



EUROPEAN
COURT
OF AUDITORS

Report on the annual accounts of the Clean Sky Joint
Undertaking for the financial year 2017

Together with the Joint Undertaking's reply

CONTENTS

	Paragraph
Introduction	1 - 11
Establishment of the Clean Sky Joint Undertaking	1 - 2
Governance	3 - 5
Objectives	6
Resources	7 - 10
The Commission's evaluations	11
Opinion	12 - 24
Opinion on the reliability of the accounts	13
Opinion on the legality and regularity of revenue underlying the accounts	14
Opinion on the legality and regularity of payments underlying the accounts	15
Responsibilities of management and those in charge of governance	16 - 18
Auditor's responsibilities for the audit of the accounts and underlying transactions	19 - 24
Budgetary and financial management	25 - 35
Implementation of the 2017 budget	25 - 26
Multiannual budget implementation under FP7	27 - 30
Multiannual budget implementation under Horizon 2020	31 - 35
Internal controls	36 - 38
Internal control framework	36 - 38
Other issues	39
Leverage of contributions from other members	39
Information on the Commission's Evaluations	40 - 41
Annex - Follow-up of previous years' comments	

The Joint Undertaking's reply

INTRODUCTION

Establishment of the Clean Sky Joint Undertaking

1. The Joint Undertaking for the implementation of the Joint Technology Initiative in Aeronautics (Clean Sky Joint Undertaking), located in Brussels, was set up in December 2007 under the Seventh Research Framework Programme (FP7) for a period of ten years, and started working autonomously on 16 November 2009¹. On 6 May 2014, the Council extended the lifetime of the Joint Undertaking for the period up to 31 December 2024².

2. The Clean Sky Joint Undertaking is a public-private partnership for aeronautic research and innovation. The founding members of the Joint Undertaking under the new regulation are the European Union (EU), represented by the Commission, and the private members consisting of the industrial Leaders and Associates of the Integrated Technology Demonstrators (ITDs), Innovative Aircraft Demonstrator Platforms (IADPs) and Transverse Areas (TAs). In addition, the Joint Undertaking cooperates with industrial 'core partners' selected via open and competitive calls³. Partners got private member status under the Clean Sky 2 founding regulation.

¹ Council Regulation (EC) No 71/2008 of 20 December 2007 setting up the Clean Sky Joint Undertaking (OJ L 30, 4.2.2008, p. 1).

² Council Regulation (EU) No 558/2014 of 6 May 2014 establishing the Clean Sky 2 Joint Undertaking (OJ L 169, 7.6.2014, p. 77).

³ In 2008, 16 Leaders and 66 Associates joined the first phase of the Clean Sky Joint Undertaking (Clean Sky 1 programme). In line with article 4(6) of the Statutes annexed to the Council Regulation (EU) No 558/2014, Associates under the Clean Sky 1 programme retain their status until completion of their research activities but until 31 December 2017 at the latest. In 2017, after completion of the fourth Call for Core Partners launched in 2016, the Joint undertaking closed the membership selection and accession procedure with in total over 230 legal entities involved in the Clean Sky 2 programme. It includes the 16 Leaders with their associated entities and linked third parties, and the selected Core Partners with their associated entities and linked third parties.

Governance

3. The governance structure of the Clean Sky Joint Undertaking includes the Governing Board, the Executive Director, the States Representatives Group and the Scientific and Technological Advisory Board.

4. The Governing Board is composed of one representative of the Commission on behalf of the Union, one representative of each industrial Leader, one representative of the Associates per ITD, and one representative of the core partners per ITD and IADP. The Governing Board is the main decision-making body and is responsible for the operations of the Joint Undertaking and oversight of its activities. The Executive Director is responsible for the day-to-day management of the Joint Undertaking.

5. The States Representatives Group is a network of national representatives from EU Member States and other countries which provides advice and opinions on the strategic orientation and operations of the Joint Undertaking. The Scientific and Technological Advisory Board is composed of scientists and engineers, and provides advice on technological, environmental and socio-economic issues.

Objectives

6. The main objectives of the Clean Sky Joint Undertaking are to improve significantly the environmental impact of aeronautical technologies and to enhance the competitiveness of European aviation.

Resources

7. The maximum EU contribution to the first phase of the Clean Sky Joint Undertaking's administrative costs and research activities (Clean Sky 1 programme) is 800 million euro from the Seventh Research Framework Programme (FP7)⁴. Of this amount, a maximum of 400 million euro is to be allocated to the ITD Leaders and up to 200 million euro to the

⁴ Article 5(1) of Regulation (EC) No 71/2008.

