Commission's rules on security regarding the protection of sensitive non-classified and Union classified information, laid down in Commission Decisions (EU, Euratom) 2015/44331 and 2015/44432 respectively.

Specific clauses to this effect will be included in and/or annexed to the experts' model contract. Each SAB Member shall also sign an individual non-disclosure agreement prior to the start of his/her SAB activities.

15. Absence of conflict of interest

In order to ensure the independence of the SAB in the performing of its mandate, before appointment and start of any official task or assignment under the capacity of SAB Members, all members of the SAB shall be required to complete and sign a declaration of conflict of interest as well as a commitment to disclose any actual or potential conflict of interest that may prejudice the independency and impartiality of their duties when acting as SAB Member.

Specific rules on the prevention, avoidance and management of conflict of interest will be detailed in the rules of procedures of the SAB that will be adopted at the 1st meeting of the SAB and in the rules and procedure to be adopted by the Governing Board to give effect to Articles 42 of the Single Basic Act.

Applicants shall notify in written any direct or indirect involvement in any of the Members other than the Union and other stakeholders participating in Clean Aviation JU in order for the Executive Director to determine any recourse to mitigate any potential conflict of interest in their duties for the SAB.

16. Start of the assignment

Subject to the entry into force of the Single Basic Act, conclusion of the evaluation process and appointment decision of the SAB by the Governing Board of the Clean Aviation JU, the first meeting of the SAB is expected to take place before 31 January 2022.

17. Protection of personal data

The Clean Sky 2 Joint Undertaking and the future Clean Aviation Joint Undertaking will ensure that candidates' personal data are processed as required by EU Regulation No 2018/1725 /2001 of the European Parliament and of the Council on the protection of individuals with regard to the processing of personal data by the Union institutions and bodies. Please refer to the Privacy Statement published on the Clean Aviation JU's website:

https://www.cleansky.eu/data-protection-legal-notice

Annex

Call for Expression of Interest for the selection of members of the European Clean Aviation Scientific Advisory Body of the Clean Aviation Joint Undertaking

Application procedure

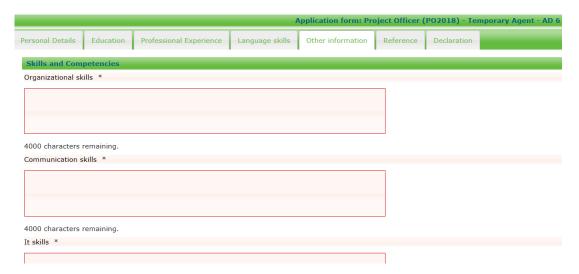
For applications to be valid, candidates must submit an online application via this link: http://www.cleansky.eu/vacancies

Note that there are two parts to the application portal:

- 1. The Vacancy Document Download Link
- 2. The Link to the Application Submission System.



The submission system has multiple tabs for different kinds of information:



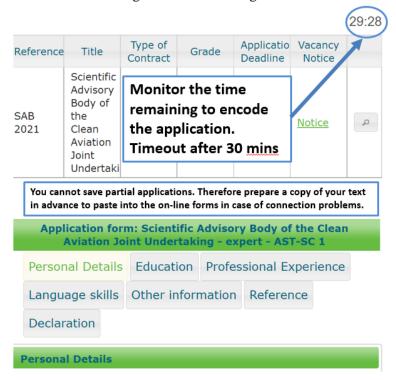
Candidates must complete all the mandatory sections before the system will permit the submission of an application.

It is not possible to upload any documents. All the information must be provided via the on-line forms.

The application will be disqualified if the dossier is incomplete.

It is not possible to save a draft of the application in the system for later re-editing so it is recommended to collect all the necessary information before commencing. It is recommended to draft answers in a working document and save the text which you can then paste into the on-line forms. This will prevent loss of the text in the event of an internet connection problem and will also provide you with a record of what you have submitted.

Therefore, please monitor the warnings on time remaining



IMPORTANT: If a candidate does not receive an acknowledgement of receipt for their application within 10 minutes of submitting it on-line, s/he should:

- 1. Check their junk mail folder and if the mail is found then add the sending e-mail address to the safe contacts list to prevent this problem with future communication.
- 2. Contact recruitment@cleansky.eu if no Acknowledgement of Receipt mail can be found.

IMPORTANT: for each position advertised, any new application made by a candidate with the same email address will automatically erase and replace the previous application for that position.

Candidates are advised to apply using an e-mail address that will remain valid for several months: candidates that will leave their job in the coming months are advised not to use their professional e-mail address. We ask the candidates to use one e-mail address and to write carefully their e-mail address in order to receive communications from the HR unit without delays.

Candidates are requested to complete their application in English. Candidates should assess and check before submitting their application form whether they fulfil all the conditions for admission laid down in the Call for Expression of Interest notice, particularly in terms of qualifications and relevant professional experience.

Application forms sent by e-mail, fax or post will not be accepted.

Candidates are asked to report any potential change of contact details in writing, without delay, to the following e-mail address: recruitment@cleansky.eu