Associates. The ITD Leaders and Associates are to contribute resources at least matching the EU contribution, excluding those allocated through calls for core partners. The remaining amount of at least 200 million euro must be allocated to the partners selected by means of competitive calls for proposals⁵.

8. The maximum EU contribution to the Joint Undertaking's second phase of activities (Clean Sky 2 programme) is 1 755 million euro, to be funded from Horizon 2020⁶. The private members of the Joint Undertaking are expected to contribute resources of at least 2 193,75 million euro over the life span of the Joint Undertaking⁷. Of this amount, private members have to incur costs of at least 965,25 million euro in implementing additional activities outside the work plan of the Clean Sky Joint Undertaking⁸.

9. The administrative costs for the second phase of the Clean Sky 2 programme are limited to 78 million euro, to be covered through financial contributions divided equally on an annual basis between the EU and the private members⁹.

10. In 2017, the final budget for the Clean Sky 2 Joint Undertaking was 243,5 million euro (2016: 287,8 million euro). At 31 December 2017, the Joint Undertaking had 41 staff (2016: 41)¹⁰.

⁵ Article 13(1) of the Statutes of the Clean Sky Joint Undertaking (Annex I of Regulation (EC) No 71/2008.

⁶ Article 3(1) of Regulation (EU) No 558/2014.

⁷ Article 4(1) of Regulation (EU) No 558/2014.

⁸ As provided in Article 4(2)(b) of Regulation (EU) No 558/2014, additional activities are activities outside the work plan of the Joint Undertaking but contributing to the objectives of the Clean Sky Joint Technology Initiative. In line with Article 4(4) of the same Regulation, the cost of additional activities must be certified by an independent external auditor and are not subject to audit by the Joint Undertaking, the ECA or by any EU body.

⁹ Article 15(2) of the Statutes of the Clean Sky Joint Undertaking - Annex I of Regulation (EU) No 558/2014.

¹⁰ Further information about the Joint Undertaking and its activities are available at its website: <http://www.cleansky.eu>.

The Commission's evaluations

11. The Commission completed the final evaluation of the Joint Undertaking's FP7 activities and the interim evaluation of its Horizon 2020 activities in June 2017, which was followed by respective action plans prepared by the Joint Undertaking to address the recommendations raised in the evaluations. On this occasion, we include a section related to the Joint Undertaking's Action Plans in response to the evaluations, which is intended only for information purposes and does not form part of our audit opinion or observations.

OPINION

12. We have audited:

- (a) the accounts of the Joint Undertaking which comprise the financial statements¹¹ and the reports on the implementation of the budget¹² for the financial year ended 31 December 2017, and
- (b) the legality and regularity of the transactions underlying those accounts, as required by Article 287 of the Treaty on the Functioning of the European Union (TFEU).

Opinion on the reliability of the accounts

13. In our opinion, the accounts of the Joint Undertaking for the year ended 31 December 2017 present fairly, in all material respects, the financial position of the Joint Undertaking at 31 December 2017, the results of its operations, its cash flows, and the changes in net assets for the year then ended, in accordance with its Financial Regulation and with accounting rules adopted by the Commission's accounting officer. These are based on internationally-accepted accounting standards for the public sector.

¹¹ The financial statements comprise the balance sheet, the statement of financial performance, the cash flow statement, the statement of changes in net assets and a summary of significant accounting policies and other explanatory notes.

¹² The reports on implementation of the budget comprise the reports which aggregate all budgetary operations and the explanatory notes.

Opinion on the legality and regularity of revenue underlying the accounts

14. In our opinion, revenue underlying the accounts for the year ended 31 December 2017 is legal and regular in all material respects.

Opinion on the legality and regularity of payments underlying the accounts

15. In our opinion, payments underlying the accounts for the year ended 31 December 2017 are legal and regular in all material respects.

Responsibilities of management and those in charge of governance

16. In accordance with Articles 310 to 325 of the TFEU and the Joint Undertaking's Financial Regulation, management is responsible for the preparation and presentation of the accounts on the basis of internationally-accepted accounting standards for the public sector and for the legality and regularity of the transactions underlying them. This responsibility includes the design, implementation and maintenance of internal control relevant to the preparation and presentation of financial statements that are free from material misstatement, whether due to fraud or error. Management is also responsible for ensuring that the activities, financial transactions and information reflected in the financial statements are in compliance with the authorities which govern them. The Joint Undertaking's management bears the ultimate responsibility for the legality and regularity of the transactions underlying the accounts.

17. In preparing the accounts, management is responsible for assessing the Joint Undertaking's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting.

18. Those in charge of governance are responsible for overseeing the entity's financial reporting process.

Auditor's responsibilities for the audit of the accounts and underlying transactions

19. Our objectives are to obtain reasonable assurance about whether the accounts of the Joint Undertaking are free from material misstatement and the transactions underlying them are legal and regular and, on the basis of our audit, to provide the European Parliament and the Council or other respective discharge authorities with a statement of assurance as to the reliability of the accounts and the legality and regularity of the transactions underlying them. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit will always detect a material misstatement or

non-compliance when it exists. These can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these accounts.

20. An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the accounts and the legality and the regularity of the transactions underlying them. The procedures selected depend on the auditor's judgment, including an assessment of the risks of material misstatement of the accounts and of material non-compliance of the underlying transactions with the requirements of the legal framework of the European Union, whether due to fraud or error. In making those risk assessments, internal control relevant to the preparation and fair presentation of the accounts and legality and regularity of underlying transactions is considered in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of internal control. An audit also includes evaluating the appropriateness of accounting policies used, the reasonableness of accounting estimates made by the management and the overall presentation of the accounts.

21. For revenue, we verify the subsidy received from the Commission and assess the Joint Undertaking's procedures for collecting fees and other income.

22. For expenditure, we examine payment transactions when expenditure has been incurred, recorded and accepted. This examination covers all categories of payments (including those made for the purchase of assets) other than advances at the point they are made.

23. In preparing this report and Opinion, we considered the audit work of the independent external auditor performed on the Joint Undertaking's accounts as stipulated in Article 208(4) of the EU Financial Regulation¹³.

24. The comments which follow do not call the ECA's opinions into question.

¹³ Regulation (EU, Euratom) No 966/2012 of the European Parliament and of the Council (OJ L 298, 26.10.2012, p. 1).

BUDGETARY AND FINANCIAL MANAGEMENT

Implementation of the 2017 budget

25. The final 2017 budget available for the Clean Sky 1 and Clean Sky 2 programme implementation included commitment appropriations of 313,4 million euro and payment appropriations of 243,5 million euro.

26. The implementation rates for commitment and payment appropriations were high with 99,6 % and 98,5 %, respectively.

Multiannual budget implementation under FP7

27. Out of the 800 million euro of FP7 funds allocated to the Clean Sky Joint Undertaking for the implementation of Clean Sky 1, by the end of 2017, the EU had contributed in cash a total amount of 800 million euro.

28. Private members were committed to contribute at least 600 million euro to the Joint Undertaking's Clean Sky 1 activities. The Clean Sky 1 programme was closed in 2017 and at year-end the Governing Board had validated in-kind contributions from private members of 594,1 million euro. In addition, the private members made cash contributions to the Joint Undertaking's administrative costs of 14,9 million euro.

29. Consequently, at the end of 2017, the total contribution of the private members to the Clean Sky 1 programme amounted to 609 million euro, compared to the EU cumulative cash contribution of 800 million euro.

30. Out of the total operational and administrative budget of 817,2 million euro for Clean Sky 1 activities¹⁴, by the end of 2017, the Clean Sky 1 Joint Undertaking had made commitments of 815,2 million euro and payments of 815,1 million euro (99,7 % of the available budget).

¹⁴ The total of 817,2 million euro is composed of the 800 million euro EU cash contribution funded by the FP7 programme, 14,9 million euro of private members' cash contribution to cover the administrative costs and 2,3 million euro interest received on the pre-financed FP7 funds.

Multiannual budget implementation under Horizon 2020

31. Out of the maximum of 1 755 million euro of Horizon 2020 funds allocated to the Clean Sky Joint Undertaking for the implementation of the Clean Sky 2 programme, by the end of 2017, the EU had contributed in cash a total amount of 484,8 million euro.

32. The private members are not obliged to make a minimum amount of in-kind and cash contributions to the Joint Undertaking's Clean Sky 2 activities. At the end of 2017, the private members had reported in-kind contributions of 265,6 million euro, of which 54 million euro had been validated by the Governing Board. In addition, private members made cash contributions to the administrative cost of the Joint Undertaking of 9,5 million euro.

33. Out of the at least 965,25 million euro of private members' contributions to be made to additional activities outside the work programme of the Joint Undertaking, by the end of 2017, the private members had already reported 594 million euro out of which 423 million euro had been certified. As we have no right to audit members' in-kind contributions to additional activities, we cannot provide an opinion on their nature, quality and quantity (see also paragraph 39).

34. Consequently, by the end of 2017, the total contributions of the industry members amounted to 477 million euro (of which 89 % are contributions to additional activities), compared to the EU cumulative cash contribution of 484,8 million euro.

35. Out of the maximum operational and administrative budget for Clean Sky 2 of 1 794 million euro¹⁵, by the end of 2017, the Joint Undertaking had made commitments of 1 009,6 million euro and payments of 493 million euro.

¹⁵ The total is composed of the 1 755 million euro EU cash contribution funded by the Horizon 2020 programme and a 39 million euro cash contribution to administrative costs from private members.

INTERNAL CONTROLS

Internal control framework

36. The Clean Sky Joint Undertaking has set up ex-ante control procedures based on financial and operational desk reviews. For FP7 interim and final payments, the Joint Undertaking performs ex-post audits at the beneficiaries whilst for Horizon 2020 project cost claims the Commission's Common Audit Service (CAS) is responsible for the ex-post audits. The residual error rates for the ex-post audits reported by the Joint Undertaking at the end of 2017 were 1,40 % for FP7 projects and 1,6 % for Horizon 2020 projects¹⁶.

37. Based on an assessment of the Joint Undertaking's internal control system and substantive testing of revenue, payment, grant and procurement operations and a review of a sample of finalised ex-post audits including recoveries arising from the errors detected, the audit results provided us with reasonable assurance that the overall residual error rate for the Joint Undertaking is below materiality.

38. At the end of 2017, the Commission's common Horizon 2020 grant management and monitoring tools had not finished the specific developments needed for the processing of the Joint Undertaking's in-kind contributions.

OTHER ISSUES

Leverage of contributions from other members and risk of double funding

39. One of the main objectives of the Joint Undertaking is to leverage contributions from industry members in the area of its activities¹⁷. The minimum leverage factor for both,

¹⁶ Clean Sky Joint Undertaking 2017 Annual Activity Report, pages 103-104.

¹⁷ Recital 4 of Regulation (EU) No 558/2014 states that this partnership should be based on a balanced contribution from all partners.

operational and additional activities amounts to 1,25¹⁸. However, Clean Sky 2's founding regulation does not oblige industry members to make a minimum of in-kind contributions to the operational activities of the Joint Undertaking¹⁹. Consequently, a minimum leverage factor for the in-kind contributions to the operational activities cannot be determined. As we have no right to audit in-kind contributions to additional activities we cannot provide an opinion on the nature, quality or reality of such contributions²⁰.

INFORMATION ON THE COMMISSION'S EVALUATIONS

40. The Commission's Final Evaluation on Clean Sky Joint Undertaking operating under FP7 covered the period between 2008 and 2016²¹, while the Interim Evaluation on Clean Sky 2 Joint Undertaking operating under H2020 covered the period from 2014 to 2016²². The evaluations were carried out with the assistance of independent experts as foreseen in the Clean Sky Council Regulations²³, and covered the performance of the Joint Undertaking in terms of relevance, efficiency, effectiveness, coherence, and EU added value, with additional

¹⁸ Total of minimum contribution of the industry and research members to the Joint Undertaking's operational and additional activities (2 193,75 million euro) divided by the maximum EU cash contribution reserved for the industry and research members (1 755 million euro).

¹⁹ Article 4 (1) and 4(2) of Regulation (EU) No 558/2014 specify that private members should make total contributions of at least 2 193,75 million euro over the life span of the Joint Undertaking, out of which at least 965,25 million euro should consist of costs incurred by them in implementing additional activities outside the work plan of the Joint Undertaking.

²⁰ In accordance with article 4 (4) of Regulation (EU) No 558/2014 the cost of additional activities are certified by an independent external auditor appointed by the Joint Undertaking. The cost for such activities shall however, not be audited by the Joint Undertaking or any Union body.

²¹ Final Evaluation of the Clean Sky Joint Undertaking operating under FP7.
<https://ec.europa.eu/research/evaluations/pdf/cs.pdf>.

²² Interim Evaluation of the Clean Sky 2 Joint Undertaking (2014-2016) operating under Horizon 2020. <https://ec.europa.eu/research/evaluations/pdf/cs2.pdf>.

²³ Commission statutory evaluations in application of Article 11 of Council Regulation (EU) No 71/2008 on Clean Sky Joint Undertaking, and article 11 of Council Regulation (EU) No 558/2014 establishing the Clean Sky 2 Joint Undertaking.

consideration of openness and transparency and research quality. The results of the evaluations were taken into account in the report that the Commission sent to the European Parliament and Council in October 2017²⁴.

41. In response to the recommendations raised by the evaluators²⁵, the Joint Undertaking prepared an Action Plan that was endorsed by the Joint Undertaking Governing Board in April 2018. The action plan includes a wide set of actions to be implemented by the Joint Undertaking²⁶, for which a certain number of activities have already been initiated²⁷, while

²⁴ Commission Staff Working Document. Interim Evaluation of the Joint Undertakings operating under Horizon 2020 {SWD(2017) 339 final}.

²⁵ Recommendations raised by the evaluators relate to the following areas: the appropriateness and optimisation of the EU Framework for Public-Private Partnerships in the field of aeronautics, including the Delegation Agreement with the Commission; the launch of less prescriptive topics in future calls for proposals; the need to stimulate subcontracting to enhance SMEs participation; the need to increase transparency and awareness on the Clean Sky Programme; the need to improve involvement of alternative research technologies within Clean Sky activities; to improve synergies with National research programmes, and to promote economic impact and academia participation. Together with these recommendations, in 2017 the Commission's Internal Audit Service carried out an audit of the performance framework of the Joint Undertaking, recommending that Clean Sky 2 completes its performance framework by defining criteria and related indicators, quantifying targets for the competitiveness/industrial objectives of the Joint Undertaking, and to develop an appropriate methodology for measuring progress achieved against objectives.

²⁶ Specific actions to be implemented during 2018 in response to the evaluator's recommendations include: better coordination with National Research Programmes by improving the effectiveness of the States Representative Groups; to increase the visibility of the Joint Undertaking's strategic vision by developing a plan for transversal workshops with other sectors on different technologies; a set of actions to address the recommendation of less prescriptive topics in the Clean Sky 2 activities; to promote the economic impact of the activities by performing an analysis of the project results and their planned exploitations; relaunch the Clean Sky Academy Group to increase academia participation.

²⁷ Activities already include: the replacement of the Associated Members scheme under Clean Sky 1 with the Core Partners scheme in Clean Sky 2 in order to increase participation; the renewal of the Scientific Committee members bringing new competencies on emerging technologies agreed by the Governing Board on December 2017; an analysis to identify where the subcontracting mechanism could be implemented to increase SMEs participation and efficiency while respecting the legal framework and the principles of openness and transparency; a preliminary analysis as regards simplification and derogation measures on the Delegation Agreement with the Commission and Rules for Participation in view of the next programming period; a first analysis by the States Representative Group on future Research Framework funding for aeronautic activities carried out in December 2017; regular meetings with the other

the rest are planned to be implemented in 2018, or in the next programming period²⁸.

This Report was adopted by Chamber IV, headed by Mr Neven MATES, Member of the Court of Auditors, in Luxembourg at its meeting of 2 October 2018.

For the Court of Auditors

Klaus-Heiner LEHNE

President

relevant Joint Undertakings (SESAR, Shift2Rail, FCH2 and ECSEL); a Report on all technological achievements of the Clean Sky 1 Programme (Outcome of the first European Aeronautics Research Partnership 2008-2017).

²⁸ Actions considered for further analysis in view of the next programming period concern primarily the legal and operating framework of the Joint Undertaking, including simplification measures, and the scope of research activities to be managed by the Joint Undertaking.

Follow-up of previous years' comments

Year	Court's comment	Status of corrective action (Completed / Ongoing / Outstanding / N/A)
	<i>Management of Horizon 2020 grants</i>	
2016	At the end of 2016 – the third year of Horizon 2020 implementation – the Joint Undertaking had only partially completed the integration of its control systems with the Commission's common Horizon 2020 grant management and monitoring tools.	Completed
	<i>Monitoring and clearing of prefinancing</i>	
2016	At the end of 2016, the Joint Undertaking had not yet cleared any of the pre-financing payments (176 million euro) made to its industrial members for projects under Horizon 2020 grant agreements. Regular clearing of its pre-financing payments against statements of reported costs from the members would decrease the exposure of the Joint Undertaking to financial risk.	Completed

THE JU'S REPLY

The Joint Undertaking has taken note of the Court's report.